Kentucky Accounting and Finance Foundations

Curriculum Guide

Student Guide 3rd edition

UNBRIDLED LEARNING
College/Career Readiness for All

Learning that works for Kentucky
CTE™

Unit 1

Accounting Careers

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Key Terms: Define the following terms.

Résumé –

Letter of Application/Cover Letter –

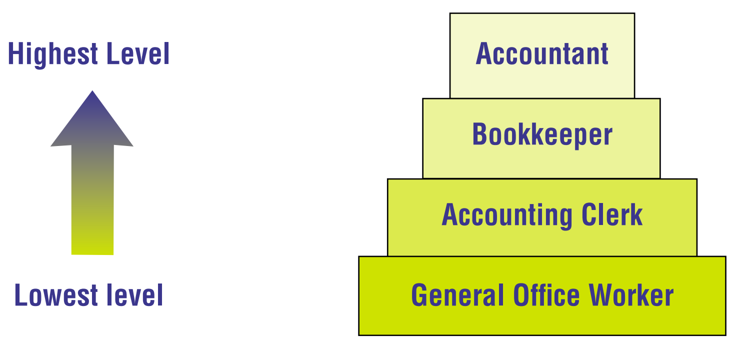
Interview –

Ethics –

Integrity –

Lesson 1.1 The Accounting Career Ladder

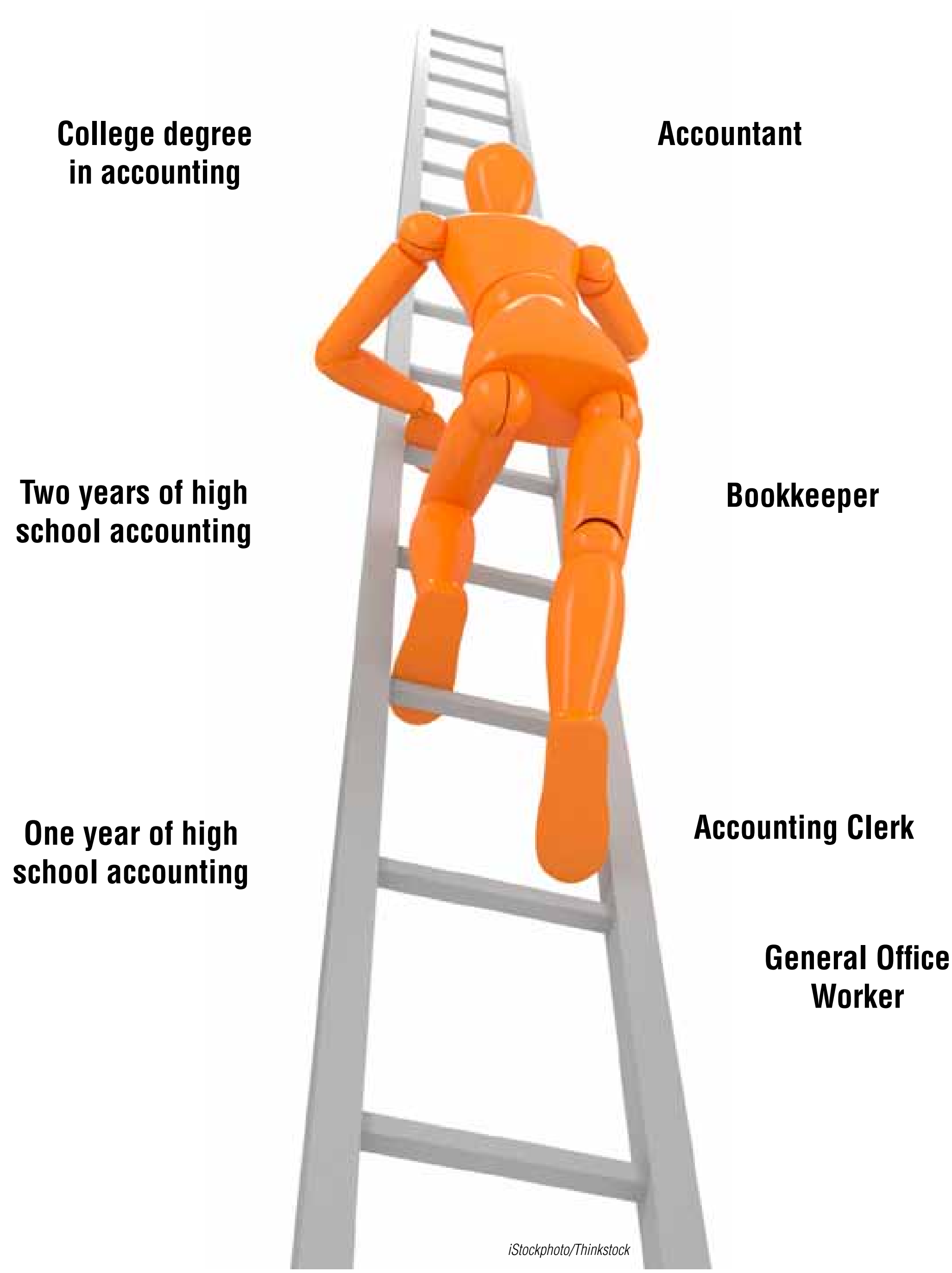
Immediately after high school graduation—and sometimes even *during* high school—individuals may start an accounting career. With experience and additional accounting study, individuals can earn a promotion to a higher position on the career ladder.



An individual can begin as a general office worker during or immediately after completing high school, having had only an accounting class. With experience and some college training, a person can move up the ladder to an accounting clerk and bookkeeper. With a college degree in accounting, one earns the right to be called an accountant and begin opening the door for more responsibility, more authority, higher earnings, and greater success.

The Accounting Career Ladder

Immediately after high school graduation—and sometimes even before—individuals may start an accounting career. With experience and additional accounting study, accounting personnel can earn a promotion to a higher level on the career ladder.



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1.1.2 Takin' Care of Business #12, Video Activity

Instructions: Answer the first question before the video begins. During the video, answer the second question.

1. List the types of positions you think are available for Certified Public Accountants. What types of activities do they do at their jobs?
   a. ______________________
   b. ______________________
   c. ______________________
   d. ______________________
   e. ______________________
   f. ______________________
   g. ______________________
   h. ______________________
   i. ______________________
   j. ______________________

2. During the video, several jobs Certified Public Accountants can hold during their career will be highlighted.
   a. ______________________
   b. ______________________
   c. ______________________
   d. ______________________
   e. ______________________
   f. ______________________

3. Reflection: What is the difference between your assumptions and predictions about CPAs and the impression the video wants you to have?

   ____

Name: ______________________

#12

Takin' Care of Business

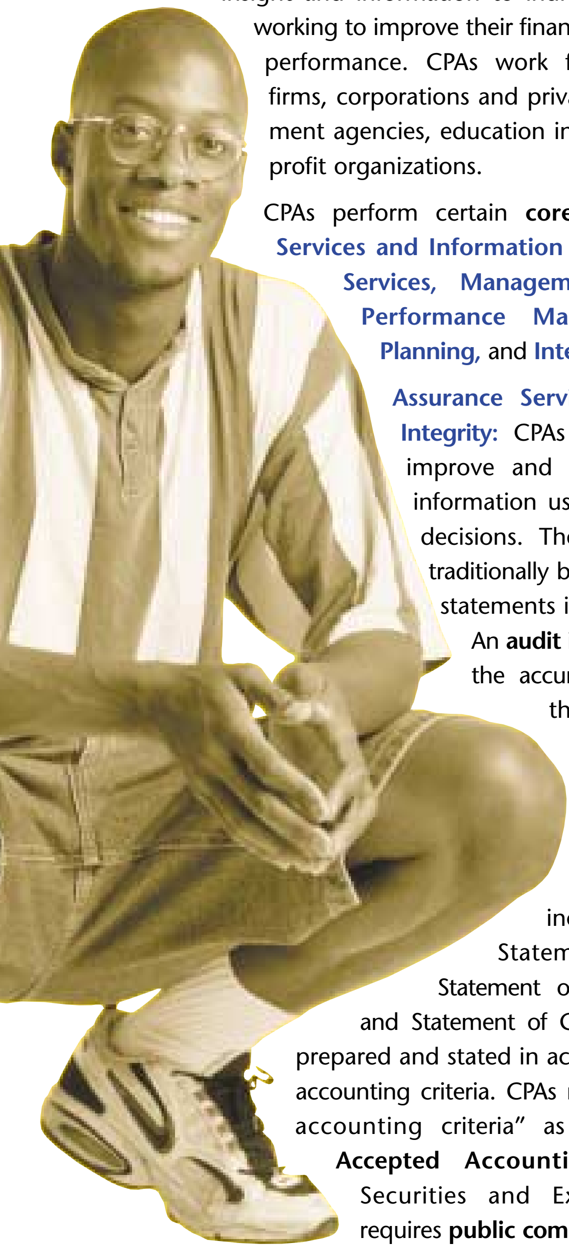
CPA... Imagine the possibilities!

AICPA

#12 CPA PROFESSIONAL SERVICES
"A Day in the Life"

Overview

The accounting profession is one of the most respected and rewarding career paths available to students. At the pinnacle of the accounting profession is the **Certified Public Accountant (CPA)**. CPAs are versatile business strategists who provide valuable insight and information to individuals and companies working to improve their financial position or business performance. CPAs work for public accounting firms, corporations and private businesses, government agencies, education institutions, and not-for-profit organizations.



CPAs perform certain **core services:** **Assurance Services and Information Integrity, Technology Services, Management Consulting and Performance Management, Financial Planning,** and **International Services.**

Assurance Services and Information Integrity: CPAs provide services that improve and assure the quality of information used in making business decisions. The CPA's assurance has traditionally been applied to financial statements in the form of an audit. An **audit** is the process of verifying the accuracy and legitimacy of the accounting practices used by a company. The purpose is to determine whether the company's financial statements, which include the Income Statement, Balance Sheet, Statement of Stockholder's Equity, and Statement of Cash Flows, have been prepared and stated in accordance with specified accounting criteria. CPAs refer to this "specified accounting criteria" as **GAAP**, or **Generally Accepted Accounting Principles**. The Securities and Exchange Commission requires **public companies** — ones that sell their stock in public financial markets such as the New York Stock Exchange — to undergo an annual audit of their financial statements by an independent CPA.

In addition to traditional audit services, new exciting niche areas have increased the demand for the expertise of CPAs. The new assurance services that CPAs provide — WebTrust℠/™, SysTrust℠, Performance View, and ElderCare — require a multitude of skills and knowledge, such as technology in the case of WebTrust and SysTrust, which CPAs have gained through their education and work experience.

***WebTrust*:** CPAs conduct an examination of Internet-based systems that carries the professional equivalent of a financial statement audit. WebTrust, an assurance service, is designed to build confidence among consumers and businesses purchasing goods and services over the Internet. The **WebTrust seal of approval** is given to companies that comply with stated procedures, thus assuring consumers that they can transact business electronically with confidence.

***SysTrust*:** CPAs examine the reliability of information systems and provide assurance that transactions are processed accurately, without security and privacy concerns.

***Performance View*:** CPAs identify the critical factors that will lead to success in a business and then measure, track and analyze them in order to assess the progress made in achieving specific goals and targets.

***ElderCare*:** Through ElderCare, CPAs provide assurance to children and family members that elderly family members, no longer able to live independently, will have long-term care. The CPA, working with other professionals, such as healthcare practitioners and attorneys, coordinates and assures the quality of services provided to the elderly person.

Technology Services: CPAs provide services that help businesses accomplish their goals by designing and implementing computer systems and software applications that improve business performance and decision-making.

Management Consulting and Performance Management: CPAs utilize their strong problem-solving skills and broad business knowledge to provide objective advice and insight to any company on a wide range of management and performance issues. For instance, CPAs provide services that deal with business valuation, operational efficiency, strategic planning, organizational restructuring, business risk assessment, and mergers and acquisitions.

Forensic Accounting also falls under the management consulting umbrella. In forensic accounting, also known as investigative or fraud auditing, CPAs search beneath the accounting records, analyzing the "paper trail" for evidence of criminal conduct.

Financial Planning: As a financial planner, the CPA assists clients in identifying financial objectives and advising them of the risk, liquidity, management and tax characteristics of investments. Examples of financial planning services include developing investment strategies, tax consulting, insurance analysis and retirement planning. The CPA also assists clients with preparing income tax returns.

International Services: CPAs provide international consulting services, such as the development and implementation of operating procedures that are in accordance with the laws, rules and regulations of a foreign country. Serving multinational businesses requires an understanding of the business practices of different countries and cultures.

Activities

Your team is a CPA firm and the individuals and companies listed below are your clients.

ROUND-1

For each of the independent situations, identify the CPA service that you are providing for your client. For each correct answer, award your firm $10,000! For each incorrect answer, award zero dollars.

ROUND-2

For each of the independent situations, identify the CPA service that your client needs. For each correct answer, award your firm $10,000. For each incorrect answer, deduct $10,000 from your firm's total!

Use the table to the right to score your CPA firm's results and remember that for each situation there can be more than one answer, BUT there is one answer that is best.

Round 1: Identify the Service that Your CPA Firm is Providing	Round 2: What Service Does Your Client Need?
Job A1 $	Round 1 Total $
Job A2 $	Job B1 $
Job A3 $	Job B2 $
Job A4 $	Job B3 $
Job A5 $	Job B4 $
Job A6 $	Job B5 $
Job A7 $	Job B6 $
Job A8 $	Job B7 $
Job A9 $	Job B8 $
Job A10 $	Job B9 $
Round 1 Total $	Job B10 $
	Grand Total $

ROUND-1: IDENTIFY THE SERVICE THAT YOUR CPA FIRM IS PERFORMING.

Job# A1. The Wyatt Corporation has engaged your services. Their financial statements report a cash balance of $1 million. You contact Wyatt's bank to verify that the balance is accurate.

Job# A2. The Casden Company plans to invest $5 million in a new computer system over the next year. You review Casden's operations, systems and technology needs. Next, you research and determine the type of information and computer system to purchase.

Job# A3. Adam and Alexis have engaged your services and agree to meet with you. At the meeting, you request the following information from Adam and Alexis: age; yearly salary; number of children; mortgage amount, credit card balances and other debt; type and amount of investments; expected retirement age.

Job# A4. The Eldridge Group, a domestic company based in New York City, is a retailer of home furnishings. On their behalf, you research possible international distribution channels and the tax laws of various European countries.

Job# A5. The Nyles Production Team, Inc., a manufacturer of bicycle racing equipment, has engaged your services. You are conducting productivity tests, including performance, operational and efficiency studies to determine the true cost to produce the equipment that Nyles sells.

Job# A6. Joel, an enterprising college student, has invented a new and improved computer chip and established his own company, called ChipWare. Andrews Corporation, a manufacturer of computer hardware, approached Joel regarding the purchase of ChipWare. Joel has engaged your firm to research the best alternatives for completing this transaction.

Job# A7. The Reeves Corporation has purchased the latest automated inventory control system and has engaged you to conduct training sessions at the Reeves Corporation to explain the uses of the system and demonstrate how to operate the system. You will conduct the seminars every Tuesday for three months.

Job# A8. The Verda Group is a real estate partnership that has engaged your firm. The Verda Group earns less than most real estate companies, but has been assessed tax penalties by the Internal Revenue Service the past two years. Your firm has requested from the Verda Group tax returns for the past five years and has planned monthly and quarterly meetings with them.

Job# A9. Tahoo Inc. is a national retailer of fine men's clothing. During the past year, Tahoo has expanded its stores from 72 to 98. Tahoo is now considering developing a Web site to advertise its clothing and provide customers the opportunity to place orders and purchase clothing over the Internet. Tahoo has contacted you to determine the cost, feasibility, and technological requirements of developing a Web site, including assuring customers that their site will be secure.

Job# A10. Michael Rodney has engaged your services. Michael Rodney owns 13 car dealerships. Rodney's dealerships sell the following cars: Rolls Royce, Lamborghini, Porsche, and Mercedes Benz. The financial statements of Rodney's dealerships report Inventory of $22.5 million. You travel to each of the 13 dealerships to "witness" that the Inventory figure is fairly presented.

PART-2: WHAT SERVICE DOES YOUR CLIENT NEED?

Job# B1. Edith is 67. She lives alone, in a house in Pennsylvania. She has four children who live in California, Maine, North Carolina and Texas. Edith's children are concerned about her healthcare and finances.

Job# B2. The Wilson Company started a fast food restaurant called "Willy's" and is in its fifth year of operation. Sales at Willy's have increased every year and the Wilson Company is now considering opening additional restaurants or offering franchises or both.

Job# B3. The Rumba Company manufactures distinctive chinaware patterns. Rumba has been quite successful in the United States and now plans to distribute its chinaware in Europe and eventually set up a facility in Italy.

Job# B4. Margaret is the controller of a large sports arena. While she was on her honeymoon, a temporary employee was hired to fulfill her role. Margaret believes funds from a recent concert were embezzled because they are recorded in the computer ledgers but do not show up on the bank statement.

Job# B5. Joan and Jim, who are both employed, are expecting their first child in March. Joan and Jim hope to have a second child as well and send both children to college and graduate school.

Job# B6. The Wallford Company is owned by five individuals and has been in operation for ten years. The owners now plan to offer stock of the Wallford Company on the New York Stock Exchange in order to raise additional capital.

Job# B7. The Central Partnership is a free Web-based dating service that has experienced tremendous growth in the last two years. It now wishes to sell gifts and other products over its site and wants to assure customers that the site is secure.

Job# B8. Joe, a college graduate, started his own insurance agency ten years ago. At the time, Joe had one office with two employees and filed applications with the insurance companies manually. Joe now has eight offices in three states with over 100 employees and is finding that the manual system of filing insurance applications is inefficient.

Job# B9. The Rodgers Corporation is a profitable, well-known exercise and fitness business. The company, however, has had difficulty hiring and retaining quality personnel. On average, most new hires leave the company after three years.

Job# B10. Sweet Pea, Inc., a large domestic producer of fruits and vegetables, is a public company. According to Securities and Exchange Commission (SEC) guidelines, public companies must report quarterly earnings and produce an annual report.

2.1.1 Employability Skills PowerPoint Notes

1. Cooperativeness –

   How can you be cooperative?

2. Willingness to follow directions –
   Tips:

3. Willingness to learn –

4. Initiative –

5. Responsibility –

6. Loyalty –

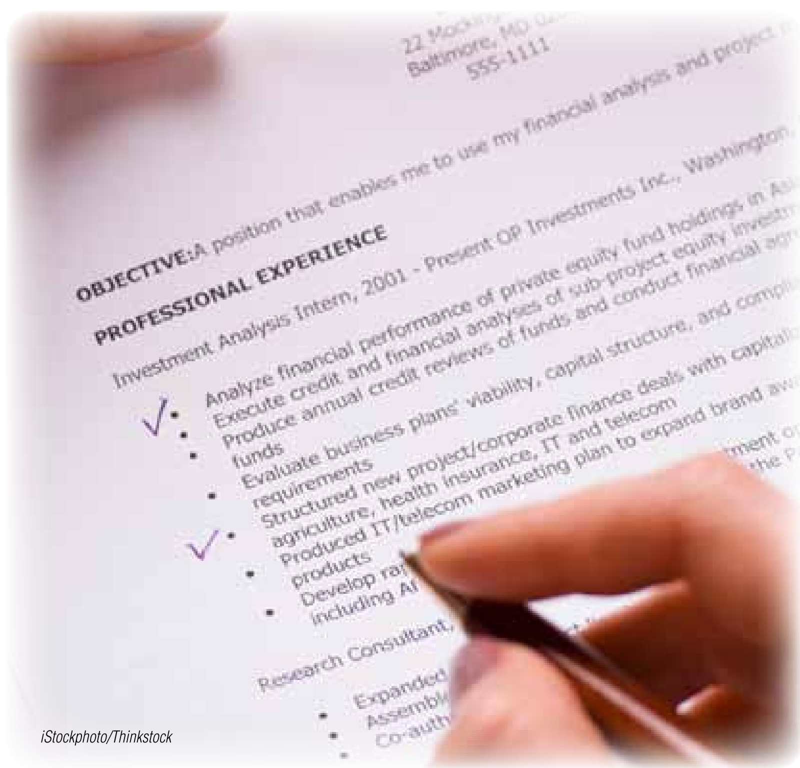
Name: ____

2.2.2 Writing a Résumé and Examples

Information contained on a résumé:

1. **Heading:** Name, address, phone number, and e-mail address. Do not take this section too lightly. It is the first section a prospective employer will see, and it contains all the information needed to contact you. Make sure your e-mail address is appropriate and professional.
2. **Objective:** This statement should be one sentence that helps an employer know the position you are seeking. The objective can be specific or general, but should always be to the point.
3. **Education:** List your educational background beginning with the most current. State your graduation date, and be sure to emphasize your chosen career path.
4. **Work Experience:** List your work experience beginning with the most current positions held, specific duties, and dates you held each position. This section is arguably the most important element of a résumé. Even if the work itself seems unrelated to your proposed career path, you should list any job or experience that will help sell your talents.
5. **Other:** Honors, Volunteer Work, Clubs, Activities, Certifications, Extra-Curricular Activities, and Special Skills
6. **References:** Leave this section off your résumé. Create a separate page titled "References." Include 3-5 individuals <u>not</u> related to you. List their name, job title, address, and phone number.

***Most résumés will be reviewed for only 10 seconds before being eliminated.** Picture a stack of 1500 résumés in front of you and a one-week deadline to get several candidates in the door for an interview. After the initial round of review and elimination, an employer will usually spend a few minutes looking over the 10-15 résumés that have made the cut. **A good résumé should result in one thing: an interview.**



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2.2.3 The Do's & Don'ts of Résumé Writing

Do's:

1. Divide your résumé into clearly defined, easy-to-read sections.
2. Keep the résumé to one or two pages. Cover all the information clearly and concisely.
3. Proofread carefully for spelling, punctuation, grammar, and other errors.
4. Get someone else's reaction before finalizing and mailing.
5. Use good quality paper (white, ivory, or off-white).
6. Ask permission before using someone as a reference.

Don'ts:

1. Attach a picture or list personal statistics such as age, height, and weight. It is illegal for employers to consider these factors when hiring.
2. Use the word "I" on a résumé.
3. Use long, complicated phrases/sentences or "big" words.
4. Use unfamiliar abbreviations.
5. Use the same résumé for every job application—design each to fit the job.

KEVIN E. GORDON

Permanent Address:	College Address:
P. O. Box 352	Oklahoma Christian College
Lone Grove, OK 73443	Box 11000, Student
(405) 667-8464	Oklahoma City, OK 73136
	(405) 425-6244

OBJECTIVE	To obtain an accounting position and become a Certified Public Accountant.
EDUCATION	**Oklahoma Christian College**, Oklahoma City, Oklahoma Will graduate May 2014 with a Bachelor of Science Degree in Accounting G.P.A. 3.65 **Lone Grove High School, Lone Grove**, Oklahoma Class of 2010
WORK EXPERIENCE	Summer 2009-2011 **ARCO Pipeline**, Ringling, OK. Summer Gang Hand Duties included: driving a truck, running valves, welder's helper, manual labor, and informal supervision of other summer employees. Summer 2008-2010 **Church of Christ**, Lone Grove, OK. Youth Coordinator Duties included: planning and organizing youth activities and being responsible for teenagers at church functions. Summer 2006-2009 **First National Bank**, Ardmore, OK. Gardener/Janitor Duties included: Upkeep and maintenance of grounds and building.
AWARDS & ACTIVITIES	Alpha Gamma Omega-Social Service Club Phi Beta Lambda, a national business organization National Dean's List-Honor Society Alpha Chi-National Honor Society 2010 Student of the Year-Lone Grove High School
SPECIAL SKILLS	Ability to use Microsoft Office XP: Access, Excel, PowerPoint, Word, and Publisher.

BENJAMIN T. PHILLIPS

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407 Phillips Road
Benton, KY 42025
(502) 527-7702
btphillips@yahoo.com

OBJECTIVE	To obtain a full-time summer position which would give experience in the area of secondary education, preferably mathematics education.
EDUCATION	**FREED-HARDEMAN UNIVERSITY**, Henderson, TN Mathematics major seeking secondary licensure Will Graduate May 2014, GPA 4.0 **MARSHALL COUNTY HIGH SCHOOL**, Benton, KY High School Diploma, May 2011, GPA 4.0
JOB EXPERIENCE	**Benton Church of Christ,** Benton, KY Summer 2013 Intern Minister **Video Visions**, Benton, KY August 2009-Present Owner/Video Producer **WCBL Radio FM & AM**, Benton, KY May 2009-August 2012 Announcer/Disc Jockey
SKILLS	-Proficient with Microsoft Access, Excel, PowerPoint, and Word -Proficient with Macromedia Studio 8: Flash, Fireworks, and Dreamweaver

Carmen Camille Kennedy
2112 Palm Grove Lane
Berea, KY 40403

Home Phone: 454-999-0129 Cell Phone: 454-777-9210

Objective To obtain a customer service/cashier position.

Education **Madison Southern High School**, Berea, Kentucky. Will graduate in the top 20% from Madison Southern High School as part of the Class of 2007

- Completed the following business courses: Business and Marketing I Business and Marketing II, and currently in Accounting.
- Completed the following art courses: Art 1, Art II, Art III, Art Drawing, and Advanced Placement Studio Art.
- Awarded for Proficient on CATS test.
- Employee of Madison Southern school retail store.

Work Experience **March–August 2006**
Taco Bell - Richmond, KY 40475
Frontline Service Leader
Front Cashier
Drive-thru Cashier

September–December 2004
EKU Community Athletics - Richmond, KY 40475
Part-time position as gymnastics coach
Demonstrated patience and knowledge of tasks
Gained experience in people skills

School Activities

- **2003-2007**– Varsity Dance Team
- **2006-2007**– Varsity Dance Team Captain
- **2005-2007**– Varsity Track Team
- **2005-2006**– Future Business Leaders of America, Treasurer
- **2006-2007**– Future Business Leaders of America, Historian
- **2005-2006**– Art Club, Treasurer
- **2004-2006**– DECA, competed in regional and state competitions
- **2003-2006**– Pep Club
- **2005-2006**– Prom Committee

Volunteer Work Participated in

- Fundraising for **Make a Wish Foundation**
- Fundraising for **March of Dimes**
- Fundraising for research on Muscular Dystrophy
- Mission work through local church

2.2.4 The Letter of Application

Once your résumé has been printed, the final step before mailing it is to write a letter of application. The letter of application is also called a cover letter. Résumés sent through the mail always need an accompanying letter that briefly introduces you and your résumé. The purpose of a letter of application is to get a potential employer to read your résumé.

Like your résumé, your letter of application should be clean, neat, and direct. A letter of application includes the following information:

1. Your personal letterhead—name, address, phone number, and e-mail address.
2. The date.
3. The name and address of the person and company to whom you are sending your résumé.
4. The salutation.
5. An opening paragraph explaining why you are writing and how you found out about the position you are seeking.
6. One or more paragraphs explaining why you are qualified and why you want to work for that company.
7. A closing paragraph that invites the reader to contact you for an interview and tells the best method to contact you. Make a reference to your enclosed résumé.
8. Complimentary closing, followed by your signed name in dark ink, with your name keyed under it.
9. Make an enclosure notation a double space below the name.

2.2.5 Guidelines for Letter of Application

221 Poplar Street
Missoula, Montana 59801
February 20, 20XX

Mr. John P. Johnson, Personnel Manager
Ajax Accounting Company
555 Tamarack Drive
Billings, Montana 59801

Dear Mr. Johnson:

First Paragraph. In your initial paragraph, state the reason for the letter, the specific position or type of work for which you are applying, and indicate from which resource (placement center, news media, friend, employment service) you learned of the opening.

Second Paragraph. Indicate why you are interested in the position, the company, and the company's products or services. If you are a recent graduate, explain how your academic background makes you a qualified candidate for the position. If you had some practical work experience, point out the specific achievements or unique qualifications. Try not to repeat the same information the reader will find in the résumé.

Third Paragraph. Refer the reader to the enclosed résumé or application which summarizes your qualifications, training, experiences, or whatever media you may be utilizing to present yourself.

Final Paragraph. In the closing paragraph, indicate your desire for a personal interview and your flexibility as to the time and place. Repeat your phone number in the letter and offer any assistance to help in a speedy response. Close the letter with a statement or question which will encourage a response. This response can be accomplished by asking for more specific information about the position, the company, etc.

Sincerely yours,

Thomas L. Smith

Thomas L. Smith

Enclosure

2.2.5 Letter of Application Example 1

Box 11000, Student Box 816
Oklahoma, OK 73136-1100
February 20, 20XX

Mr. Bill Browning, Audit Partner
Arthur Andersen & Company
Audit Department
20 Broadway, Suite 1200
Oklahoma City, OK 73102

Dear Mr. Browning:

I have been impressed by the winning, innovative personality of Arthur Andersen & Company. I am aware of the extensive educational opportunities that your training programs offer. Consequently, I am submitting a history of my background and qualifications for employment as one of your auditors.

Arthur Andersen & Company's superior reputation in the auditing field allows me to conclude that I would be motivated and challenged to excel in my work as an auditor. My academic record, extracurricular achievements, and related work experience reflect a well-rounded background and an ability to produce quality results.

Enclosed is a copy of my résumé. My undergraduate studies and achievements have given me strong backgrounds in accounting and communication skills.

After you have the opportunity to review my qualifications, please allow me the chance to personally discuss with you the potentiality of employment with your firm. You can reach me at (405) 425-6928. Additional information may be obtained by contacting the Oklahoma Christian College Placement Center.

Sincerely yours,

Gwen Richardson

Gwen Richardson

Enclosure

2.2.5 Letter of Application Example 2

101 College Hill Road
Richmond, KY 40475
February 20, 20XX

Mr. Steve Gibbs
Personnel Director
Electronics Data Systems
450 Lancaster Avenue
Richmond, KY 40475

Dear Mr. Gibbs:

The Center for Career Development and Placement at Eastern Kentucky University has recently informed me that Electronic Data Systems is in the process of recruiting business and computer science majors for the Systems Engineering Development (SED) program. I am aware of the extensive training and excellent opportunities that the SED program offers qualified individuals and would like to submit my credentials and résumé for consideration.

This year, I have had the opportunity to learn about the tremendous growth Electronic Data Systems has experienced and also about the dynamic leadership of your chairman, Mr. Ross Peroe. I am very interested in becoming a part of an organization that is on the leading edge of business systems development.

Enclosed is a copy of my résumé. My college training has provided me with a solid foundation in the field of systems analysis, and my qualifications correspond to the high standards typical of your organization.

After you have the opportunity to study my background thoroughly, please allow me to visit with you personally and discuss the possibility of my employment with your firm. If you would like any additional information, please call me at (405) 478-3620 or contact the Eastern Kentucky University Center for Career Development and Placement.

Sincerely,

Ken McFarland

Ken McFarland

Enclosure

Lesson 2.3.1 The Job Interview

Congratulations, you got the call for an interview! What now? The following steps are necessary to prepare for the job interview:

- Learn about the company/organization. Talk to anyone you know who works there and research the company website. You will make a good impression if you are knowledgeable about the organization.
- Have a specific position in mind. You will be able to better focus on your talents and other qualities that are best suited to the position. Be flexible. If there is a similar position open, be ready to apply for it also.
- Review your résumé.
- Prepare answers to broad questions about yourself. Many interviewers use very general questions to open an interview. They may say, "Tell me a little about yourself; list your strengths and weaknesses; tell me your short- and long-range plans; explain why you are the person for the position." Your answers to these questions should be specific and related to the position. For example, when discussing the type of person you are, you could say you enjoy working with others and mention that you have been involved in many school activities or participated in team sports.
- Practice what you will say until you feel comfortable and confident. Video tape yourself or ask a friend to play the part of the interviewer.

It is the day of the interview! Use the checklist below to ensure the appropriate steps are taken before, during, and after the interview.

Before You Leave

- Wash, put on deodorant, and brush/comb hair.
- Dress appropriately.
- Do not bring gum, cigarettes, or smokeless tobacco.
- Bring your résumé.
- Bring your references page.
- Give yourself plenty of time to arrive at the interview. Arrive 10 minutes early.


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During the Interview

- Shake hands firmly, smile, and be open and friendly.
- Answer each question concisely and respond promptly.
- Use good manners.
- Use good English, avoid slang.
- Be alert, show interest, and be enthusiastic.
- Be prepared to ask the interviewer any questions you may have. Ask intelligent questions about the position and the company. Do not ask questions that raise a “red” flag. For example, asking “Would I really have to work weekends?” Also, avoid questions about compensation (pay).
- Ask for the interviewer’s business card, so you will know how to spell his/her name and have the address for a thank-you note.

After the Interview

- Write a thank-you note to the interviewer.
- Reflect on the interview. How can you improve?

Common Job Interview Mistakes

Learn from the mistakes of others. Below are "18 Deadly Interview Mistakes Job Seekers Make," adapted from Drs. Caryl and Ron Krannich's *101 Dynamite Answers to Interview Questions*.

1. Arrive late for the interview.
2. Indicate you are late because the directions you were given were not good.
3. Look disheveled and inappropriately dressed.
4. Slouch in your seat.
5. Don't maintain good eye contact with the interviewer.
6. Do your company research at the interview by asking, "What do you guys do here?"
7. Don't make a connection between your skills and the needs of the employer.
8. Brag about how great you are but neglect to cite evidence of your accomplishments.
9. Respond in an unfocused, disorganized, and rambling manner.
10. Remain low key and display no enthusiasm for the job.
11. Answer most questions with simple "yes" and "no" answers.
12. Appear desperate for a job—any job.
13. Call the interviewer by his or her first name, or use the wrong name.
14. Give memorized responses, forgetting parts of the process.
15. Badmouth your current or former employer.
16. Ask "How am I doing? Are you going to hire me?"
17. Blurt out, "I need to make at least $35,000. I hope this job pays at least that much," near the beginning of the interview.
18. When asked, "Do you have any questions?" reply "No."

Commonly Asked Interview Questions

1. Tell me about yourself.
2. What is important to you in a job?
3. What is, or was, your best subject in school? Your worst? Your favorite?
4. Where do you hope to be in 5 years? 10 years?
5. What work experience have you had that would help you in this job?
6. What are your short-term and long-term goals?
7. What does success mean to you?
8. Tell me about your last job? Why did you leave?
9. Why do you want to work for our company?
10. What are your strengths?
11. What are your weaknesses?
12. What do you consider your greatest accomplishment?
13. What do you consider your greatest failure?
14. What do you like most about yourself?
15. What do you like least about yourself?
16. What is important to you in a job?
17. What can you contribute to this company?
18. Are you willing to relocate?
19. How has your education prepared you for this position?
20. Why should I hire you for this position?

Questions to Ask at the End of the Interview

Just remember, don't ask a question if you are not truly interested in the answer; it will be obvious to the employer.

1. What are the company's strengths and weaknesses compared to its competition?
2. How important does upper management consider the function of this department/position?
3. What is the organization's plan for the next five years, and how does this department fit in?
4. Could you explain your organizational structure?
5. How will my leadership responsibilities and performance be measured? By whom?
6. What are the day-to-day responsibilities of this job?
7. Could you describe your company's management style and the type of employee who fits well with it?
8. What are some of the skills and abilities necessary for someone to succeed in this job?
9. What is the company's policy on providing seminars, workshops, and training, so employees can keep up their skills or acquire new ones?
10. What particular computer equipment and software do you use?
11. What kind of work can I expect to be doing the first year?
12. What percentage of routine, detailed work will I encounter?
13. How much opportunity is there to see the end result of my efforts?
14. Who will review my performance? How often?
15. How much guidance or assistance is made available to individuals developing career goals?
16. How much opportunity will I have for decision making in my first assignment?
17. Can you describe an ideal employee?
18. What is your organization's policy on transfers to other cities?

2.3.2 Portfolio Piece—Employment Advice

Situation: We have been studying about the career portfolio and the documents needed to introduce you to a future employer and prepare for the job interview.

Writing Assignment: You are employed by a college placement office that publishes a newsletter once a semester for students who are going to graduate. You have been asked to write an article for the newsletter giving advice to students who will soon be searching for jobs as they enter the job market.

Criteria for Assignment:

Purpose: To provide information students will need as they prepare for a job. Focus on the résumé, letter of application (cover letter), and the interview.

Audience: Students who will be graduating and entering the job market this semester.

Content: You may organize your information in the way you feel it can best be communicated. Newsletters use columns. Bullets are good for lists of suggestions. Be sure to cite your sources.

Organization: You may organize your tips in the sequence you feel is easiest to understand. It is recommended you begin with résumé preparation, then letter of application preparation, and end with interview tips.

Style: Use your best grammar, punctuation, and spelling. Divide your article into subheadings. Use graphics to enhance and make it easier for your reader to understand your document.

2.3.3 Open Response—Career Portfolio

Most people will seek employment at various times throughout their lifetime. Reflect on the research and discussions we have had in recent weeks in class to answer the questions below.

1. List three documents you will need as you seek employment and prepare for the job search.

2. Describe in detail how to complete one of the documents you listed above.

Name: ______________________

2.3.5 Career Interview Form

Interviewer:

Interviewee:

Job title:

Job description:

Educational requirements:

Duties:

Skills needed:

Hours (per week, per day, actual time):

Salary/Pay:

Benefits (insurance, sick days, vacation days, child care, etc.):

Advancement opportunities:

Advantages of job:

Disadvantages of job:

Typical day schedule:

Why did you choose this career?

How did you hear about this career (i.e., friend, newspaper, Internet)?

Name: ______________________________

2.3.6 "The Interview" Instructions

There are many things to consider before going for your first interview. You should PREPARE for the interview; you should know what to do DURING the interview; you should know what to do AFTER the interview; and you should definitely know common interview DOs and DON'Ts.

Research these topics using the Internet, current magazines, and/or books in your library. Fill in the 2.3.7 worksheet with the information found from your research.

Finally, create an article for a popular career magazine discussing the information you found. The article must be two or three columns and fully justified. It should contain an appropriate title, headings for each section, two appropriate pictures/clipart, and sources.

2.3.7 The Interview

Before the interview

1.
2.
3.
4.
5.

During the interview

1.
2.
3.
4.
5.

After the interview

1.
2.
3.
4.
5.

Interview DOs and DON'Ts

1.
2.
3.
4.
5.

Name: ______________________________

2.3.8 Career Activity

Choose an accounting career that might interest you. Use the Internet to research that specific career; gather as much information as you can about that career (educational requirements, exams required, skills, experience, hours, salary, job description, duties, benefits, advancement opportunities, advantage/disadvantages, etc.).

Next, compile that information in a paper (introduction, body, conclusion). This activity is an informative paper. It is worth 100 points. It will be given to your English teacher for a writing portfolio piece also.

Use: Good grammar
Good sentence structure
Informative information
Correct spelling
Neatness
Double space (10-12 size font; Courier New, Arial, or Times New Roman)

Possible careers in accounting:

Accountant
Accounting Clerk
Accounting Professor
Accounting Supervisor
Asset Manager
Assurance Services
Auditor
Bookkeeper
Budget Analyst
Cash Management
Certified Public Accountant
Chief Executive Officer
Chief Financial Officer
CIA Special Agent
Compliance Officer
Controller
Corporate Tax Accountant
Cost Accountant
Eldercare Accounting Services
Entrepreneur
Environmental Accounting
FBI Special Agent
Financial Analyst
Financial Planner
Forensic Accountant
General Accounting
Governmental Accountant
Internal Auditor
International Accounting
Investment Banking
IRS Special Agent
IT Professional
Junior Accountant
Managerial Accountant
Mortgage/Real Estate
Project Accountant
Property Accountant
Security Specialist
Senior Accountant
Small Business Owner
Stock Analyst
Tax Accountant
Treasury/Risk Accountant
Underwriter
Treasury/Risk Accountant

2.3.9 The Big Four

You will work with other classmates in teams to engage in perhaps the most critical fact-finding mission of your life, landing a job with one of the Big Four accounting firms. You need meaningful information about potential employers. You need to make an important decision regarding your life and career! You need to explore one of the Big Four accounting firms and decide as a team if you would want to work for that company. The right decision could make you and others in your team very wealthy and happy. The wrong decision could ruin your career. Your team will be assigned one of the Big Four accounting firms which are: Deloitte & Touche, Ernst and Young, KPMG, and Price Waterhouse Coopers.

After completing your research, each team will convince the class that this is or is not the company to work for, and this convincing will be done through a PowerPoint presentation.

Each team member will need to begin the process by researching different aspects of the company:

Evaluating the pros and cons about working for the company.

Analyzing and ranking the importance of the criteria used in the evaluation.

Designing and drawing a logo for the company.

Convincing the class that this is or is not the company for which to work.

Each team will research the following criteria (if applicable):

- Salary
- Company Culture
- Career Advancement/Opportunities
- Turnover
- Satisfaction of the Employees
- Hours
- Locations
- Diversity
- Prestige
- Company Overview

Each team member will be responsible for researching two of the above criteria.

Once the information has been collected, team members will need to organize the data in a table format in MSWord. Team members can then start on the design of the logo for the company, and finally team members can work on the PowerPoint presentation.

Before the team presents its findings to the class, the team will need to discuss and organize the presentation. All team members will need to participate.

3.1.2 Business Ethics PowerPoint Notes

Ethics –

What does it mean to be honest? Honest about time and honest about money.

Respecting employers' property –

Confidentiality –

Fairness –

3.1.3 Ethics vs. Morality

Ethics and morality are often used to refer to an individual's ability to "do what is right." These synonymous English words were derived from different languages. "Ethics" is derived from the Greek language, and "morality" is derived from Latin. Over time, our society has given a slightly different meaning to each word.

Over 100 years ago, C.C. Everett wrote, "Ethics is the science of morality." Morality is the standard of conduct that is acceptable in a society. Ethics is an organized method that relies on our morality to make moral decisions. Science students use the scientific method. In the same manner, many ethical models have been proposed to guide individuals in applying their morality to business decisions. The following ethical decision model should be used when making ethical business decisions:

1. Recognize you are facing an ethical dilemma.
2. Identify the action taken or the proposed action.
3. Analyze the action.
    a. Is the action legal?
    b. Does the action violate company standards?
    c. Who is affected, and how, by the action?
4. Determine if the action is ethical.

Recognizing Ethical Dilemmas


Photodisc/Photodisc/Thinkstock

The first step of the ethical model is to recognize you are facing an ethical dilemma. Few business decisions will require you to act immediately. Take whatever time is required to determine whether your actions could harm someone else. If you have any doubts that your action will violate your morals, stop to evaluate the decision using the ethical model.

The second step of the ethical model is to identify the action taken or the proposed action. Write down every possible action you think of, even if the idea might seem outrageous at first. Seek the advice of others who may have encountered similar dilemmas or whom you admire for their ethical behavior.

Are Your Actions Legal?

In a perfect world, everyone would know to do the right thing. In the real world, however, governments have been forced to create complex systems of laws to force individuals to adhere to the social norm of right and wrong. We rely on these laws for our protection as well as the orderly operation of our society.

The following concepts are common knowledge for individuals working in business:

- Employers may not discriminate on the basis of national origin.
- Different customers may not be charged different prices for the same item.
- Taxes must be paid to the government.

However, it is not always so obvious to determine when an action is legal. Did you know:

- It can be illegal to sell certain items such as computers and oil to countries that violate global norms of conduct.
- An interviewer may not ask a prospective employee if he or she has children.
- Companies with more than $10 million in assets having more than 500 owners must file annual and other periodic reports with the government.

No one can be expected to know every law that might affect the operation of a business. To assist its managers, businesses hire lawyers to provide legal advice. Most large businesses staff their own lawyers. Small businesses typically use an independent lawyer to provide legal advice when needed. Managers should always be encouraged to consult the lawyers if there is any question about whether an action might be illegal.

Integrity

What does the word *integrity* mean to you? Many companies include an interpretation of the word in their code of conduct.

- "We always try to do the right thing." -Procter & Gamble
- "To say what we mean, to deliver what we promise, to fulfill our commitments, and to stand for what is right." -Lockheed Martin
- "We do the right thing without compromise. We avoid even the appearance of impropriety." –Intel

Companies with integrity have an absolute commitment to do what is right in all business activities. Integrity is ultimately the most critical component to long-term business success. A business that fails to act with integrity will soon find it difficult to hire employees, deal with suppliers, and enjoy repeat customers.

The American Institute of Certified Public Accountants recognizes that integrity is critical for maintaining public confidence in its members' professional services. "Integrity is an element of character fundamental to professional recognition. It is the quality from which the public trust derives and the benchmark against which a member must ultimately test all decisions."

In private and to yourself, think of five people you believe to possess integrity.

Do you have integrity?

ETHICS

"Do the Right Thing"

Takin' Care of Business

#14

CPA... Imagine the possibilities!

AICPA

#14 "Do the Right Thing" ETHICS

Overview

Ethics are principles of good conduct that help people decide whether an action or decision is morally right or morally wrong. The most fundamental ethical principle is: "Do unto others as you would have them do unto you." Known as the "Golden Rule," this rule implies that an ethical person is concerned not only with themselves, but also with the well-being of others.

Despite the notion that the sole consideration is the "bottom line," businesses are concerned with ethics. At a minimum level, businesses are concerned with acting in an ethical manner in order to protect themselves, avoid scandals, and stay free of government intervention which, in turn, can avoid the levying of fines and the assessment of penalties, if not imprisonment. At a higher level, however, businesses pay heed to the notion of proper ethical conduct since such conduct often defines another "bottom line," which is not what you earn financially, but who you are. In light of today's image conscious public, proper ethical conduct may add more to the bottom line than price hikes and cost-cutting measures.

Another common misconception is that laws and ethics are the same: "If it's legal, it's ethical." Quite the contrary. In fact, an individual can be dishonest, untrustworthy, unfair and uncaring without ever breaking the law. Laws — rules of society — only outline minimal standards of what is proper. Laws do not always define or address proper ethical actions or behavior.

Proper ethical behavior is founded in the belief that it is imperative to distinguish between right and wrong. A **Certified Public Accountant (CPA)** abides by a code of ethics that all members of the profession must observe.

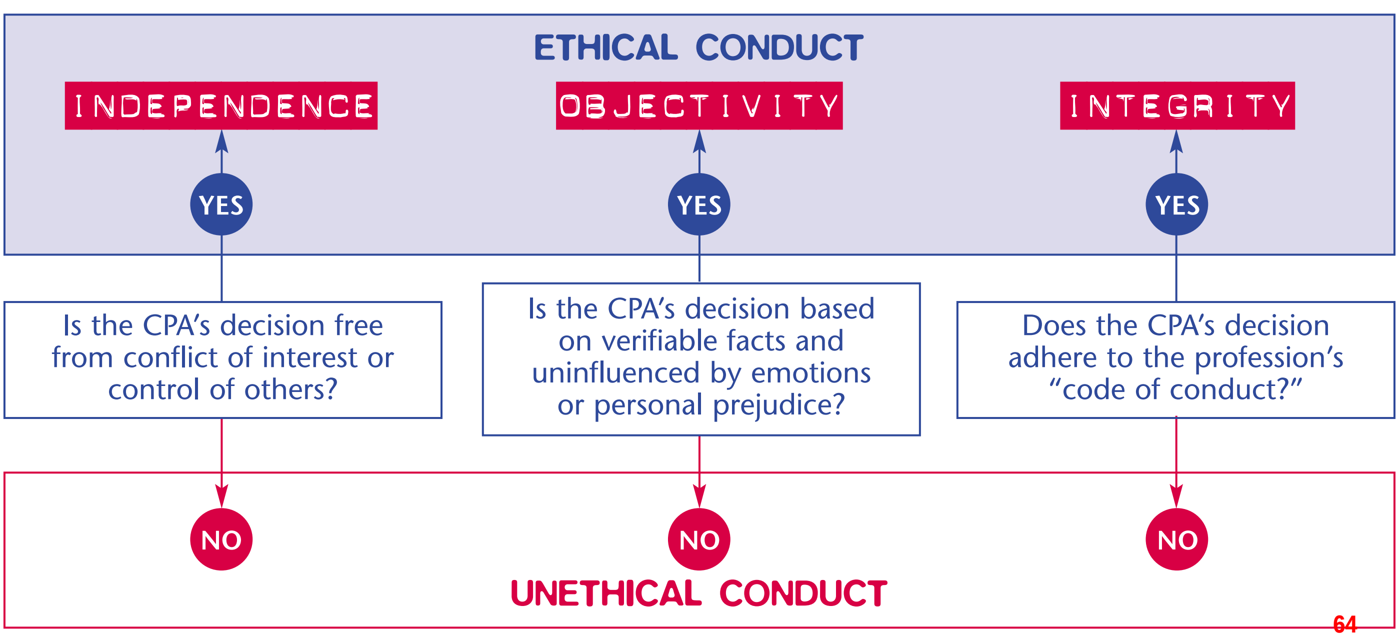
The principle source of information concerning the CPA's professional ethical standards is the *AICPA's Code of Professional Conduct (Principles and Rules)*, which has been in existence for more than 100 years. Additionally, each state has its own regulatory body that sets professional and ethical standards that govern CPAs licensed to practice in that state.

Proper ethical behavior can be defined according to three basic characteristics: **independence, objectivity,** and **integrity**.

With regard to **independence and objectivity**, CPAs must be free of conflicts of interest both in appearance and in fact when providing public accounting services to clients. CPAs provide multiple services — auditing, financial planning, consulting, international, and technology services — to a variety of clients in a multitude of industries. Therefore, it is imperative that CPAs continuously assess their client relationships and public responsibilities.

Maintaining the highest degree of **integrity** is necessary to sustain and broaden the public's confidence in CPAs and the accounting profession. Integrity requires CPAs to be honest and candid in their work and to maintain client confidentiality without seeking personal gain. Measured in terms of what is right and what is wrong, integrity is the benchmark against which all decisions and actions by a CPA must be assessed.

In order to act ethically, a CPA must be independent, objective and act with the highest degree of integrity. If a CPA ***violates any one*** of these characteristics, the action is deemed to be ***unethical***.



Ethics and Professional Behavior

1. Jon Watson, CPA, accepts two round-trip tickets to Florida from a client of the firm he is employed with.

2. Julie McVoy, CPA, is seeking employment as a top-level accounting manager with a client for whom she is currently conducting an independent audit.

3. Jack is a partner with Morgan & Co., CPAs. The Moxie Company has asked Jack to perform an audit of the company. Jack's partner, Jake, and Susan, a staff accountant, own stock in Moxie Company. Jack does not own stock in Moxie Company.

4. Andrew & Co., CPAs, performed auditing services for McMahon Financial Services Inc. last year. McMahon has yet to pay the fees for those services. McMahon has engaged Andrew & Co. to perform an audit of their financial statements for this year.

5. Joe has earned his CPA designation by passing the CPA Exam and meeting the education, experience and licensing requirements in his state. He has decided to pursue a career as a high school and college accounting instructor. In his search for a teaching position, Joe presents himself as a CPA by placing the "CPA" letters on personal business cards and stationery. In addition, as a part-time job, Joe continues to audit financial statements and prepare tax returns for clients that have engaged Joe based on the fact that he has informed the clients that he is a CPA.

6. The KML Company has engaged the firm of J. Ditkan, CPAs, to audit its financial statements and prepare its tax return. KML stated to Jodi, a partner with J. Ditkan, that they would pay Ditkan $250,000 if she would issue a favorable audit opinion of the financial statements and prepare the tax return so that they would receive a refund. In fact, if the tax refund is more than $100,000, KML has agreed to buy Jodi a convertible Mercedes-Benz. Otherwise, without a favorable audit opinion and tax refund, KML will only pay Ditkan $45,000.

7. Thomas, a CPA, was recently hired by a large Wall Street firm to assess the advantages and disadvantages of proposed mergers among Fortune 500 companies. As part of the terms of employment, Thomas has agreed not to invest in any of the companies he is researching, because to do so would be considered insider trading, which is illegal. Thomas has never acquired the stock of companies he is analyzing, but has on occasion strongly suggested to his brother-in-law, Richard, that he (Richard) might want to do so. In fact, Richard has taken Thomas' "advice" and made $1 million in the New York Stock Exchange by buying and selling Thomas' "suggested" stocks.

8. Jocelin, who is an accountant but not a CPA, has agreed to prepare a financial forecast and projection for the Dube Group. Jocelin has approached Nikki, a CPA, and offered her half of the fee — $50,000 — from the Dube Group if she signs the financial report. Since Nikki is a CPA and Jocelin is not, Nikki's signature, as opposed to Jocelin's, would give the report more credibility.

9. Francis, a CPA with the accounting firm Norris & Co., attended a party and fundraiser at the Downtown Metropolitan Center. Francis, in his conversations with other guests, revealed that he is auditing Bendas, Inc., a prominent distributor of computer software.

10. J. Tater & Company, a manufacturer of high-tech computer equipment, is one of eight companies preparing contract proposals to supply foreign countries with the latest microcomputers. Each company will present their proposal to the United States Foreign Affairs Committee. In conversations with members of the committee, J. Tater's chief financial officer, Melanie — a CPA — has mentioned the possibility of giving each member of the committee $25,000 if J. Tater is awarded the contract, which is worth $10 million.

Do the Right Thing

FIRST, for each of the business scenarios described, indicate whether the CPA's action is ethical or unethical.

- **IF you answer "ethical" and that is the correct answer,** award your team **15 points.**
- **IF you answer "unethical" and that is the correct answer,** award your team **5 points. THEN** indicate the characteristic(s) of ethical conduct — objectivity, integrity, independence — that the CPA has violated. If you answer correctly, award your team an additional **10 points.** Incorrect answers receive zero additional points.
- **IF you answer incorrectly, zero points** are awarded.

THEN, total your team's points to assess the character of your team members using the "Character Assessment Guide."

Remember that CPAs must act with objectivity, integrity AND independence. If a CPA violates any one of the characteristics, his or her action is deemed to be unethical.

CPA Scenario	CPA's Action *Ethical or Unethical*	Characteristic(s) Conflict *Objectivity • Integrity • Independence*	Points
#1			
#2			
#3			
#4			
#5			
#6			
#7			
#8			
#9			
#10			
		TOTAL POINTS	

Character Assessment Guide

Points	Assessment
135 or more	A model professional!
120 to 134	Somebody you can definitely trust
105 to 119	A decent person
90 to 104	A shady character
75 to 89	Somebody you can never trust!
74 or less	***A real, no-good *&%#@!!***

3.1.7 Top Ten Questions You Should Ask Yourself When Making an Ethical Decision

10. **Could the decision become habit forming?**

    If so, don't do it.

9. **Is it legal?**

    If it isn't, don't do it.

8. **Is it safe?**

    If it isn't, don't do it.

7. **Is it the right thing to do?**

    If it isn't, don't do it.

6. **Will this stand the test of public scrutiny?**

    If it won't, don't do it.

5. **If something terrible were to happen, could I defend my actions?**

    If you can't, don't do it.

4. **Is it just, balanced, and fair?**

    If it isn't, don't do it.

3. **How will it make me feel about myself?**

    If it's lousy, don't do it.

2. **Does this choice lead to the greatest good for the greatest number?**

    If it doesn't, don't do it.

And the #1 question you should ask yourself when making an ethical decision:

1. **Would I do this in front of my mother?**

    If you wouldn't, don't do it.

Used with permission:

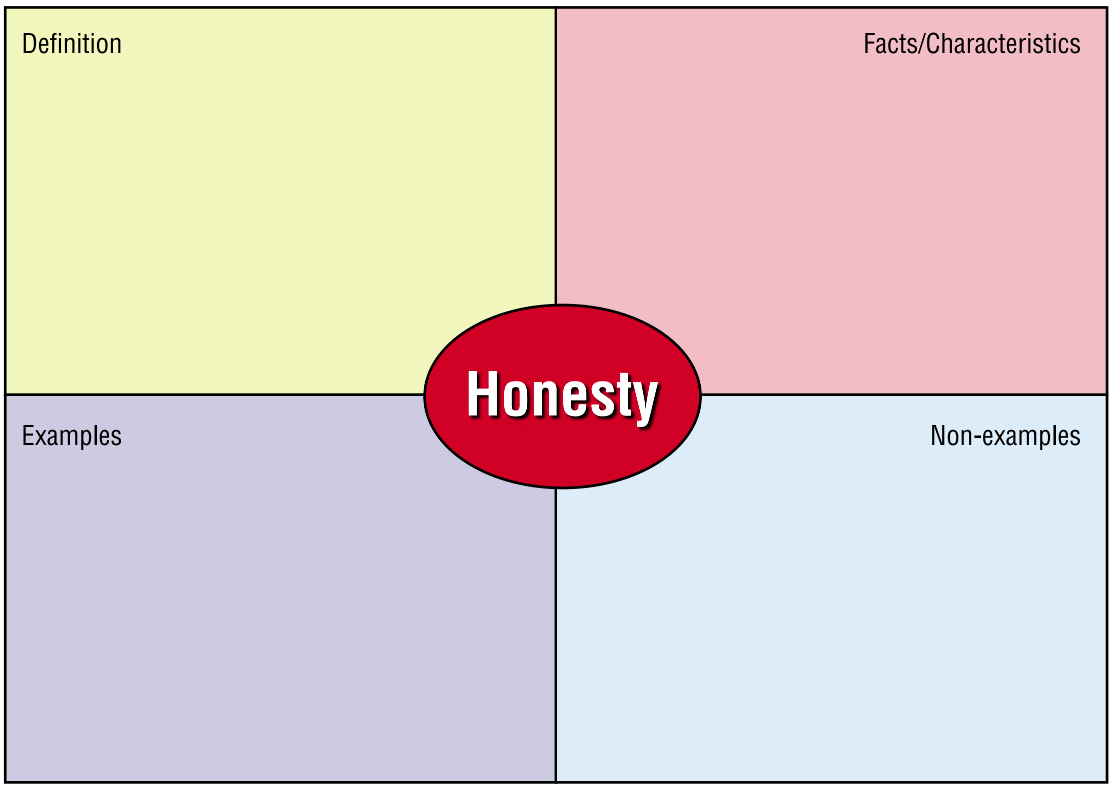
Hopper, Carolyn. "Top Ten Questions You Should Ask Yourself When Making an Ethical Decision." (1998). University 101 Instructor's Resource Manual Middle Tennessee State University. http://frank.mtsu.edu/~u101irm/ethicques.html (16 Aug. 2012)

3.1.8 Honesty in the Workplace

Complete the chart below using the word honesty. Brainstorm feelings and opinions about this word with other students.

Write a response to:

Why do you think some employers are reluctant to be honest when in a working environment? Describe the ideal workplace environment.



3.1.9 Confidentiality

The Merriam-Webster dictionary defines confidential as:

- marked by intimacy or willingness to confide <a *confidential* tone>
- private, secret <*confidential* information>
- entrusted with confidences <a *confidential* clerk>
- containing information whose unauthorized disclosure could be prejudicial to the national interest

Confidentiality applies to a variety of situations. It is personal when it relates to someone's personal information or friends who are trading secrets. It relates to parents who are aware of information about their children or their children's friends. It applies to teachers and school counselors and information they know about students. And, it applies to a range of professionals such as doctors, police officers, elected officials, judges, attorneys, accountants, investment advisors, and people in other occupations, and what they know about certain people, places, and things.

Confidentiality is an ethical principle that requires good judgment be applied daily in professions such as law, medicine, and counseling. In these professions, communication between the professional and the person being helped (client) legally cannot be shared with others.

The law requires attorneys to keep secret any information that pertains to defending their clients. This is known as legal confidentiality. It enables clients to discuss their cases openly with their attorneys. Clients need to be comfortable sharing all relevant information about their cases including information that might hurt their cases with their lawyers. An open conversation keeps the attorney from being surprised in court by information a client should have shared with him/her. The information might even be something that the attorney could use to help her/his client. Legal confidentiality allows a client to receive the best legal representation s/he possibly can, without fear of having the information used against her/him. However, there are exceptions to the requirement of legal confidentiality. If an attorney has reason to believe that a client may kill or seriously injure someone, may cause substantial injury to the financial interest or property of another, or is using the attorney's services to commit a crime or fraud, s/he is not required to keep the information secret.

Confidentiality also applies to conversations between doctors and patients. This is called medical confidentiality. Doctors are protected from having to share certain information obtained from conversations with their patients, even under oath in court. Just like in legal confidentiality, the practice is an attempt to allow the doctor to provide the best treatment possible by making sure the patient is comfortable discussing all relevant information. There are numerous exceptions to medical confidentiality, though. Many U.S. states require doctors to report gunshot wounds to police and impaired drivers to the Department of Motor Vehicles. There can also be exceptions related to the diagnosis of certain diseases, especially if a patient's refusal to share the diagnosis with a spouse or others could cause harm to them, or if an underage patient's parents are not aware of a potentially dangerous medical issue.

Professional counselors, including school counselors, are also governed by the ethical principle of confidentiality. A counselor must create an environment of trust for treatment to be successful. This means s/he must be able to assure clients that information about them shared during treatment will almost never be discussed with anyone else. Sometimes, however, confidentiality conflicts with the counselor's duty to warn or protect. Situations that involve suicidal or homicidal behavior, child abuse, elder abuse, and dependent adult abuse are examples of when information is exempt from confidentiality requirements.

Based on what you have read, answer the following questions:

1. Is there really a difference between the different kinds of "confidentiality"?
2. Do you think that all information you share with teachers, counselors, coaches, nurses, and doctors needs to remain confidential?
3. Give examples of situations in which you think the information might have to be shared.
4. Do you think that sometimes requiring that information be shared is good or bad?

Confidentiality in the workplace is also a must. Just as most legal and medical information cannot be shared, much business information is confidential as well. Only certain company employees may have access to the information, and, in many cases, even those individuals aren't authorized to share it with anyone outside the office.

To ensure that confidential business information remains confidential, many employers require their employees to sign a non-disclosure agreement, which is a type of contract, when they are hired. Although non-disclosure agreements may contain somewhat confusing legal jargon, they all serve the same basic purpose—to explain to employees the consequences of sharing confidential information with unauthorized persons. If you are ever asked to sign a non-disclosure agreement, remember not to take the request personally—your employer doesn't think that you're a criminal. Instead, your employer is simply protecting itself against loss.

So, what company information shouldn't be shared? That all depends on the type of company and the type of information it possesses. Certainly, you shouldn't share the contents of a file stamped "Top Secret" or "Confidential." Secret formulas and new product ideas are off limits, too. But, you also need to be extremely careful about what you say to people regarding company and client financial records, business meetings, upcoming mergers and acquisitions, staff members, and anything else that your employer doesn't want people outside the company to know.

Sharing confidential business information with unauthorized individuals can result in some pretty harsh consequences. Regardless of whether you do it by accident or intentionally, you can damage your professional reputation, lose your job, or even get in trouble with the law by sharing a company's confidential information. If you're unsure about whether it's okay to share a piece of business information or not, err on the safe side—keep the information a secret.

You know that you have an obligation to maintain the confidentiality of your employer's secret information, but is your employer required to show you the same respect? Probably not. Many businesses monitor their employees' company e-mail accounts and Internet usage to insure that workers are using company resources wisely. After all, when you're at work, you should be working, not accessing your personal Facebook account or sending e-mails to friends. In fact, your supervisor and/or manager may be permitted to read e-mails that you send or receive via your work e-mail account. So, make sure that everything that you write or get via company e-mail is information that you'd be willing to share with your boss!

Answer the following questions:

5. Why shouldn't you share information that you hear at work with your friends or anyone else?
6. Does the same idea apply to information that you share at school?

Next, read the three parts of the article *Too Much Information* (http://careerplanning.about.com/cs/personalissues/a/personal_info.htm). The article discusses how much information is appropriate to share with coworkers. This advice also applies to dealing with classmates. Answer the following questions after reading the article:

7. Are you confident that everything you share with a friend always remains private?
8. Does the part about "exposing your belly" make sense to you? Do you agree or disagree with it?
9. What is the most important idea you are taking away from reading the article?

Too Much Information

By Dawn Rosenberg McKay, About.com Guide

Part 1: How Much Should You Share With Your Co-Workers?

Do you share personal information at work? It's kind of hard not to tell your co-workers things about your private life. After all, these are the people with whom you spend at least eight hours a day, five days a week. You're practically living with them—you spend more time with your co-workers than you do with your own family. If you don't talk to them you may lose your mind.

I spent almost ten years at my last place of employment. I shared many lunches and, because we worked some evenings, dinners with my colleagues. We were like a family. They were among the first people to know when I got engaged and offered advice as I planned my wedding. Many of my co-workers even attended my wedding and several came to visit me shortly after my daughter was born.

When I first found out I was pregnant with my daughter, though, I didn't want to reveal that information too soon. I especially didn't want my boss to know about it since I didn't want her to pressure me into making a decision about when I would return to work after giving birth. Therefore, I told only two people at work. One was a very close friend, and the other was someone I knew could keep a secret and was someone I could count on in an emergency. It wasn't that I didn't trust everyone else. Okay, there were some people I really didn't trust. As for the others, I didn't think it was fair to burden them with having to keep a secret. It was tough for me to keep my pregnancy a secret and I had a reason to do that. To expect other people to remember to keep my secret when they had no vested interest in doing so, was, I thought, somewhat unfair.

There are several reasons for not sharing personal information with your co-workers. As I discussed above, you may not want to burden your co-workers. As I alluded to, also, was not trusting your co-workers to keep your secret. There are people around, and we all know someone like this, who will think nothing of talking about you. Some people are very matter-of-fact about it and just assume there's nothing wrong with telling others whatever you told them. Others are malicious and intend to cause harm by spreading information. By the time you find out you've shared your story with the wrong person it's usually too late. There are other reasons for keeping personal information out of the workplace. Let's explore those reasons now.

Too Much Information

By Dawn Rosenberg McKay, About.com Guide

Part 2: How Much Should You Share With Your Co-Workers?

Don't Expose Your Belly

Those of you who have been around dogs know that a dog will show its submissiveness to a more dominant dog by exposing its belly. When you share personal information, especially information that shows your weaknesses, you may be "exposing your belly" to your co-workers. If your position at work requires you to exhibit strength and control, such as a managerial position, you may be showing just the opposite by sharing certain information. Here's what Elizabeth Mitchell, MSW, LCSW, About's former Social Work Guide and now About's Guide to The Southwestern United States for Visitors, had to say about this: "Decisions are made and impressions formed about us while at work that are used for different reasons than those with our families and friends. For example, a person being considered for a promotion would benefit from having an image of strength, excellent judgement and good interpersonal skills. How might your recent disclosure to your colleagues that you are divorcing your alcoholic husband, just obtained a restraining order in fear for your life and are worried about making your house payments, affect your chances for promotion? You can't sleep, fear you are depressed and need support from friends during this trying time. In this situation, a wise employee would make an appointment with an Employee Assistance Program counselor and use his or her friends and family for support, letting colleagues at work know, perhaps, that he or she is divorcing but keeping the details scant."

Shhh… No Talking in School

What are you doing at work? Working hopefully. While no one expects you to be all business all the time, too much time spent chit chatting means too little time working. According to Susan Heathfield, the About Guide to Human Resources, "Where a lack of privacy at work becomes problematic, in my mind, is when it becomes excessive. 'How was your weekend? Just great. We went on a great hike. How was yours?' is common courtesy. To spend a half hour giving a co-worker a blow by blow description of your weekend, is not." However, some would quickly argue, there's always lunchtime. You can share a lot of private information during the hour you get for lunch each day. That's five hours a week—imagine all the things you can share. And that doesn't include breaks. Even if talking when you should be working isn't an issue, shouldn't you maintain some privacy?

Too Much Information

By Dawn Rosenberg McKay, About.com Guide

Part 3: Keep It To Yourself

Keep It Close to the Vest

As mentioned earlier, revealing too much about yourself may give people the wrong impression or rather the impression you don't want them to have. In general, you do want to preserve some level of privacy. Susan Heathfield says, "When you have worked in a particular work place for a long time, people will tend to know more about your personal world, simply from longevity. As an example, they know when you took a week off work when your mother died. They know you left for the day when your son got sick at school. This level of knowledge about each other is fine, and, depending on the work place, almost unavoidable... I also think people need to leave their personal and family issues and problems at home. If a co-worker is going through a divorce, you can extend some sympathy (or joy!), without having to hear all the details. It's a two-way street, however, as co-workers need to leave each others' privacy intact by not prying as well."

Susan goes on to say, "Too much sharing has a negative impact on productivity, an emotional impact on the work environment, can be unhealthy for participants who really should seek nurture and friendship elsewhere. It's like office romance, however, we spend so much time at work these days, there has to be room for some interaction."

Brian Mairs, a career expert, gets straight to the point: "If you don't want to hear it in the neighborhood pub, don't mention it around the water cooler. If it is a thing of pride (new car, new house, new baby, etc), go ahead and share the joy. If it is a thing of privacy (family problems, etc.) keep it to yourself at work. Find a professional therapist, or somebody you trust to keep a confidence (such as a Priest or Rabbi), to discuss such things."

As with anything else, you are the only one who can decide what, and how much, information you want to share with your co-workers. The words of wisdom provided by my colleagues certainly give you something to think about. In the end, though, the decision is yours. And the consequences are yours to deal with. If opening up your personal life is what you feel comfortable doing, realize that there will be no line between the "work you" and the "real you." That may be fine for some people, and as a matter of fact preferable for many. A lot of people would feel uncomfortable and unhappy exhibiting a different persona at work than they do at home. Do what you need to do, as long is it doesn't interfere with doing your job.

Source: http://careerplanning.about.com/cs/personalissues/a/personal_info.htm

3.1.10 Confidentiality Exercise

Read the article *Understanding Value of Confidentiality in the Workplace* (http://www.workplaceetiquette.net/confidentiality_in_the_workplace/confidentiality_in_the_workplace.html).

Confidentiality is not only sometimes required by law but also necessary to have a healthy and trusting school and work environment. It is important to understand what types of conversations are appropriate and right to have. As the last sentence of the article states, "Keeping employee information safe is not just the law but also the way to run a highly profitable business." What works in business also works for a school organization, sports team, band, or drama club.

Suppose you are in a play with a friend, and the friend shares personal information about a family matter that caused her to miss practice. However, the story she tells you is different than the story she tells everyone else. How would you handle the situation? Make a list of reasons you think it would be a good idea for you to share with others your friend's "real story" about missing practice. Then, make another list of reasons why you should keep the details that she told only you to yourself.

Write a short essay that answers the following questions:

How would you feel if the roles were reversed and your friend shared information about you with everyone in the play? Would it be as much fun to be in the play if you knew that others knew something personal about you? What if you knew that everything you shared with your friend would be shared with everyone in the school? How can you apply what you have learned about confidentiality in your personal, school, and work life?

Understanding Value of Confidentiality in the Workplace

Not only is confidentiality in the workplace associated with ethics and company policy, but also government requirements. Today, confidentiality among employees is serious business, used to protect employees and employers but also company information. After all, companies maintain all types of proprietary data onsite such as financials, employee personal information (home address, social security number, salary, etc.), business contracts, and much more.

Typically, when a person is hired on by a company, the human resources department would require orientation so everyone understands the importance of confidentiality in the workplace, as well as consequences if this rule is violated. People in human resources have a very specific job to do since the Privacy Act of 1988 was enacted. Within this act are specific principles known as the National Privacy Principles that must be followed exactly. These principles include:

Personal Information – Whether factual or not, any information or opinion that becomes a part of the company's database, regardless of how the information is maintained, should be kept confidential. Confidentiality in the workplace is very touchy as to what can and cannot be done with this type of information.

Sensitive Information – Another part of confidentiality in the workplace has to do with sensitive information, which could be employee political associations, health status, religious beliefs, financial standing, disability, trade/professional association, trade union membership, criminal record, sexual orientation, race, or philosophical beliefs.

While employee and sensitive information are among the two areas that need to be monitored and maintained to ensure confidentiality in the workplace, other aspects of the business are protected. For instance, management strategies, company policies, marketing and advertising information, recruitment, and so on are all included, whether in actual hard documentation or maintained electronically.

To maintain confidentiality in the workplace, the method used for collecting and storing personal and sensitive information by the HR department is imperative. Legally, HR must inform employees that this type of information is being gathered and that it will be maintained. HR also has the responsibility to keep all information current and complete. However, to ensure the information is protected from unauthorized access, misuse, loss, disclosure, or notification, reasonable steps must be followed.

Not only does confidentiality in the workplace have to do with the way information was collected and handled on a daily basis, but also on storage. This means HR is required to keep documentation in a restricted and locked area that only authorized personnel would have access to so only certain people would be able to get into files. Files are maintained for a specific amount of time according to state law, which could be up to 75 years.

Finally, while confidentiality in the workplace involves the way in which employee records are handled and maintained, it also involves employees being taught from day one what conversations are allowed so everyone within the organization is fully protected. This creates a friendly working environment that people enjoy, which equates to dedication and higher production. Keeping employee information safe is not just the law but also the way to run a highly profitable business.

Source: http://www.workplaceetiquette.net/confidentiality_in_the_workplace/confidentiality_in_the_workplace.html

3.2.1 Workplace Ethics Activity: Making Informed Ethical Decisions

Scenarios

For all scenarios, assume you are employed by Best Computer Systems, a large computer manufacturing company with approximately 1000 employees. The company is located in a large metropolitan area.

Case 1: Lorna is an administrative assistant in the Human Resources Department. Her good friend, Bill, is applying for a job with the company, and she has agreed to serve as a reference for him. Bill approaches her for advice on preparing for the interview. Lorna has the actual interview questions asked all applicants and considers making him a copy of the list so he can adequately prepare.

Case 2: Emily works in Quality Control. Once a year her supervisor gives away the refurbished computers to the local elementary school. No specific records are kept of this type of transaction, and Emily really needs a computer for her son who is in college. Her supervisor asks her to deliver 12 computer systems to the school.

Case 3: Marvin is the secretary in the Facilities Management Department. He has just received a new computer and wants to try it out. Though his supervisor has a strict policy about computer use for business purposes only, he wants to learn the e-mail software more thoroughly than his training can provide. One good way to do this, he figures, is to write e-mail messages to his friends and relatives until he "gets the knack of it." He is caught up on all his work and only has 30 minutes left to work today. His supervisor left early.

Case 4: Richard and Conway are talking in the hallway about the employee benefits program. Conway had some recent financial trouble. He tells Richard that he believes the benefits program has a loophole that will allow him to receive some financial assistance to help him pay for health care costs for his mother, even though she is not covered by his insurance plan. Cathy, a fellow worker, overhears the conversation. Later, Cathy is approached by her supervisor who says he heard a rumor that some people were taking advantage of the company benefits program.

Case 5: Jennie was recently hired to work as a receptionist for the front lobby. As receptionist, she is responsible for making copies for the associates. Her son, Bruce, comes in and needs some copies for a school project. He brought his own paper and needs 300 copies for his class. If he doesn't bring the copies with him, he will fail the project. The company copier does not require a security key nor do they keep track of copies made by departments.

Steps for Making Ethical Decisions

1. Identify the ethical issue or problem.

2. List the facts that have the most bearing on the decision.

3. Identify anyone who might be affected by your decision and how.

4. Explain what each affected person would want you to do about the issue.

5. List three alternative actions and identify the best and worst case scenario for each alternative, anyone who would be harmed by this choice (and how), any values that would be compromised by selecting this alternative, and any automatic reasons why this alternative should not be selected (legal issues, rules, etc.).

6. Determine a course of action.

Adapted from http://journalism.uoregon.edu/~tbivins/J397/Links/Worksheet.html

Skill Standards

Academic:

AB 5 Demonstrate competence in organizing, writing, and editing using correct vocabulary, spelling, grammar, and punctuation

AB 6 Demonstrate the ability to write clearly and concisely using industry specific technology

Employability:

EK 4 Prepare a résumé, letter of application, and job application

Scenario

According to its website, Universal Studios in Orlando, Florida, is looking for high school interns to work in its Revenue Accounting Department. The advertisement says that your travel, lodging, and food expenses will be covered. Since this opportunity would be a great work and personal experience, you decide to apply. The Revenue Accounting Intern's primary responsibility would be to prepare weekly revenue reports, which requires the candidate to be comfortable performing mathematical calculations and writing reports. You believe that you are qualified for the internship because you have worked in the concession stand at your high school football games and served as Treasurer of your class. In addition, you enjoy writing and have earned excellent grades on your term papers this year. You also write for your school's newspaper. To apply for the internship, you need to submit your résumé and a letter of application online.

Tasks

A. Identify the information you need in order to prepare your résumé and letter of application.

B. Prepare your résumé and letter of application. Your letter of application should explain why your experience is relevant to the job and why you should be selected.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this assessment.

Scoring Rubric

4

- Thoroughly identifies information needed to prepare a résumé and letter of application
- Organizes and communicates information in the résumé and letter of application in a professional manner
- Explains relevant work experience in a logical and clear manner
- No grammatical and spelling errors

3

- Adequately identifies information needed to prepare a résumé and letter of application
- Organizes and communicates information in the résumé and letter of application in a somewhat professional manner
- Explains relevant work experience in a reasonably logical and clear manner
- Few grammatical and spelling errors that do not distract the reader

2

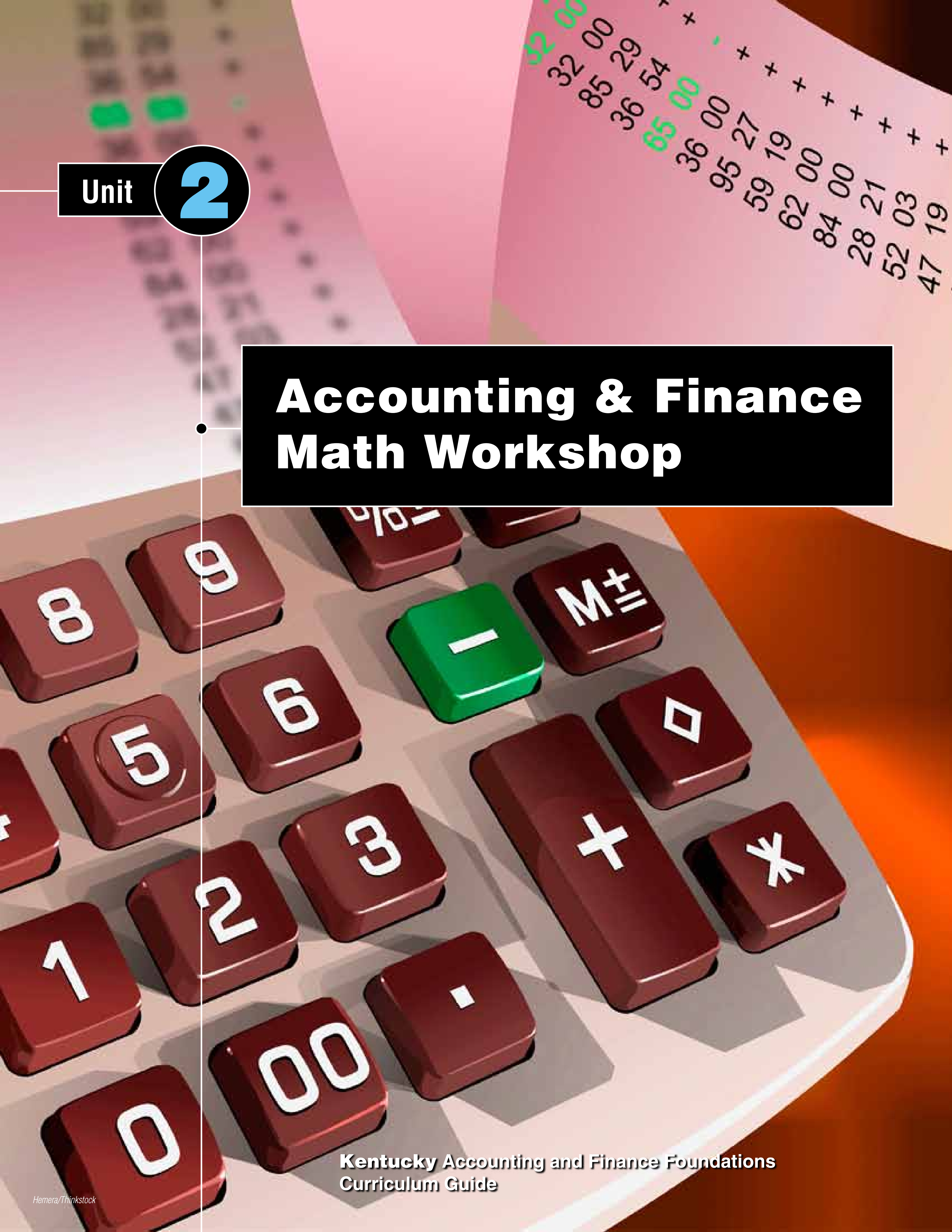
- Limited identification of the information needed to prepare a résumé and letter of application
- Organizes and communicates information in the résumé and letter of application in a somewhat haphazard manner
- Limited explanation of relevant work experience
- Some grammatical and spelling errors that distract the reader

1

- Little or no identification of the information needed to prepare a résumé and letter of application
- Little or no organization and communication of information in the résumé and letter of application
- Little or no explanation of relevant work experience
- Many grammatical and spelling errors that distract the reader

Unit 2

Accounting & Finance Math Workshop



Hemera/Thinkstock

Kentucky Accounting and Finance Foundations Curriculum Guide

Student Assignment

4.1.1 Pre-Test

Please answer each of the following problems in the space provided.

1. If a man weighs 160 pounds and increases his body weight by 15 percent, what is his new weight?

2. Change .004 to a percent.

3. A bundle of rope is 1,260 feet long. Cut a 584-foot piece from it. After the cut is made, how long is the remaining piece of the rope?

4. If you are instructed to run four, 528-foot pieces of cable off a large reel, how many feet of cable must be on the reel?

5. If you have a reel that has 400 feet of cable, and you are asked to cut a piece of cable that is 35% of the reel, how long would that piece be?

6. Convert .125 to a fraction.

7. Which is greater— .750 or 7/8?

8. If you are running a machine that produces 170 feet of wire per minute, how many feet of wire will you produce in seven hours?

9. If you earn $13.64 per hour, calculate your gross income if you worked 40 hours at your regular rate, plus an additional 8 hours earning time and one-half.

10. The diameter of the cable you are running is 3.614 inches. If your foreman tells you that the cable is eight thousandths of an inch oversize, what would be the correct size of the cable?

Name: ______________________________

Lesson 4.2 Student Assignments—edHelper.com Math Worksheets

You determine
which drills and how many
based on your students' pre-test results.

Follow-Up Drills for Pre-Test

(Unit 14 includes more drills and activities that can be used to help with weaknesses identified in the pre-test.)

Addition

Subtraction

Multiplication

Division

Decimals

Fractions

Percents

Name: ______________________________ Date: ______________

Addition

Complete.

1. Nicole wrote a report about some of the Native American foods of long ago. She wrote about Indian pudding, wild nut soup, berries and wild rice, and feast day puffs. To get information, she spent 3 hours and 33 minutes doing research online and 1 hour and 21 minutes doing research at the library. It took her 1 hour and 39 minutes to write her rough draft and another 38 minutes to write her final draft. How long did it take Nicole to research and write her report?	2. It's harvest time. On Tuesday, Darlene took 12 loads of grain to the elevator, and Shannon took 11 loads. On Wednesday, Darlene took six loads, and Shannon took eight. How many truck loads went to the grain elevator on Tuesday and Wednesday? How many more loads did they get on Tuesday than Wednesday?
3. The 109 students in fourth grade at Tallassee School were trying to learn to say, "Hello" in five different languages for World Hello Day. If 35 students learned to say "Hello" in all five languages, 29 students learned to say it in just four languages, 24 learned to say it in just three languages, and the rest of the students learned to say it in just two languages, how many students learned to say "Hello" in just two languages?	4. If Egypt has 71 airports with paved runways and 15 airports with unpaved runways, how many airports does Egypt have altogether?
5. Courtney and Victoria looked for shells on the beach. They found a total of 22 shells. If Victoria found six more shells than Courtney, how many shells did Victoria find?	6. Mom likes to whistle while she cleans the house. It took her 40 minutes to clean the bathroom, 13 minutes to do the dishes, 11 minutes to vacuum the house, and half an hour to clean the bedroom. How long did Mom spend cleaning the house?

Name: ______________________ Date: ______________

Subtraction

Complete.

1. Idaho's highest elevation is Borah Peak at 12,662 feet above sea level. The lowest elevation is found at the Snake River in Lewiston, measuring 710 feet above sea level. What is the difference between the highest elevation and the lowest elevation?	2. Christine is learning about her family history. She found out that after a potato famine struck Ireland, an ancestor of hers came to New York City in 1848. At that time, her relative was ten years old. In what year was her relative born?
3. Jordan's pet is a king snake named Mick. Mick is still very young, so he is only 18 inches long. When he is grown, he will be 47 inches long. How much longer will he be when he is grown than he is now? Oh, by the way, Mick refused to be dressed up as anything!	4. Our neighbor, Mrs. Anderson, said her family originally immigrated to Canada in 1867. If it is August, 2012, how many years ago did her family immigrate to Canada?
5. Kyle wants to be an actor when he is older. He has a good voice and already has a part in the school play. It is an important part, and he has many lines to learn. Samantha is helping him learn his part. He has 119 lines to learn, and he has memorized 39 of them. How many more lines does he have to learn?	6. Brandon has trained to be part of the police department's bomb squad. In his city there were fifty-one thousand, eighty-nine crimes reported last year. There were forty-eight thousand, one hundred five non-violent crimes. How many violent crimes were there?

Name: ______________________________ Date: ______________

Multiplication

Solve.

1. The Sheriff's Office was very noisy today because of all the city workers who were in the hallway. There are four departments that have offices close to the Sheriff's Office. If there were six people from each of the four offices in the hallway, how many people were in the hallway?	2. Each pack of gum has seven cards in it. If Megan bought nine packs of gum, how many cards did she add to her collection?
3. Mrs. Allen's class is making Halloween boxes for the children at Valley Day Care. They are putting 6 homemade cookies in each box. There are 8 boxes to fill. How many cookies do they need for the six boxes?	4. The fruit that we picked looked very ripe. We picked 6 bushels of apples. Each bushel cost us $2.00. How much money did we spend on apples?
5. Brandon thought it would be better if he built 4 toolboxes instead of 3. Each toolbox has 4 sides. How many sides will there be in all?	

Name: ______________________ Date: ____________

Division

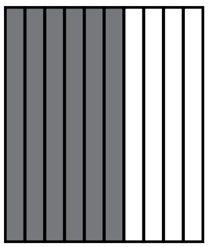
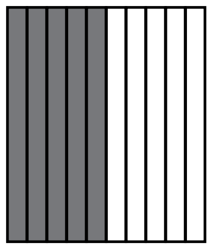
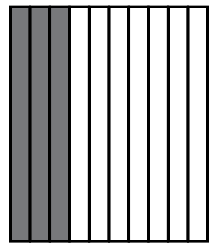
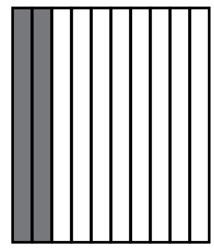
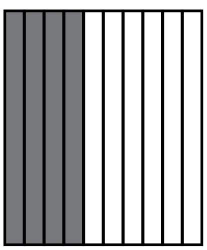
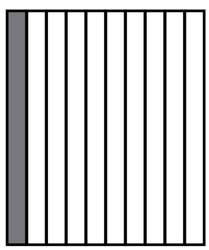
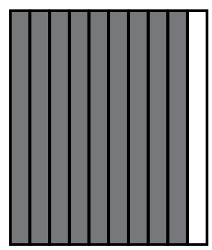
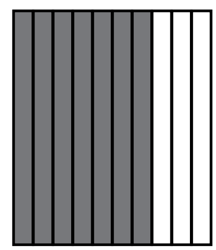
Solve.

1. Our neighbor had 63 floor tiles delivered today. If he makes 9 equal groups, how many tiles will be in each group? ___ tiles	2. Elizabeth made 25 glasses of lemonade to sell. If she makes 5 equal groups, how many glasses will there be in each group? ___ glasses
3. Emily has 18 pieces of fried chicken to share. If she makes 2 equal groups, how many pieces of chicken will be in each group? ___ pieces of chicken	4. Tasty Freeze has 63 different flavors of ice cream. If you put them into 7 equal groups, how many flavors will be in each group? ___ flavors

Name: ______________________________ Date: ______________

Decimals

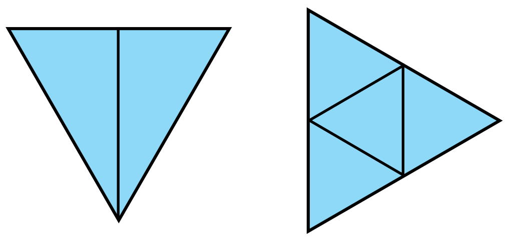
Write each as a fraction.

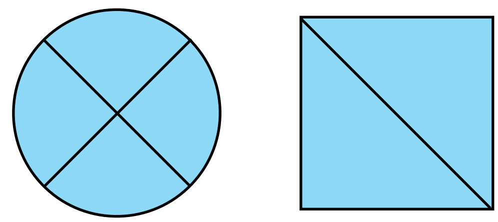
1. 	2. 	3. 	4. 
5. 	6. 	7. 	8. 
9. eight tenths	10. 0.7	11. five tenths	12. 0.3
13. three tenths	14. 0.9	15. 0.4	16. four tenths
17. 0.1	18. nine tenths	19. 0.2	20. seven tenths
21. 0.5	22. one tenth	23. 0.6	24. six tenths

Name: ______________________________ Date: ______________

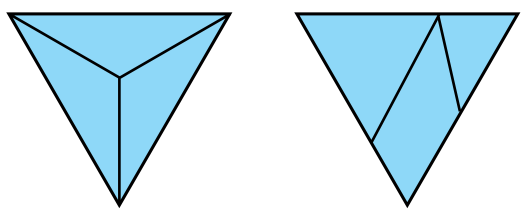
Fractions

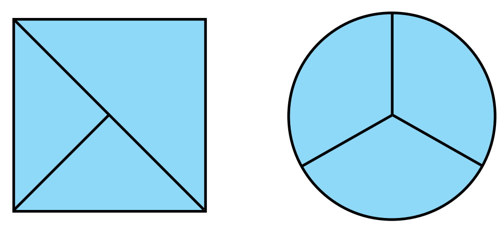
Circle the shape that shows two halves.

1.


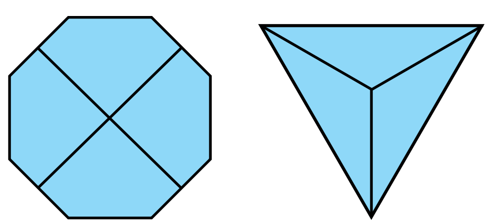
2.


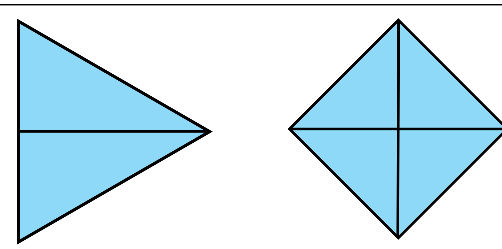
Circle the shape that shows three thirds.

3.


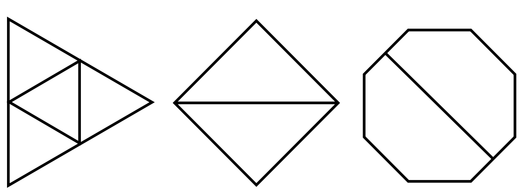
4.


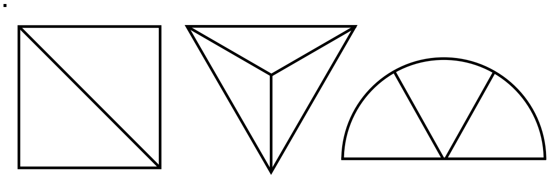
Circle the shape that shows four fourths.

5.


6.


Find the shapes that show halves. Fill in $\frac{1}{2}$.

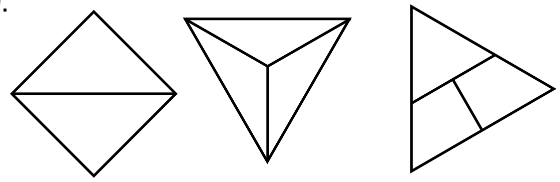
7.


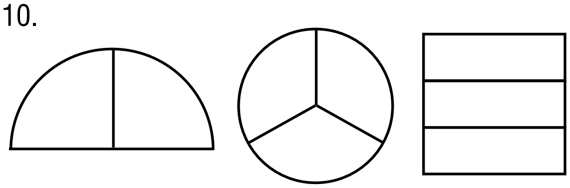
8.


Name: ______________________ Date: ____________

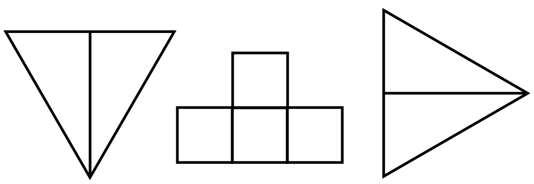
Fractions (cont'd)

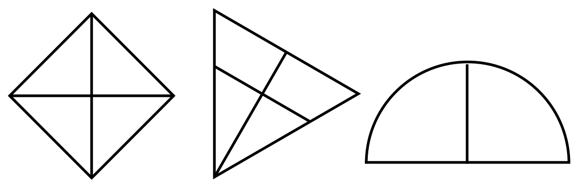
Find the shapes that show thirds. Fill in $\frac{1}{3}$.

9.


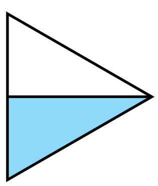
10.


Find the shapes that show fourths. Fill in $\frac{1}{4}$.

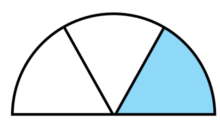
11.


12.


What fraction does the shaded part show? Circle the fraction.

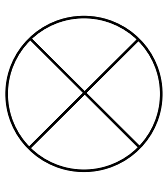
13.


$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

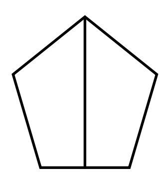
14.


$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

Fill in one part. Circle the fraction.

15.


$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

16.


$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

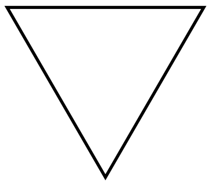
Name: ______________________ Date: ____________

Fractions (cont'd)

Complete.

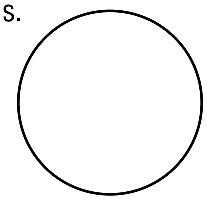
17. Draw a line to show fourths.

Fill in $\frac{1}{4}$.



18. Draw a line to show thirds.

Fill in $\frac{1}{3}$.



Complete.

19.

Fill in $\frac{1}{2}$.

20.

Fill in $\frac{1}{3}$.

Complete.

21.

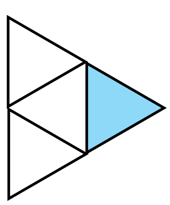
Fill in $\frac{2}{4}$.

22.

Fill in $\frac{2}{3}$.

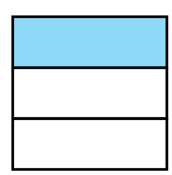
What fraction does the shaded part show? Circle the fraction.

23.



$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

24.



$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

Name: ______________________ Date: ______________

Percents

Write each percent as a decimal.

1. 8.6%	2. 20%	3. 30%
4. 29.3%	5. 71.7%	6. 451%
7. 5.1%	8. 60%	9. 96.1%
10. 38%	11. 10%	12. 8.9%
13. 360%	14. 47.1% .	15. 8.1%
16. 79%	17. 14.2%	18. 80%
19. 43%	20. 7.7%	21. 911%
22. 76.7%	23. 90.1%	24. 50%
25. 2.4%	26. 63%	27. 78.5%
28. 659%	29. 43.4%	30. 90.2%
31. 65%	32. 30.9%	33. 75.2%
34. 844%	35. 8%	36. 37.1%
37. 62%	38. 10.9%	39. 60.6%

Name: ______________________ Date: ____________

Percents

Write each decimal as a percent.

1. 2.4	2. 0.70	3. 0.353
4. 0.29	5. 0.310	6. 0.022
7. 0.182	8. 0.8	9. 0.52
10. 0.4	11. 0.4080	12. 0.18
13. 4.9	14. 0.710	15. 0.15
16. 0.026	17. 0.077	18. 0.980
19. 0.5	20. 0.745	21. 0.812
22. 0.0350	23. 5.6	24. 1.31
25. 0.60	26. 0.112	27. 0.91
28. 0.1	29. 0.0540	30. 0.649
31. 0.128	32. 0.7	33. 0.809
34. 9.710	35. 0.065	36. 0.3
37. 0.8390	38. 0.1660	39. 0.53

Name: ______________________ Date: ____________

Percents

Write each fraction as a percent. Round to the nearest hundredth of a percent.

1. $\frac{11}{20}$	2. $\frac{1}{2}$	3. $\frac{9}{10}$	4. $\frac{2}{5}$
5. $\frac{23}{25}$	6. $\frac{53}{100}$	7. $\frac{99}{10}$	8. $\frac{5}{8}$
9. $\frac{3}{25}$	10. $\frac{48}{5}$	11. $\frac{17}{50}$	12. $\frac{49}{100}$
13. $\frac{1}{8}$	14. $\frac{7}{16}$	15. $\frac{1}{4}$	16. $\frac{138}{25}$
17. $\frac{7}{10}$	18. $\frac{4}{5}$	19. $\frac{3}{4}$	20. $\frac{3}{10}$
21. $\frac{83}{100}$	22. $\frac{1}{10}$	23. $\frac{3}{8}$	24. $\frac{21}{5}$
25. $\frac{3}{16}$	26. $\frac{1}{5}$	27. $\frac{23}{50}$	28. $\frac{5}{16}$

Student Assignment

Lesson 4.3 Post-test

Please answer each of the following problems in the space provided.

1. If a woman weighs 135 pounds and increases her body weight by 23%, what is her new weight?

2. Change .007 to a percent.

3. If a bundle of rope is 1,350 feet long, and you are asked to cut it into three equal pieces, how long will each piece be?

4. You are instructed to run four 725-foot lengths of cable off a large single reel. How many feet of cable must be on the reel?

5. If you have a reel of cable that is 600 feet long, and you are asked to run 43% of it, how long would that piece be?

6. Convert .250 into a fraction.

7. Which is greater— .85 or 8/9?

8. The machine you are running produces 235 feet of wire per minute. How many feet of wire will your machine produce in 3 hours?

9. If you are earning $14.25 per hour, calculate your gross income if you worked 40 hours of regular time and 8 hours of time and one-half.

10. The diameter of a cable you are running is 3.250 inches. If your foreman tells you that the cable is five thousandths of an inch oversize, what would be the correct size of the cable?

Name: ____

Lesson 5.1 Unit Prices

Many items are packaged in ways that make it difficult to compare them easily with competing brands. For example, one product may be packaged in an 8 oz. jar while another brand uses a 12 oz. jar.

To help shoppers compare the costs of products, many stores post unit prices on their shelves. The **unit price** is the price of one item or one measure of the item. It may be an ounce, a pound, a quart, a dozen, a hundred feet, or some other measure. If unit prices are not posted, you have to calculate them to compare costs.

Example

Glow toothpaste costs $1.28 for a 6 oz. tube. Starbright toothpaste costs $1.99 for a 4.6 oz. tube. Which brand costs more per ounce? How much more?

Solution:

Divide Glow price by 6 to find price per ounce: $1.28/6 = $0.213

Divide Starbright price by 4.6 to find price per ounce: $1.99/4.6 = $0.433

Starbright costs $0.22 cents more per ounce. ($0.433 – $0.213 = $0.22)

MATH TIP
1 lb = 16 oz
1 ton = 2,000 lb
1 ft = 12 in
1 yd = 3 ft
1 qt = 2 pt
1 gal = 4 qt

Group Pricing

Stores may have one price for a single unit and another price for a group of two or more units. For example, soup may be sold for $0.89 a can or 3 cans for $2.60. If you buy three cans, you pay less than $0.87 a can ($2.60/3 = $0.86666).

Example

Corn is selling at 3 cans for $1. What is the unit price of a can of corn?

Solution:

Divide the group price by the number of units to find the price per unit.
$1/3 = $0.333, or $0.34 price per one can of corn.

5.1.1 Price Per Unit

Find the price per unit. Round up to the next highest cent.

1. 4 batteries cost $5.99. What is the cost of each battery?
2. 3 rolls of film cost $12.99. What is the cost for each roll of film?
3. 3 large cans of dog food cost $2.00. What is the cost for each can of dog food?
4. 5 cans of tuna cost $2.19. What is the cost for each can of tuna?
5. A box of 16 dog treats costs $1.79. What is the cost of each treat?
6. 5 suit hangers cost $2.29. What is the cost of each hanger?
7. 5 tons of sand cost $104.99. What is the cost of one ton of sand?
8. A 46 oz. can of apple juice costs $1.99. What is the cost for 1 ounce?
9. A 50 oz. bottle of liquid detergent costs $3.49. What is the cost of each ounce?
10. 10 cubic yards of garden mulch cost $64.99. What is the cost of 1 cubic yard?
11. A store is selling 3 oranges for $0.97. What is the cost per orange?
12. 5 shirts are on sale for $53. What is the sale price per shirt?
13. A package of four D batteries costs $5.99, and a package of two D batteries costs $3.49. Which package costs less per battery? How much less?
14. If a 13 oz. dispenser of Coral moisturizing lotion costs $7.29, and a 12 oz. dispenser of Dino moisturizing lotion costs $6.99, which brand costs less per ounce? How much less per ounce?
15. If a bottle of 250 Vitamin C pills costs $11.99, and a bottle of 100 Vitamin C pills costs $5.99, which size costs less per pill? How much less per pill does it cost?

Name: ______________________________

Lesson 5.2 Promissory Notes

When you borrow money, you usually sign a promissory note. A **promissory note** is your written promise, or IOU, that you will repay the money to the lender on a certain date. Usually you also have to pay for using the lender's money. This cost is called **interest**. A note that requires you to pay interest is called an **interest-bearing note**.

Lenders may require a borrower to deposit or pledge property as security for a loan. This property is called collateral. Types of collateral that are often used to secure loans are cars, land, homes, certificates of deposit, stocks, bonds, and life insurance. If the loan is not repaid, the lender can seize the collateral and sell it to recover the borrowed money.

The amount borrowed with a promissory note is called the face value or **principal value**. The time period for which the money is borrowed is called the **loan period,** or time of the loan. The date on which the money must be repaid is the **due date** or **maturity date**. The rate of interest to be paid is the **rate of interest**. The money that must be paid on the due date is the **maturity value** or **amount due**.

To calculate interest on a note, use the formula: **PRT = I**

P = PRINCIPAL	**T = TIME**
I = INTEREST	**R = RATE**

Interest rates are stated as rates per year. The interest paid on a loan is proportional to the time for which the money is borrowed. For example:

2 months = 2/12 = 1/6 of a year, 8 months = 8/12 = 2/3 of a year, 10 months = 10/12 = 5/6 of a year

To find the amount due on the due date, add the interest to the principal.

Example

On May 8, 20XX, Trenton borrowed $6,500 from the bank to buy a boat, which he used as collateral on the loan. Trenton signed a 2-year promissory note at a 10 percent interest rate. Find the amount of interest Trenton must pay. Then find the total amount he must repay when the note is due.

Solution

Rewrite the interest rate as a decimal: 10% = .10

Substitute known values in the formula. PRT = I

$6,500 x .10 x 2 = $1,300

Total amount paid on note: $6,500 + $1,300 = $7,800

Student Assignment

5.2.1 Promissory Notes

1. On July 8, 20XX, Leslie borrowed $2,500 from her bank to pay for a cruise. Leslie signed a 6-month promissory note at 18 percent interest. Find the amount of interest Leslie must pay. Then find the total amount she must repay to her bank when the note is due.
2. Ty borrowed $3,500 for 18 months from his bank to have his house repainted. Ty signed a promissory note that carried 12 percent interest. Find the interest Ty must pay. Then find the total amount he must repay to his bank on the due date.
3. Principal: $2,500; Rate: .15; Time in years: 2; Total Interest: ____?____
4. Principal: $12,500; Rate: .12; Time in years: 3½; Total Interest: ____?____
5. Principal: $500; Rate: .08; Time in years: ½: Total Interest: ____?____
6. To finance the remodeling of her kitchen, Rosa borrowed $26,400 on an 18-month home equity loan. She signed a promissory note bearing interest at 12 ½ percent. What total amount did Rosa pay on the due date?
7. Rondel borrowed $2,000 for a vacation to Mexico. The promissory note he signed was for 3 months at 15 ¼ percent interest. How much did Rondel have to pay when the note came due?
8. Kelly borrowed $4,800 for 6 months and paid $264 interest. What rate of interest did she pay?
9. Toney paid $19.50 in interest on a loan of $2,600 for 1 month. What rate of interest did he pay?
10. Jennifer borrowed $5,000 on a 2-year note at 6.25 percent interest. What is her total interest? How much did she have to pay when the note came due?

Name: ______________________________

Lesson 5.3 Installment Plans

When buying on an **installment plan**, you are borrowing money and paying it back in part payments. You may have to make a **down payment**. You may also have to sign an installment contract in which you agree to pay the unpaid balance. The installment price is higher than the cash price because the seller adds a finance charge to the cash price. This charge pays the seller interest on the money and covers the extra cost of doing business on the installment plan. The finance charge is the difference between the installment price and the cash price.

Example

A desktop computer system has a cash price of $1,600. To buy it on the installment plan, you pay $100 down and $40 a month for 48 months. Find the finance charge. By what percent is the installment price greater than the cash price?

Solution

$40 x 48 = $1,920 (total monthly payment)

$1,920 + $100 = $2,020 (installment price)

$2,020 – $1,600 = $420 (finance charge)

Divide the finance charge by the cash price to find the percent that the installment price is greater than the cash price.

$420/$1,600 = .2625 or 26.25% greater

Example

The installment price of a set of water skis is $190. You must pay $50 down and make payments for 16 months. What will your monthly payments be?

Solution

$190 – $50 = $140 (remainder to pay)

$140/16 = $8.75 (monthly payment)

* **Business Tip: For installment loans, there are many loan calculators on the web. You enter principal, annual interest rate, and time of the loan. It will calculate the monthly payment amount. Search for "loan calculator."**

After researching vehicle prices, go online and practice using a loan calculator. Enter the amount you would borrow, the interest rate (use several given by your teacher) and the duration of the loan in months (60 months for a 5-year loan).

SOURCE: Hansen, M. (2010). *Business math* (17th ed.) [pp. 185-186]. Mason, OH: South-Western Cengage Learning

Lesson 5.4 Sales Tax

Many states, cities, and counties charge a sales tax on certain items. **Sales tax** is a percentage of the price of an item or a percentage of the total of all taxable items. Sellers collect the sales tax from consumers for the government. Sales tax rates differ from community to community and state to state. What is the sales tax rate where you live?

Sales Tax Rate x Price of Item = Sales Tax

Sales tax is rounded to the nearest cent. If more than one tax is charged, the two are often combined. For example, the state charges a tax rate of 6% and the city charges a tax rate of 2%. The total tax collected would be 8%. The buyer pays the price of the item plus the sales tax.

Price of Item + Sales Tax = Total Cost of Item

Example

Brent purchased a chain saw priced at $285.99. The state in which he lives charges a 6.5% sales tax on purchases. What sales tax is paid and what is the total cost of the chain saw to Brent?

Solution

$285.99 x .065 = $18.58935, or $18.59

$285.99 + $18.59 = $304.58

Nontaxable Items

In some states, items such as food, prescription drugs, and charges for labor or services are nontaxable. To find the sales tax when some items are not taxable, first find the subtotal of all taxable items. (A subtotal is a partial total.) Calculate sales tax on only that portion of the bill. To then find the total of the bill, add the subtotal of taxable items + the subtotal of nontaxable items + the sales tax.

Sales Tax = Sales Tax Rate x Subtotal of Taxable Items

Total Bill = Subtotal of Taxable Items + Subtotal of Nontaxable Items + Sales Tax

Example

Wylie Chevrolet's service department took three hours to repair a car. The service charge was $65 an hour. Two parts were replaced at a cost of $117.98 and $49.39. The state has a sales tax of 4% charged on goods but not on labor. Find the total bill.

Solution

$65 x 3 = $195 (Cost of nontaxable labor)

Add the cost of the taxable parts: $117.98 + $49.39 = $167.37 (Taxable items)

Multiply the sales tax rate by the subtotal of taxable items: $167.37 x .04 = $6.69 (sales tax)

Total Bill:

Nontaxable labor + Taxable items + Sales tax

$195 + $167.37 + $6.69 = $369.06

Lesson 5.5 Sales Receipts

Most store employees give customers a **cash register receipt** or **sales invoice** after a transaction has been completed. Customers may use these slips to check that all items bought were received and that the prices and calculations were correct. Sales receipts/invoices can also be used as expense records for business travelers or serve as proofs of purchase if items are returned.

Sales receipts show:

- number of units or quantity and a description of each item
- **unit price**—or the price of one item or group of items treated as one. For example, a ream of paper is treated as one unit even though each ream contains 500 sheets of paper.
- the unit price multiplied by the quantity of each item, also called **extension**. For example, 3 reams of paper at $3.19 for each ream will give the extension $9.57.
- subtotal or the sum of the extensions
- sales tax
- total sale

Sales extensions are the total price of each quantity on a sales slip. "At" or "@" means the price of a single unit. To find the price of an extension, multiply the quantity by the unit price.

For example, 3 dozen batteries @ $3, means that you are getting 36 batteries for $9 (3 x $3).

Example

1 dozen pens @ $4.99 per dozen

2 M (thousand) rolls of toilet paper @ $450 per thousand

2 C (hundred) mouse pads @ $358 per one hundred

Solution

1 x $4.99 = $4.99 (12 pens for $4.99)

2 x $450 = $900 (2000 rolls for $900)

2 x $358 = $716 (200 mouse pads for $716)

Business Tip	
Gross	12 Dozen
C	Hundred
M	Thousand
T	Ton (2000 lbs)

Sales Slip Totals are found by adding the extensions to get the subtotal. If there is sales tax and it is applied to all items sold, the tax rate is multiplied by the subtotal to find the tax amount. Then the subtotal and tax amount are added to find the total amount of the sales slip.

Subtotal = Sum of Extensions

Sales Tax Amount = Subtotal x Sales Tax Rate

Total of Sales Slip = Subtotal + Sales Tax Amount

Lesson 5.5 Sales Receipts (cont'd)

Sample Sales Receipt

Techno Computing **833 Mero Street, Frankfort KY 92119-8330** **502-555-1222**							
Date: May 11, 20__			SOLD TO: Kevin Smith Address: 276 Anderson Ave City, ST, Zip: Berea, KY 40403				
Sold By: JA	Cash	Charge x	Check		Delivery Taken		
Quantity	Description		Unit Price ($)		Amount ($)		
3 Reams	**Paper**		**3**	**19**	**9**	**57**	
1	**Keyboard**		**28**	**98**	**28**	**98**	
1 box	**1G Jump Drives**		**98**	**57**	**98**	**57**	
Everything you need for home or office	Subtotal ($)				**137**	**12**	
	Sales Tax ($)		**6%**		**8**	**23**	
	Total ($)				**145**	**35**	

Lesson 5.6 Cash Discounts

Usually businesses sell to other businesses on account. This means the customer will be billed later for purchases. The time a purchaser has to pay a bill, usually 30 to 90 days, is called the **credit period**.

Businesses frequently offer **cash discounts** as a way to encourage customers to pay their invoices early. Cash discounts are figured from the total due amount on the sales invoice.

The most commonly used cash discounts are 2/10, n/30. This means that 2% may be deducted from the invoice price if it is paid within 10 days of the invoice date. The full amount is due within 30 days.

Example

Determine the dates for discount and final due date. Credit terms 2/10, n/30;
Invoice date June 10.

Solution

2% discount if paid within 10 days. June 10 + 10 days = June 20.

Full amount due in 30 days. June 10 until June 30 = 20 days. 10 more days = July 10 as the due date.

*Always count out the 30 days due to months that contain more or less days.

Example

Determine the cash discount if the invoice is paid within 10 days. Credit terms 2/10, n30;
Invoice amount: $1,025.40.

Solution

.02 x $1,025.40 = $20.51 discount

$1,025.40 – $20.51 = $1,004.89 total due if paid within 10 days. Customer saved $20.51!

There is another way to look at this transaction: If the customer pays the bill within 10 days, they are only required to pay 98% of the total amount due. $1,025.40 x 98% = $1,004.89

Lesson 5.7 Sales Tax, Sales Receipts, and Cash Discounts

1. You purchase a stereo for $89.99 in a state that charges 4.5% sales tax. What is the amount of the sales tax paid? What is the total cost of the stereo?
2. Nancy Small buys a treadmill for $369.89 in a state with a 7% sales tax and 2% city tax. How much sales tax did she pay on the treadmill? What is the total amount she paid for the treadmill, the sales tax, and the city tax?
3. Shawn paid $309.59 for a new washing machine and $56 to have it installed. A state tax of 5.25% was added to the cost of the washer but not the installation. How much will Shawn pay in sales tax? What is the total cost of the washer?
4. Juan had 8 sections of cedar fencing installed around his pool. He was charged $462.53 for the fencing and $225 for the installation. Juan's state charges a sales tax rate of 6.75% on goods, but not labor. What is the amount of the sales tax that Juan paid? How much was his total bill for the fence?
5. You can buy manila folders in boxes of 100 for $8.99. If you bought 600 folders, what is the price?
6. Julie bought 300 leather planners for her employees as gifts. The planners are priced at $85.99 per C. What was the total price of the planners?
7. Todd bought 3 boxes of highlighters @ $3.89 and 5 boxes of pens @ $5.79. The state sales tax is 3.85%. What is the total amount that prints out on the sales receipt?
8. Vicki bought 2 dozen shirts @ $139.89 and 2 boxes of caps @ $89.99 for the Little League team she coaches. There was a state sales tax of 5% and a city tax of 2.5%. What was the total on her cash register receipt?

Brent bought the following items at the hardware store: 2 doz. screws @ $5.99, electrical tape @ $1.99, and 3 rulers @ $9.83. The store applied a 7.2% state sales tax to the subtotal.

9. What is the subtotal of the items Brent purchased?
10. What was the state sales tax amount?
11. What is the total amount that is printed on the sales slip?

Name: ______________________________

Skill Standards

Academic:

AB 4 Record information accurately and completely

AB 5 Demonstrate competence in organizing, writing, and editing using correct vocabulary, spelling, grammar, and punctuation

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AD 2 Solve problems using measurement skills (e.g., distance, weight, area, volume)

AD 4 Use tables, graphs, diagrams, and charts to obtain or convey information

AD 5 Use deductive reasoning and problem-solving in mathematics

Financial Services:

OG 2 Compute simple and compound interest

Scenario

Your youth group is holding a bake sale to raise money for a bus trip to Washington D.C. There are 60 students in the group. Every person in the group is supposed to contribute 20 cookies, brownies, or cupcakes for the sale. There will be a total of 1,200 baked goods to sell.

Tasks

A. 400 cookies, 400 brownies, and 400 cupcakes are available to sell. The prices are $0.25 for each cookie, $0.30 for each brownie, and $0.50 for each cupcake. If every item is sold, how much money will your youth group raise? Explain how you determined your answer, and show your work.

B. Suppose that your youth group's goal is to earn $450. If the prices for your baked goods remain the same, how many more cupcakes do you need to sell to reach the group's goal? Explain how you determined your answer, and show your work.

C. Assume that your group borrowed $100 for one month to purchase the baked goods you sold. The bank charges an annual interest rate of 12% on the borrowed money. How much interest will be due when your group pays back the loan at the end of the month? Explain how you determined your answer, and show your work.

Evaluation Criteria

You must score a 3 or a 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Correctly answers Tasks A, B, and C.
- Thoroughly explains how to solve Tasks A, B, and C.
- Uses appropriate mathematical processes to solve Tasks A, B, and C.

3

- Correctly answers two of the three tasks.
- Adequately explains how to solve each task.
- Uses appropriate mathematical processes to solve two of the three tasks.

2

- Correctly answers one of the three tasks.
- Somewhat explains how to solve each task.
- Uses appropriate mathematical processes to solve one of the three tasks.

1

- Does not answer any of the tasks correctly.
- Provides little or no explanation of how to solve each task.
- Does not use appropriate mathematical processes to solve any of the tasks.

Adam Grant/Digital Vision/Thinkstock

Unit 3

The Role of Money

Kentucky Accounting and Finance Foundations
Curriculum Guide

Introduction

Sometimes it seems as though no matter how hard you work you never have enough money. Knowing where money comes from helps put it in perspective. Once we start thinking about money a little differently, we can understand how to use whatever amount we have and still get ahead in life.

Before people had money, they traded. Over time, the trading process became more refined, and the concept of money was born. Today we use several forms of money to buy the things we need. In this chapter, you will learn how to manage your money and make it work for you.

Lesson 6.1 Characteristics of Money

For something to be an effective medium of exchange it should be:

1. Scarce
2. Durable
3. Portable
4. Divisible

Although many different items, including shells, furs, and tobacco, have been used as money, gold and silver have typically been the most popular forms of money throughout history. Today, these precious metals are no longer part of the money supply of the United States. Instead, the basic money supply consists primarily of currency and checking accounts.

Where Did Today's Money Come From?

No one wanted to carry around their moose hides just in case they wanted to buy something, so they began writing what amounted to IOUs—papers that promised to pay a seller the agreed-upon price.

Businesses (usually goldsmiths) with the ability to safely keep valuables started to warehouse the commodities for individuals. These earliest bankers were considered respectable citizens, trustworthy of being responsible for recording the business transactions. Receipts could be written authorizing sellers to visit the goldsmith for payment instead of meeting again with buyers after the sale to obtain payment. People began accepting the paper receipts as money itself.

Keeping track of what values were set for each commodity became such a big problem that governments began issuing their own money based on their own laws and stores of commodities. Within the boundaries of the government's borders, the money could be traded as though it had value of its own. This concept is fiat money. Fiat money has no real value except the government's power that backs it!

Think About This

1. What skills do you have that you could trade with your friends so that you could barter without money?
2. What is something everyone in your community needs that could be used as commodity money?

What's So Great About Money?

You can go to any of the 50 states and buy everything you need or anything you can imagine with fiat money. The government calls it **legal tender**, and you probably call it cash, but you might have other words for it, too.

No matter what you call it, cash is a big part of our lives. Our society is so complex that we need it just to survive. Whenever something plays that big a part in our lives, it tends to take on a life of its own.

Instead of using money, it's very easy for us to let it use us. How much do you worry about money? Do you wonder where it all goes each month? Do you feel like you will never be able to buy everything you want? All of this stress comes from looking at money as though it has value of its own.

One way to avoid letting money control us is to look at it from a different perspective. For a moment, let's see why it looks the way it does, and just think of it as "green stuff" or "metal stuff."

Why Does Money Look The Way It Does?

Currency is the term for the paper money we use. The United States prints money in $1, $2, $5, $10, $20, $50, and $100 bills. Did you know that nearly all of the purchases we make with cash involve amounts less than $20? That's why one-dollar bills get so worn and one-hundred-dollar bills (if we ever even see them) stay pretty, crisp, and new. The currency in the United States is widely used all across the world. Individuals in some countries use it as a means of saving like some people save gold. Some countries, especially in the Caribbean, allow U.S. dollars as payment for purchases—making it easy for American tourists to spend their money while vacationing abroad. There are even countries like Liberia and Panama that actually use U.S. currency as their official money.

Our government, which backs the money, is more stable than most. This fact means that our currency is also very stable. Our economy is the world's largest, too. Those factors together make our currency the most desired on the planet.

Unfortunately, that also makes it the target of **counterfeiters**—those who make copies of genuine money and try to pass fake currency off as the real thing. This practice costs our country millions of dollars each year. Our money is designed to try to prevent as much counterfeiting as possible.

The color green was chosen for bills just before the Civil War. The color has become synonymous with money for us.

Originally, currency produced here was larger and more colorful than the money we have today. The current size was adapted to better fit into our hands and wallets.

How would you know if you got a counterfeit bill? The Bureau of Engraving and Printing (which prints the money) has added some security features to each bill.

Do you have a $5, $10, or $20 bill in your wallet? Take a look at it. Feel the paper on which it is printed. It almost feels like fabric instead of paper, doesn't it? It feels that way because the paper is made of cotton and linen. The ink itself is special, too. It's a secret formula developed by the government that no one else knows how to make.

Why Does Money Look The Way It Does? (cont'd)

Hold the bill up to the light. On both sides of the bill, you should see a security thread, running from top to bottom, woven into the paper. “TWENTY USA” and an American flag are printed along this thread. When you hold the bill up to the light, you should also see a faint image of Andrew Jackson, the U.S. president featured on the bill, to the far right of the larger image of him. This faint image, called a watermark, is visible from both sides of the bill. Finally, the lower right corner of the front of the bill shows the denomination in color-shifting ink. None of these features can be easily copied.

Other features of the bills like serial numbers and Federal Reserve indicators are used to make it easier to track where the money goes.

Security Thread
Hold the bill up to the light and look for the security thread, or plastic strip, that is embedded in the paper and runs vertically up one side of the note. If you look closely, the words “USA TWENTY” and a small flag are visible along the thread from both sides of the note. This thread glows green when held under ultraviolet light.

Color-Shifting Ink
Look at the number “20” in the lower right corner on the face of the note. When you tilt the note up and down the color-shifting ink changes color from copper to green.

Watermark
Hold the bill up to the light and look for the watermark, or faint image, similar to the large portrait of President Andrew Jackson. The watermark is part of the paper itself, and it can be seen from both sides of the note.

Photos courtesy of the Federal Reserve Bank

Think About This

1. Why do you think the U.S. put pictures of its presidents on the faces of its bills?
2. Why do you think people make counterfeits of our currency?

Is Money More Than Just Currency?

Until now, we have only talked about cash when we used the term "money." Modern civilization required us to develop ways to manage money more smoothly.

Trading currency evolved from bartered goods to gold or other valuable items. Later, it became bits of paper that represented ownership of a valuable commodity. Finally, the paper itself became valuable simply because it was backed by the full faith of the government.

What is the next step in the evolution of money? Paper or electronic messages that represent the paper backed by our government? It might seem hard to comprehend, but that is exactly what happens every day.

Imagine if the company you worked for paid your entire paycheck to you in cash. They would only take out taxes to send to the government, allowing you to take the rest to do with as you pleased. You might divide it up so that you could pay rent, go to the grocery store, or pay your utilities and credit-card bills. Anything that was left over could be saved in a shoebox under the bed.

Does this seem like a good idea to you? Is it safe? How could you carry around all of that money in your wallet? What if you lost your wallet on the way to pay your rent? Would you trust the mail enough to send cash to pay your credit-card bill? Probably not.

It is important for us to keep our money safe and make sure that everyone can be paid promptly. A backup plan is also necessary in case something should happen to us.

The government, through the banking system, solved this problem by authorizing us to use **checks** and **electronic funds** transfers to pay for things. Instead of using legal tender (or currency), we can use other methods to exchange money. We can use these two methods to transact business without carrying buckets full of money around.

Lesson 6.2 Introduction: The Changing Face of Money

In this lesson, you will play a game to guess which objects have been used as money throughout history. You will learn that money should be a **unit of account**—a measure to decide the price of goods and services and comparisons between goods and services everyone agrees to use; it must be able to break down into smaller pieces that equate with the goods or services desired. Money must also be a **store of value**—money can be saved and used in the future; it must keep its value over time. You will compare modern U.S. money with older versions of U.S. money using web sites and real coins, and you will use your new knowledge to design the money of the future.

Process:

1. What are some problems with using a cow as money? Are cows easy to keep? Can you carry them around with you? What if you wanted to buy some bubble gum? Is a cow for bubble gum a fair trade? How do you trade part of a cow?
    - Money must break down into smaller amounts to be useful. What smaller amounts can we divide a dollar into? (Hint: What would you use to buy bubble gum?)
2. What are some problems with using grain as money? Will grain, or any food, keep for a long time? What happens when it gets old?
    - Money must keep its value over time. Is it easy to keep a dollar? A penny? What are some places we might store a dollar? A penny? Brainstorm.
    - How long will a penny last? Your teacher will give you a penny, or you can view images of pennies online. What is the date your penny was made? Ask your teacher if you need help. Who has the oldest penny in your class? When was it made? Is it older than you? Your parents?
    - Check out the coins at http://www.coinstudy.com. What is the oldest coin on the site? How many years old is it? It is almost as old as the U.S.? Is it older than someone's great-great-great-grandparents?
3. Compare one of the coins at coinstudy.com with a penny. How are they alike? How are they different? Are the coins more alike than different?
4. Will U.S. money ever change again? Explain that our money is in the process of changing right now. There are two versions of our currency in circulation. Visit the Bureau of Engraving and Printing's New Money web site at http://www.newmoney.gov/newmoney/default.aspx, and create a Venn diagram that identifies the similarities and differences between the old bills and the new ones.
5. Do we use anything other than bills and coins to buy things? Are checks and credit cards money? Did people have credit cards 200 years ago?
6. How will our money change in the future? Design "future money" using art supplies that your teacher gives you. Remember that money must break down into smaller amounts and keep its value over time.

Introduction: The Changing Face of Money (cont'd)

Conclusion:

1. Share your vision of "future money" with the rest of your class. What components are included in your "future money" design? Is your money durable, and will it last? Can your money be broken down into smaller units?
2. How has money changed over time? List some types of money that are no longer used. Why not?
3. Would it be easier to make money out of tissue paper or metal? Why is money often made out of metal?

Assessment Activity:

1. How has money in the U.S. changed? Visit the University of Notre Dame Libraries' Coin and Currency Collections at http://www.coins.nd.edu. Click on "**Colonial Currency**," and then choose a state to see how money has changed over time in that state. Compare old paper currency with paper money. Have each student or group of students develop a Venn diagram showing the similarities and differences between old and new paper money.
2. List, verbally or in writing, three ways in which money has changed over time.
3. Which would you prefer—money made of metal or money made of orange peels? Defend your choice.

Lesson 7.1 Economic Institutions

Economic institutions, which are also frequently called financial institutions, play a very important role in our economic system. What do they do, though? Financial institutions such as banks, credit companies, and investment companies transfer money from individuals and businesses that have it to individuals and businesses that need it. In essence, financial institutions serve as intermediaries, or middlemen, in the economy.

There are several different types of economic institutions, including finance and insurance institutions, investment institutions, government or semigovernment financial institutions, and even international financial institutions.

The best known of the economic institutions, however, are the deposit-taking institutions. They accept deposits (funds) from savers and use those deposits to offer loans to borrowers. They also use deposits to make payments on behalf of the savers to individuals, firms, and creditors whom the savers owe. Who are these deposit-taking institutions? Commercial banks, community banks, credit unions, savings and loan associations, trust companies, and mortgage companies.

Most people are aware that banks, credit unions, savings and loan associations, and other financial institutions offer a variety of services to their customers. While customers may be aware of the different services, they don't always make wise choices when selecting and using financial services.

Most banks are commercial banks that are protected by the FDIC (Federal Deposit Insurance Corporation). Banks offer services such as checking accounts, savings accounts, loans, certificates of deposit (which are essentially loans that you make to the bank), investment options, retirement options, credit cards, and debit cards. They also may offer interest on their checking and savings accounts, safe deposit boxes, traveler's checks, overdraft protection, ATMs, money transfers, automatic deposit, and other electronic services.

Traditionally, a bank generates profits from transaction fees on financial services and from the interest it charges for lending. In recent history, with historically low interest rates limiting a bank's ability to earn money by lending deposited funds, much of a bank's income is provided by overdraft fees and riskier investments.

Banks' activities can be characterized as retail banking, dealing directly with individuals and small businesses, and investment banking, relating to activities in the financial markets. Most banks are profit-making, private enterprises. However, some are owned by government or not-for-profit.

Two common retail banks are commercial and community. **Commercial bank** is the term used for a normal bank to distinguish it from an investment bank. After the Great Depression, the U.S. Congress required that banks only engage in banking activities, whereas investment banks were limited to capital market activities. Since the two no longer have to be under separate ownership, some use the term "commercial bank" to refer to a bank or a division of a bank that mostly deals with deposits and loans from corporations and other large businesses.

Community banks are locally operated financial institutions that empower employees to make local decisions to serve their customers. A bank raises funds by attracting deposits, borrowing money in the interbank market, or issuing financial instruments in the money market or a capital market. The bank then lends out most of these funds to borrowers.

Economic Institutions (cont'd)

However, it would not be prudent for a bank to lend out all of its balance sheet. It must keep a certain proportion of its funds in reserve so that it can repay depositors who withdraw their deposits. Bank reserves are typically kept in the form of a deposit with a central bank. This behavior is called **fractional reserve banking**, and it is a central issue of monetary policy. Some governments (or their central banks) restrict the proportion of a bank's balance sheet that can be lent out and use this as a tool for controlling the money supply. Even where the reserve ratio is not controlled by the government, a minimum figure will still be set by regulatory authorities as part of bank regulation.

A credit union is a not-for-profit cooperative financial institution that is owned and controlled by its members, through the election of a volunteer board of directors elected by the members. Only a member of a credit union may deposit money with the credit union or borrow money from it.

A **credit union** differs from a traditional financial institution (bank, savings and loan association, etc.) in that the members who have accounts with the credit union are the credit union's owners. A credit union is a cooperative institution, with policies governing interest rates and other matters set to benefit the interests of the membership as a whole. As such, credit unions have historically marketed themselves as providing superior member service and being committed to helping members improve their financial health. Credit unions typically pay higher dividend (interest) rates on shares (deposits) and charge lower interest on loans than banks.

Credit union revenues (from loans and investments) do, however, need to exceed operating expenses and dividends (interest paid on deposits) in order to maintain capital and solvency. The lowered profitability of most credit unions relative to banks is indicative of credit unions' focus on serving members. Banks, on the other hand, must be concerned with maximizing profits to enhance stock performance, please shareholders, and make the bank stock price more desirable.

Credit unions offer many of the same financial services as banks, including share accounts (savings accounts), share draft (checking) accounts, credit cards, share term certificates (certificates of deposits), and home banking.

The for-profit banking industry has a conflicted relationship with credit unions. Bank trade associations are opposed to the tax-free structure on earnings that credit unions enjoy. In fact, the American Banking Association identified the revocation of credit unions' tax-free status as topping its political agenda in 2004 and 2005. However, bank holding companies and their affiliates aggressively compete to provide services to credit unions through their ATM networks, corporate checking accounts, and certificate of deposit programs.

Name: ______________________________ Date: ______________

Lesson 7.2 Deposit-Taking Institutions: What do they do?

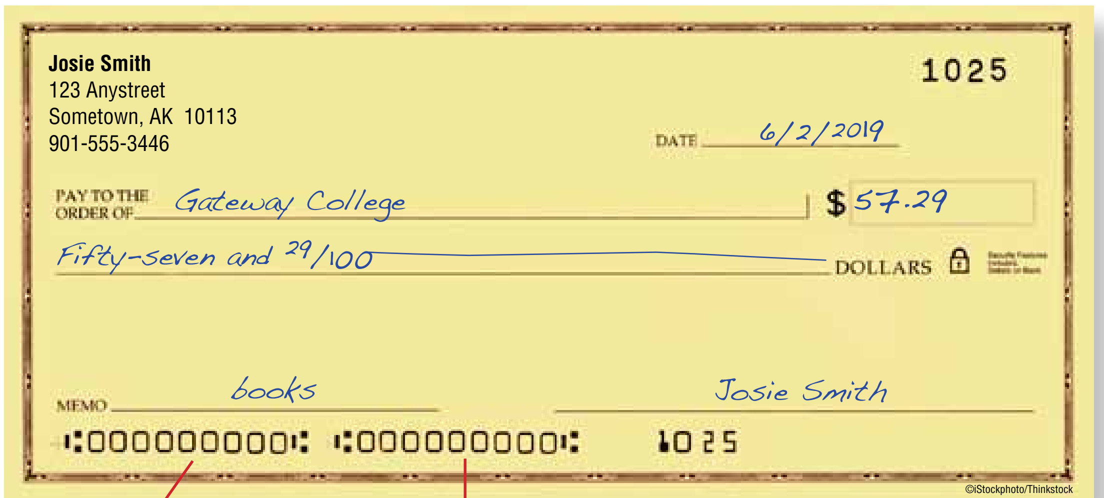
Conduct Internet research on the most common types of deposit-taking institutions, listed below. Determine the key characteristics of each, and complete the chart provided.

Type of Institution	Brief Description	Key Products/Services Offered
Bank		
Savings and Loan		
Credit Union		

Lesson 8.1 How Do Checks Work?

Believe it or not, but using a checking account is relatively simple. Checks are convenient replacements for cash, and they have many other advantages, too. They record where, when, and how you spend your money and provide proof of payment if there is ever a disagreement about a payment being made.

The handwritten figure is the legal amount.



©iStockphoto/Thinkstock

The routing number tells on what bank the check is drawn.

The account number identifies from which account the money should be withdrawn.

Each check has preprinted information about the accountholder and the bank from which the payment will be withdrawn. There are places to write the date, amount, and name of the person or entity the bank should pay. In the bottom right corner, the writer must sign his or her name, legally authorizing the bank to pay the funds. At the very bottom of each check there are numbers that tell the banking system on which bank the check is drawn, as well as whose account it is.

When we deposit money in a checking account for safekeeping, we can write checks authorizing our financial institution to pay our money to other people for us. Checks require our signature because they are legal documents, even though they are not considered currency. Remember that checks are not money; instead, the deposits made are money.

The banking system processes checks like this:

- You write a check to a store to make a purchase.
- The store accepts the check as payment and gives you the products you purchased.
- The store delivers the check to its bank, along with all other checks and cash that it received that day. The total deposit goes into the store's account.
- The store's bank passes your check to a clearinghouse.
- The clearinghouse sends the check back to your bank.

Your bank then reverses the process:

- Your bank deducts the payment from your account.
- That payment is sent to the clearinghouse.
- The clearinghouse sends the payment to the store's bank.
- The store's bank deposits the payment into the store's account.

All of this happens within just a day or two.

How Do You Know How Much Money You Have?

Have you ever used a checking account? If so, then you know how important it is to keep track of how much money you spend when you write checks.

You should use a **checkbook register** to write how much money goes into or out of your account. A register is simply a booklet in which you can write all of your checking transactions. Every deposit or withdrawal should be written down and added or subtracted from the total.

There are places to write check numbers, dates, transaction descriptions, and amounts. The last column is for a running balance of the total in your account. One column has a checkmark at the top. It can be used to check off whether or not the transaction has cleared the bank. Check registers are standard documents, and below is an example.

AD-Auto Deposit • **AP**-Automatic Payment • **ATM**-Cash Withdrawal • **DC**-Debit Card • **FT**-Funds Transfer • **SC**-Service Charge • **TD**-Tax Deductible

NUMBER OR CODE	DATE	TRANSACTION DESCRIPTION	PAYMENT FEE WITHDRAWAL (–)		✓	DEPOSIT CREDIT (+)		**BALANCE** **$**	

You should subtract any checks you write or withdrawals you make as soon as you make them. This could mean that your bank will not show the same balance as you. Just remember that the bank's balance should always be higher or the same as your own records.

Think About This

1. What kinds of things might you prefer to write checks for instead of paying cash?
2. Are checks safer than cash? Why or why not?

Lesson 8.2 Bank Reconciliation

Once a month (or more) you should do what is called "reconciling" your checkbook. You will take your bank's records and compare them with your own to make sure all of the transactions have occurred correctly. It is also a good time to double check your math and the bank's accuracy in processing.

Reconciling your checking account is a relatively easy process if you follow these steps:

1. Start by placing a copy of your most recent bank statement, which is the official record of what the bank shows is in your account, next to your checkbook register. Have the register open to the point at which you know your balance last matched the bank's balance.

   Here's an example of a bank statement:

©iStockphoto/Thinkstock

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: June 10, 2013 through July 1, 2013

Account Summary:

Beginning Balance	$2258.98
Credits/Deposits	$1685.98
Debits/Payments	$1564.86
Ending Statement Balance	$2380.10

Checking Activity:

Credits/Deposits

06/15	Deposit	+	842.99
06/30	Deposit	+	842.99

Debits/Payments

06/16	Check 531	–	38.42
06/21	Check 533	–	88.44
06/23	Check 535	–	846.13
06/24	Check 536	–	182.66
06/27	Check 537	–	386.50
06/22	Debit Card	–	22.71

2. Transfer the ending balance reported on your most recent bank statement to the appropriate place on your checking account reconciliation form (which is probably on the last page of your bank statement). A reconciliation form usually looks something like this:

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Withdrawals (B) ________

Outstanding Deposits

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Deposits (D) ___________

(A) Ending Bank Statement Balance ___________

(B) TOTAL Outstanding Withdrawals ___________

(C) Line (A) - Line (B) ___________

(D) TOTAL Outstanding Deposits ___________

(E) Adjusted Ending Balance ___________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

3. On your bank statement, find the listings of checks, electronic transactions, and other withdrawals that have cleared your account. Check off these transactions in your checkbook register.
4. Identify any checks, electronic transactions, or other withdrawals that are recorded in your register that are not on the bank statement. Most likely, these transactions were processed by the bank after it sent the most recent month's bank statement to you.
5. List the withdrawals that don't appear on your bank statement in the space provided on the reconciliation form. After doing so, determine the total dollar amount of these **outstanding** withdrawals, and record the total on the form.
6. Look for the deposits listed on the bank statement. Make sure they are listed in your register—and for the same amount. Check off these transactions, as well.

7. Identify any deposits or credits that are recorded in your checkbook register that are not on your bank statement. It is likely that these deposits were not processed in time to appear on this month's bank statement.

   But, if you are certain that you made the missing deposit(s) during the time period reported on the bank statement, it is possible that your bank made an error. In that case, find your deposit slip. Verify that the date and amount on the slip agree with what you recorded in your register. Confirm that the transaction date falls within the dates reported on your statement, and then contact your bank.

8. List all of your outstanding deposits (deposits that don't appear on your bank statement) in the space provided on the reconciliation form. Then, determine the total dollar amount of these outstanding deposits, and record it on the form.

9. Subtract the total withdrawals outstanding from the ending bank statement balance, and record the difference on the reconciliation form. Next, add the total deposits outstanding to that difference. The final sum is your adjusted ending balance, which should match the final balance in your checkbook register.

   If your adjusted ending balance and your checkbook register balance aren't the same, it typically means that items in your checkbook register were overlooked, never entered, or entered incorrectly. If, after attempting to reconcile the account again, the balances still aren't matching up, you may want to meet with a person at your bank to have them check your most recent bank records and help you determine the problem.

What Are Electronic Funds Transfers?

Have you ever had your payroll check deposited directly into your checking account? Maybe you have had a membership fee for a fitness center taken directly from your checking account for you. These are both examples of **electronic funds transfers**.

For your convenience, you can give companies permission to withdraw money from or deposit money to your account automatically. No checks ever change hands. The companies simply notify your bank using a special electronic system, and the transactions are processed for you.

Companies can't withdraw money from your account without your permission, though. In order for them to be able to withdraw funds from your checking account, you have to sign an initial authorization form allowing them to do so. They keep the form on file as long as you continue to do business with them.

When you stop doing business with a company that has been automatically withdrawing funds from your account for you, make sure that the company destroys your authorization form. Also, review your checking account statements for a couple of months to make sure that the business does not continue to withdraw payments that it is not entitled to receive.

Think About This

1. What kinds of things would you like to have directly deposited or withdrawn from your checking account? Why?

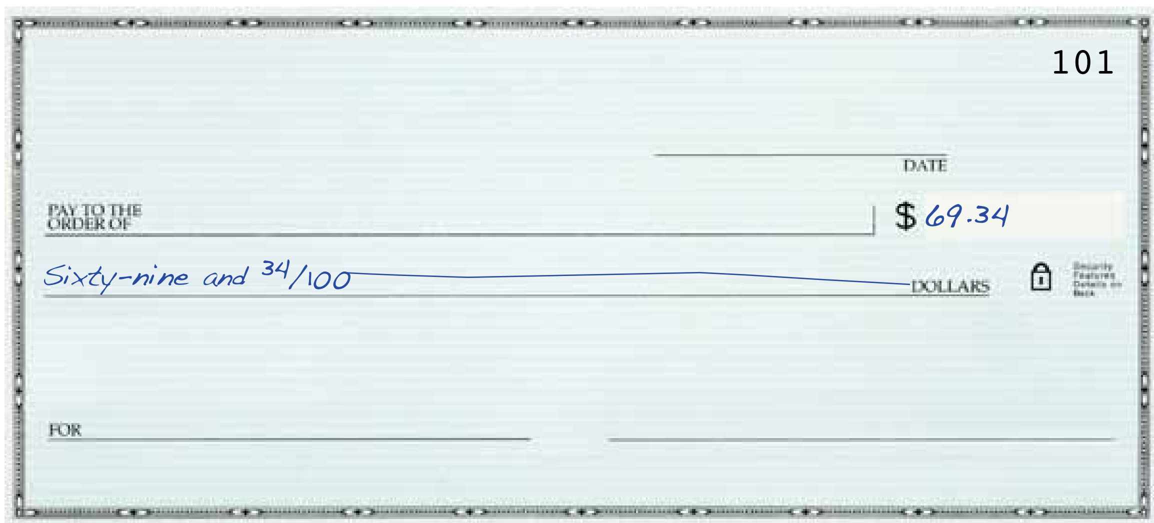
2. Do you think that electronic funds transfers are safer than checks? Why or why not?

Lesson 8.2 Student Assignments (8.2.1–8.2.6)

Name: ______________________________ Date: ____________

8.2.1 Writing Dollars and Cents

When writing a check, you must write the amount of the check in numbers and words. If there is a discrepancy between the amount written in numbers and the amount written in words, the bank honors what is written in words. For example, for a check for **$69.34**, you would write **69.34** after the dollar sign and on the next line would write out "**Sixty-nine and 34/100**."



How would the following amounts be written in words on a check?

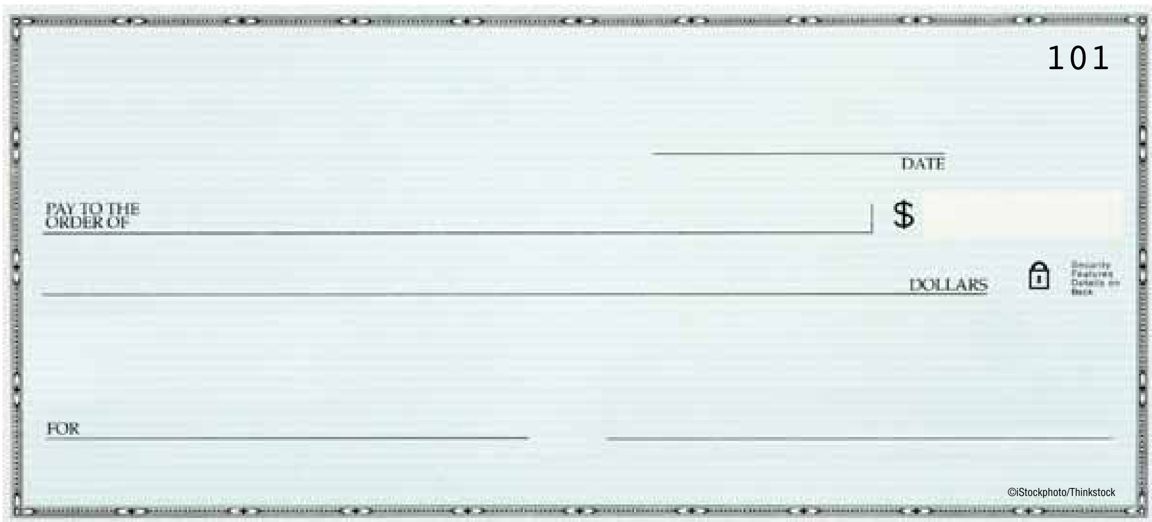
1. $72.00 ______________________________
2. $198.62 ______________________________
3. $87.90 ______________________________
4. $985.12 ______________________________
5. $8.40 ______________________________
6. $1,250.77 ______________________________
7. $7,600.00 ______________________________
8. $456.21 ______________________________
9. $875.54 ______________________________
10. $8,987.04 ______________________________

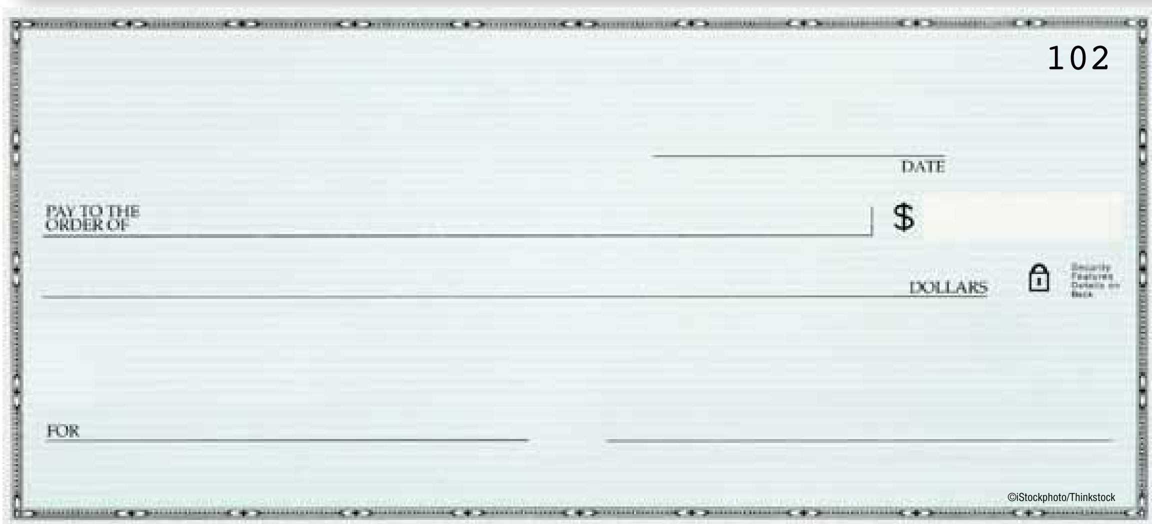
Name: ____________________ Date: __________

8.2.2 Check Writing and Check Registers

Fill in the following checks and checkbook.

Deposit: Birthday $100.00; **Checks: 101**, Kroger $25.00; **102**, Speedway $38.00


101
DATE
PAY TO THE ORDER OF
$
DOLLARS
Security Features Details on Back
FOR


102
DATE
PAY TO THE ORDER OF
$
DOLLARS
Security Features Details on Back
FOR

Check Number	Date	Check Paid To	Check/Deposit Amount	BALANCE $539.80

Name: ______________________________ Date: ______________

8.2.3 Check Registers

1. George's check register had a balance of $638.07 on March 21.
   - He wrote these checks on March 24:
     - Check #201 to Speedway for $48.02
     - Check #202 to Dillard's for $132.16
   - He deposited his paycheck of $415.35 on March 22.

Record these items in the check register.

Check Number	Date	Description of Transaction	Payment/Debit		Deposit/Credit		BALANCE	

2. Jack's check register had a balance of $125.07 on April 30.
   - He deposited a check for his birthday into his account on May 3 for $25.
   - He wrote these checks on May 5:
     - Check #585 to Wal-Mart for $28.52
     - Check #586 to Hollister for $74.16
   - He deposited his paycheck of $175.00 on May 12.
   - He also used his debit card at McDonalds on May 14 for $17.96.

Record these items in the check register.

Check Number	Date	Description of Transaction	Payment/Debit		Deposit/Credit		BALANCE	

Name: ______________________________ Date: ______________

8.2.4 Checking Assignment

1. On Monday morning, Katie's beginning checking account balance was $65.98.
   - She deposited a check for $487.00.
   - She also used her ATM card to withdraw $100.00 in cash for shopping.

   What is her new bank balance after her deposit and withdrawal?

2. Your checking account had a balance of $643.89 when you started the day. You then used your debit card to make the following purchases:
   - Transaction 1, $32.89
   - Transaction 2, $7.95
   - Transaction 3, $75.00

   What is the remaining balance in your account at the end of the day?

3. Whitney had a balance of $210.00 in her checking account on Tuesday.
   - On Tuesday morning, she went to the bank to deposit a check for $63.00.
   - While at the bank, she also withdrew $50.00 in cash from her account.
   - When she got home, she used her debit card to shop online and make a purchase of $94.00.

   How much money does Whitney have in her checking account at the end of the day?

4. Chuck's checking account had a beginning balance of $68.75 on Thursday.
   - He deposited his tax refund of $325.00 in his checking account on Thursday morning.
   - He wrote checks for the following amounts:
     - Check #1 $53.98
     - Check #2 $90.85
     - Check #3 $289.00
   - He used his debit card for $15.65.

   How much money does Chuck have left in his account?

Name: ____________________ Date: __________

8.2.5 Checkbook Transactions

Add the following transactions to Koby's checkbook register:

MAY	4	Check 120 to Connemara	$13.87
MAY	11	Check 121 to Joe's Skate Shop	$150.17
MAY	18	Check 122 to Billy Bob's Camera Shop	$194.94
MAY	19	Deposit	$162.24
MAY	27	Check 123 to Kentucky Utilities	$158.50
JUN	6	Deposit	$158.38
JUN	15	Deposit	$187.91
JUN	17	Deposit	$81.05
JUN	21	Check 124 to Adelphia Cable	$102.31
JUN	23	Check 125 to Cingular Wireless	$109.33
JUL	3	Check 126 to Kohl's	$4.96
JUL	7	Check 127 to Abercrombie and Fitch	$37.52
JUL	8	Check 128 to Drug Mart	$180.29
JUL	16	Check 129 to GAP	$162.26
JUL	22	Check 130 to Macy's	$106.56

Check Number	Date	Transaction Description	Payment	Deposit	Balance $781.30

Name: ______________________________ Date: ______________

8.2.6 Bank Reconciliation

1. Josh Burn's bank statement balance on May 31 was $2,571.40. On the same day, his check register balance was $1,872.39. The bank statement showed a service charge of $10.30 and interest earned of $3.12. Neither amount was recorded in Josh's check register. The checkbook showed three outstanding checks: $193.19, $437.28, and $75.72. Use the check register and bank statement on page 185 to reconcile Josh's checking account.

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Withdrawals (B) __________

Outstanding Deposits

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Deposits (D) __________

(A) Ending Bank Statement Balance __________

(B) TOTAL Outstanding Withdrawals __________

(C) Line (A) - Line (B) __________

(D) TOTAL Outstanding Deposits __________

(E) Adjusted Ending Balance __________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

Name: ______________________________ Date: ______________

8.2.6 Bank Reconciliation (cont'd)

AD-Auto Deposit • **AP**-Automatic Payment • **ATM**-Cash Withdrawal • **DC**-Debit Card • **FT**-Funds Transfer • **SC**-Service Charge • **TD**-Tax Deductible

NUMBER OR CODE	DATE	TRANSACTION DESCRIPTION	PAYMENT FEE WITHDRAWAL (–)		✓	DEPOSIT CREDIT (+)		**BALANCE** **$** 361.02	
3211	5/3	Target	64	89				296	13
AD	5/4	Deposit-Pay				1,179	83	1,475	96
3212	5/14	Sheryl James	20	00				1,455	96
3213	5/17	Electric Co., Inc.	57	21				1,398	75
AD	5/18	Deposit-Pay				1,179	83	2,578	58
3214	5/26	Toyota Financial Services	193	19				2,385	39
3215	5/26	Apartment Properties	437	28				1,948	11
3216	5/28	Kroger	75	72				1,872	39

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: May 1, 2012 through May 31, 2012

Account Summary:

Beginning Balance	$361.02
Credits/Deposits	$2,362.78
Debits/Payments	$152.40
Ending Statement Balance	$2,571.40

Checking Activity:

Credits/Deposits

05/04	Deposit	+	1,179.83
05/18	Deposit	+	1,179.83
05/31	Interest Earned	+	3.12

Debits/Payments

05/04	Check 3211	–	64.89
05/16	Check 3212	–	20.00
05/21	Check 3213	–	57.21
05/03	Service Charge	–	10.30

Name: ______________________ Date: ____________

8.2.6 Bank Reconciliation (cont'd)

2. Tim Hudson's check register balance on October 30 was $386.23. On the same day, his bank statement balance was $510.51. The bank statement showed a service charge of $5.00 and interest earned of $2.80, not recorded in the check register. The checkbook showed: one outstanding check of $185.48 and one outstanding deposit of $59.00. Use the check register and bank statement on page 187 to reconcile Tim's checking account.

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Withdrawals (B) ________

Outstanding Deposits

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Deposits (D) __________

(A) Ending Bank Statement Balance __________

(B) TOTAL Outstanding Withdrawals __________

(C) Line (A) - Line (B) __________

(D) TOTAL Outstanding Deposits __________

(E) Adjusted Ending Balance __________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

Name: ______________________________ Date: ______________

8.2.6 Bank Reconciliation (cont'd)

AD-Auto Deposit • **AP**-Automatic Payment • **ATM**-Cash Withdrawal • **DC**-Debit Card • **FT**-Funds Transfer • **SC**-Service Charge • **TD**-Tax Deductible

NUMBER OR CODE	DATE	TRANSACTION DESCRIPTION	PAYMENT FEE WITHDRAWAL (–)		✓	DEPOSIT CREDIT (+)		**BALANCE** **$** 133.45	
945	10/2	Speedway Gas	35	50				97	95
Dep	10/5	Deposit-Pay				272	89	370	84
DC	10/8	McDonald's	7	39				363	45
946	10/10	Meijer	123	62				239	83
Dep	10/19	Deposit-Pay				272	88	512	71
947	10/25	Frank Hudson	185	48				327	23
Dep	10/26	Deposit–Birthday Cash				59	00	386	23

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: October 1, 2012 through October 30, 2012

Account Summary:

Beginning Balance	$133.45
Credits/Deposits	$548.57
Debits/Payments	$171.51
Ending Statement Balance	$510.51

Checking Activity:

Credits/Deposits

10/05	Deposit	+	272.89
10/19	Deposit	+	272.88
10/30	Interest Earned	+	2.80

Debits/Payments

10/03	Check 945	–	35.50
10/12	Check 946	–	123.62
10/08	Debit Card	–	7.39
10/03	Service Charge	–	5.00

Name: ______________________________ Date: ______________

Lesson 8.4 Student Checking Account Booklet

Transaction Sheet

June Transactions

June 12	Carry balance forward of $2258.98 from May.
June 15	Deposit your bi-weekly paycheck. The amount of the check is $842.99.
June 16	Write check 531 for $38.42 to MES Telephone Company for the telephone bill dated June 13th.
June 17	Write check 532 for $31.86 to Morgan's Toys for a birthday present.
June 21	Write check 533 for $88.44 to the Bright Idea Electric Company for the electric bill dated June 18th.
June 22	$22.71 was spent for gasoline at Madison's Gas Station using your debit card.
June 22	Write check 534 for $45.00 to Cable Communications for the cable bill dated June 20th.
June 23	Write check 535 for $846.13 to the Duke Mortgage Company for your June mortgage payment.
June 24	Write check 536 for $182.66 to Dewey's Grocery for groceries.
June 27	Write check 537 for $386.50 to Dustie's Car Dealership for your June car payment.
June 28	Write check 538 for $34.34 to Captain Credit Card Company for your June credit card payment.
June 30	Deposit your bi-weekly paycheck. The amount of the check is $842.99.
June 30	Reconcile your checking account for the month of June.

July Transactions

July 1	Write check 539 for $ 118.42 to H20 Water Company for the water bill dated June 30th.
July 2	$28.16 was spent for a pizza dinner at Pizza Pizza using your debit card.
July 5	$18.85 was spent for gasoline at Madison's Gas Station using your debit card.
July 9	Write check 540 for $76.99 to Animal Zoo for your annual zoo membership.
July 15	Deposit your bi-weekly paycheck. The amount of the check is $802.99.
July 18	Write check 541 for $466.22 to Jack's Car Repair for car repairs.
July 23	Write check 542 for $96.21 to the Bright Idea Electric Company for the electric bill dated July 20th.
July 23	Write check 543 for $45.67 to Cable Communications for the cable bill dated July 20th.
July 23	Write check 544 for $846.13 to the Duke Mortgage Company for your July mortgage payment.
July 27	Write check 545 for $386.15 to Dustie's Car Dealership for your July car payment.
July 30	Deposit your bi-weekly paycheck. The amount of the check is $842.99.

Name: ______________________________ Date: ______________

Transaction Sheet (cont'd)

August Transactions

August 3	Write check 546 for $112.11 to H20 Water Company for the water bill dated July 30th.
August 7	Write check 547 for $378.45 to the ABC Insurance Company for your car insurance bill.
August 8	Deposit your $200 birthday gift.
August 10	$24.01 was spent for a pizza dinner at Pizza Pizza using your debit card.
August 11	Write check 548 for $48.50 to Dental Cleaners Inc. for your dentist bill.
August 15	Deposit your bi-weekly paycheck. The amount of the check is $767.15.
August 18	Write check 549 for $96.21 to the Bright Idea Electric Company for the electric bill dated August 12th.
August 22	Write check 550 for $45.67 to Cable Communications for the cable bill dated August 18th.
August 24	Write check 551 for $846.13 to the Duke Mortgage Company for your August mortgage payment.
August 27	Write check 552 for $386.15 to Dustie's Car Dealership for your August car payment.
August 28	$31.78 was spent for 2 compact discs at Sam's Records using your debit card.
August 30	Deposit your bi-weekly paycheck. The amount of the check is $842.99.

September Transactions

September 4	$139.84 was paid online to the H20 Water Company for the bill dated August 27th.
September 7	$46.16 was paid online to the MES Telephone Company for the bill dated August 28th.
September 15	$146.88 was paid online to the Bright Idea Electric Company for the bill dated August 30th.
September 16	Deposit your bi-weekly paycheck. The amount is $799.22.
September 18	Write check 553 for $46.62 to the Cable Communications Company for the bill dated September 12th.
September 21	Write check 554 for $846.13 to the Duke Mortgage Company for the September mortgage payment.
September 23	$36.22 was spent for gasoline at Madison's Gas Station using your debit card.
September 25	$386.15 was paid online to Dustie's Car Dealership for the September car payment.
September 27	$182.65 was spent online to Taylor's Clothing for a clothing purchase.
September 28	$32.66 was spent for a steak dinner at Bob's Steakhouse using your debit card.
September 30	Deposit your bi-weekly paycheck. The amount is $801.46.

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

531

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

532

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

533

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

534

DATE ____________

PAY TO THE ORDER OF ______________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

0000000000 0000000000

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

535

DATE ____________

PAY TO THE ORDER OF ______________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

0000000000 0000000000

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

536

DATE ____________

PAY TO THE ORDER OF ______________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

0000000000 0000000000

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

537

DATE ____________

PAY TO THE ORDER OF ______________________ $ ________

______________________________________ DOLLARS

MEMO ______________ ______________

⑆000000000⑆ ⑆000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

538

DATE ____________

PAY TO THE ORDER OF ______________________ $ ________

______________________________________ DOLLARS

MEMO ______________ ______________

⑆000000000⑆ ⑆000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

539

DATE ____________

PAY TO THE ORDER OF ______________________ $ ________

______________________________________ DOLLARS

MEMO ______________ ______________

⑆000000000⑆ ⑆000000000⑆

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

540

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

541

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

542

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________________

⑆0000000000⑆ ⑆0000000000⑆

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

543

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

544

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

545

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

546

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ____________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

547

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ____________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

548

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ________

______________________________ DOLLARS

MEMO ____________ ______________

⑆0000000000⑆ ⑆0000000000⑆

Name: ____________________ Date: __________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

549

DATE ________

PAY TO THE ORDER OF ____________________ $ ______

____________________ DOLLARS

MEMO ________ ________________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

550

DATE ________

PAY TO THE ORDER OF ____________________ $ ______

____________________ DOLLARS

MEMO ________ ________________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

551

DATE ________

PAY TO THE ORDER OF ____________________ $ ______

____________________ DOLLARS

MEMO ________ ________________

⑆0000000000⑆ ⑆0000000000⑆

Name: ______________________________ Date: ______________

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

552

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ______

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

553

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ______

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

John Smith
123 Main Street
Main Street, KY 99999
901-555-3446

554

DATE ____________

PAY TO THE ORDER OF ______________________________ $ ______

______________________________ DOLLARS

MEMO ______________ ______________

⑆0000000000⑆ ⑆0000000000⑆

Name: ____________________ Date: ____________

Checking Account Deposit Slip

Date ____________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Checking Account Deposit Slip

Date ____________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Checking Account Deposit Slip

Date ____________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Name: ______________________ Date: ____________

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Name: ______________________________ Date: ______________

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

____

Sign here for cash received.

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

____

Sign here for cash received.

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

____

Sign here for cash received.

Name: ______________________________ Date: ______________

Checking Account Deposit Slip

Date ______________________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Checking Account Deposit Slip

Date ______________________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Checking Account Deposit Slip

Date ______________________________

Deposits may not be available for immediate withdrawal.

____

Sign here for cash received

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

Name: ______________________________ Date: ______________

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

____
Sign here for cash received

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

____
Sign here for cash received

Checking Account Deposit Slip

Date ______________________

Deposits may not be available for immediate withdrawal.

	Dollars	Cents
Cash		
Checks		
Subtotal		
Less Cash Received		
Net Deposit		

____
Sign here for cash received

Name: ______________________________ Date: ____________________

Check Register

			Debits (–)			Credits (+)		Balance	
Number	Date	Transaction Description	Payment Amount		✓	Deposit Amount		$	

Name: ______________________________ Date: ____________________

Check Register			Debits (–)			Credits (+)		Balance	
Number	Date	Transaction Description	Payment Amount		✓	Deposit Amount		$	

Name: ____________________ Date: ____________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123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: June 10, 2013 through July 1, 2013

Account Summary:

Beginning Balance	$2258.98
Credits/Deposits	$1685.98
Debits/Payments	$1564.86
Ending Statement Balance	$2380.10

Checking Activity:

Credits/Deposits

06/15	Deposit	+	842.99
06/30	Deposit	+	842.99

Debits/Payments

06/16	Check 531	–	38.42
06/21	Check 533	–	88.44
06/23	Check 535	–	846.13
06/24	Check 536	–	182.66
06/27	Check 537	–	386.50
06/22	Debit Card	–	22.71

Name: ______________________________ Date: ______________

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: July 1, 2013
through August 2, 2013

Account Summary:

Beginning Balance	$2380.10
Credits/Deposits	$1645.98
Debits/Payments	$2039.48
Ending Statement Balance	$1986.60

Checking Activity:

Credits/Deposits

07/15	Deposit	+	802.99
07/30	Deposit	+	842.99

Debits/Payments

07/01	Check 538	–	34.34
07/01	Check 539	–	118.42
07/03	Check 534	–	45.00
07/18	Check 541	–	466.22
07/23	Check 542	–	96.21
07/23	Check 544	–	846.13
07/27	Check 545	–	386.15
07/02	Debit Card	–	28.16
07/05	Debit Card	–	18.85

Name: ______________________________ Date: ______________

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: August 3, 2013
through September 1, 2013

Account Summary:

Beginning Balance	$1986.60
Credits/Deposits	$967.15
Debits/Payments	$1978.82
Ending Statement Balance	$974.93

Checking Activity:

Credits/Deposits

08/08	Deposit	+	200.00
08/15	Deposit	+	767.15

Debits/Payments

08/03	Check 532	–	31.86
08/03	Check 540	–	76.99
08/03	Check 543	–	45.67
08/06	Check 546	–	112.11
08/10	Check 547	–	378.45
08/22	Check 550	–	45.67
08/26	Check 551	–	846.13
08/29	Check 552	–	386.15
08/11	Debit Card	–	24.01
08/29	Debit Card	–	31.78

Name: ______________________ Date: ____________

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: September 2, 2013 through October 1, 2013

Account Summary:

Beginning Balance	$974.93
Credits/Deposits	$2443.67
Debits/Payments	$1778.30
Ending Statement Balance	$1640.30

Checking Activity:

Credits/Deposits

09/02	Deposit	+	842.99
09/04	Deposit	+	799.22
09/30	Deposit	+	801.46

Debits/Payments

09/02	Check 548	–	48.50
09/03	Check 549	–	96.21
09/20	Check 554	–	846.13
09/27	Debit Card	–	182.65
09/29	Debit Card	–	32.66
09/05	Online Payment	–	139.84
09/08	Online Payment	–	46.16
09/26	Online Payment	–	386.15

Name: ______________________________ Date: ______________

June

1. Mark transactions in your check register that match entries on the statement.
2. Record any service charges in your check register that appear on the statement.
3. List any debits/payments that are outstanding in debits/payments box below.
4. Complete the reconciliation shown below:

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Withdrawals (B) __________

Outstanding Deposits

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Deposits (D) __________

(A) Ending Bank Statement Balance __________

(B) TOTAL Outstanding Withdrawals __________

(C) Line (A) - Line (B) __________

(D) TOTAL Outstanding Deposits __________

(E) Adjusted Ending Balance __________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

The balance of your check register and your reconciliation should now balance.

Name: ______________________________ Date: ______________

July

1. Mark transactions in your check register that match entries on the statement.
2. Record any service charges in your check register that appear on the statement.
3. List any debits/payments that are outstanding in debits/payments box below.
4. Complete the reconciliation shown below:

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Withdrawals (B) __________

Outstanding Deposits

Date	Detail	Amount
________	________	________
________	________	________
________	________	________
________	________	________
________	________	________

TOTAL Outstanding Deposits (D) __________

(A) Ending Bank Statement Balance __________

(B) TOTAL Outstanding Withdrawals __________

(C) Line (A) - Line (B) __________

(D) TOTAL Outstanding Deposits __________

(E) Adjusted Ending Balance __________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

The balance of your check register and your reconciliation should now balance.

Name: ______________________________ Date: ______________

August

1. Mark transactions in your check register that match entries on the statement.
2. Record any service charges in your check register that appear on the statement.
3. List any debits/payments that are outstanding in debits/payments box below.
4. Complete the reconciliation shown below:

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Withdrawals (B) ________

Outstanding Deposits

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Deposits (D) ________

(A) Ending Bank Statement Balance ________

(B) TOTAL Outstanding Withdrawals ________

(C) Line (A) - Line (B) ________

(D) TOTAL Outstanding Deposits ________

(E) Adjusted Ending Balance ________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

The balance of your check register and your reconciliation should now balance.

Name: ______________________________ Date: ______________

September

1. Mark transactions in your check register that match entries on the statement.
2. Record any service charges in your check register that appear on the statement.
3. List any debits/payments that are outstanding in debits/payments box below.
4. Complete the reconciliation shown below:

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Withdrawals (B) __________

Outstanding Deposits

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Deposits (D) __________

(A) Ending Bank Statement Balance __________

(B) TOTAL Outstanding Withdrawals __________

(C) Line (A) - Line (B) __________

(D) TOTAL Outstanding Deposits __________

(E) Adjusted Ending Balance __________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register. If it does not, try reconciling the account again.

Make sure that any fees, charges, or withdrawals that are shown on your statement but are not on your register are added to your register and deducted. Also, be sure to add any deposits shown on your statement to your register if they are not in your total.

The balance of your check register and your reconciliation should now balance.

Lesson 8.6 Online Banking

To start banking online, you need to have an account at a bank that offers online banking, as well as Internet access and a web browser that supports the bank's software.

With online customer service, you can easily request a copy of a check or statement, order checks, and make inquiries about account transactions. Customer service representatives answer e-mails about all the above-mentioned inquiries as well as questions about using online banking.

All you need is a personal checking account or credit card. Then, just follow a few simple steps to get started and you'll be able to:

- Check your balances
- See account activity
- Download account information
- Transfer money among your accounts
- Apply for a loan
- Buy certificates of deposit
- Order checks
- And more!

Receive and Pay Your Bills Online

Many banks offer online bill payment as well as online banking. Online bill payment is a relatively inexpensive, simple, and fast way to pay your bills. With online bill pay, you can:

- Make one-time payments
- Schedule recurring payments
- Schedule payments in advance
- Get bills delivered online
- Update payment instructions
- Track payments
- Save money on stamps
- Save time

Paying your bills online does have its drawbacks, though. Setting up your bill payment account can be a rather time-consuming, tiresome process. You must be very careful when entering information about your bills, including payment amounts, account numbers, and the businesses to be paid. If you aren't careful, payments could be made to the wrong businesses, be credited to the wrong accounts, or not even be paid at all. And, some businesses don't even accept online bill payments! Finally, some banks charge an additional fee to pay your bills online.

Online bill-payment security precautions that most banks offer include:

- Account numbers not displayed online
- Automatic logoff
- Constant monitoring of systems
- I.D. and password required for account access
- Ability to change I.D. and password

Online Banking Guarantee

If you are considering online banking and/or online bill payment, make sure that you do your business with a bank that can guarantee that:

- Your accounts are secure.
- Your information remains private.
- Your payments will be made on time.

Name: ______________________________ Date: ______________

8.6.1 Online Banking Word Find

P	R	I	V	A	C	Y	F	A	S	P	E	D	V	H
A	I	N	T	E	R	N	E	T	V	C	C	S	K	J
S	S	T	N	W	E	R	S	D	S	B	S	E	P	Y
S	E	R	E	B	A	B	S	O	N	A	W	C	E	G
W	L	A	I	E	F	E	E	S	L	N	A	U	D	N
O	K	N	N	M	C	E	C	I	N	K	K	R	R	I
R	I	E	E	D	B	I	C	B	E	I	L	I	N	K
D	J	T	V	D	C	V	A	A	M	N	V	T	W	N
D	U	J	N	E	A	Y	E	A	N	G	G	Y	A	A
A	F	N	O	F	V	T	G	V	K	I	N	L	S	B
O	R	V	C	L	I	E	N	T	B	A	S	E	D	C
L	X	G	E	O	S	F	B	A	B	L	U	R	S	I
N	S	A	C	G	J	A	E	H	E	O	K	F	Q	N
W	W	E	V	I	N	S	A	S	N	O	I	T	P	O
O	V	B	N	N	Y	T	W	E	R	J	K	E	C	R
D	I	G	I	T	A	L	W	A	L	L	E	T	X	T
R	L	G	F	I	K	J	W	N	A	S	E	I	V	C
D	K	U	U	G	E	L	B	I	X	E	L	F	U	E
W	N	A	V	I	G	A	T	E	N	N	D	I	J	L
A	E	R	V	I	R	T	U	A	L	B	A	N	K	E

SECURITY	ELECTRICBANKING	DIGITALWALLET	VIRTUALBANK
PRIVACY	FUN	INTERNET	DOWNLOAD
NAVIGATE	PCBANKING	SAFETY	INTRANET
FLEXIBLE	PASSWORD	OPTIONS	
LOGIN	CONVENIENT	IMAGES	
CLIENTBASED	WWW	ACCESS	

Name: ______________________ Date: ______________

8.6.2 Pros/Cons of Online Banking

Pros	Cons

Name: ______________________________ Date: ______________

8.6.3 Online Banking Self-Assessment

Yes or No

_______ 1. **Do you value your time?**
Traditional banks bind you to their opening & closing times to do transactions. If you're often stretched for time to do your banking, then you're an ideal candidate to try banking online. You can do it at your convenience, any time of the day.

_______ 2. **Would you like to reduce your banking fees?**
Most Americans don't realize that on average a checking account costs hundreds of dollars a year—in transaction costs, lower yields, and ongoing fees. Many online banks now offer free unlimited checking accounts.

_______ 3. **Are you equipped to transact online?**
Do you have access to the Internet? If you intend to bank online, access to the web is key.

_______ 4. **Are you comfortable with transacting online?**
If you are already browsing online, you must be familiar with secure Internet protocols that are used to transfer information over the Internet in an encrypted fashion.

_______ 5. **How frequently do you go to your bank branch?**
If you rarely need certified checks, bank drafts, or other such services that require the involvement of bank tellers, then online banking may be a more effective and efficient option for you. If your nearest bank branch is miles away, then elect to try out banking online.

_______ 6. **Do you get paid via direct deposit?**
If you do, then you may be able to get a very good deal from your online bank, many of whom will waive charges if you have your pay deposited directly into your bank account with them.

_______ 7. **Do you mail a lot of checks to make bill payments?**
Mailing checks to pay your bills not only requires the cost of postage, but it also requires you to spend your valuable time writing checks. Traditional banks will charge you for every transaction. With online banking, you can pay your bills online and even schedule payments. This eliminates payments being delayed or lost in the mail.

_______ 8. **Do you use personal finance software**?
If you use Quicken or some other similar financial software, online banking may be for you, since most personal finance software applications support banking online. You can even download your bank statements directly from your bank's web site into these different software packages.

Name: ______________________________ Date: ______________

8.6.3 Online Banking Self-Assessment (cont'd)

Yes or No

_______ 9. **Are you comfortable banking at an ATM (Automated Teller Machine)?**
Are you someone who rarely needs to go to the bank branch because you're already "ATM friendly"? Many online banks offer the ability to do your banking from ATMs where you can deposit checks and withdraw money, and they offer rebates on a limited number of transactions at ATMs.

_______ 10. **Do you trade stocks online?**
Many online brokers are now beginning to offer products similar to online banks. So, if you already trade stocks online, consider moving your banking online, too, since many brokers offer very attractive deals for your banking business. Their goal is to keep all of your money within their group.

Skill Standards

Academic:

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AE 1 Locate, evaluate, and apply personal financial information

Accounting:

OA 11 Prepare a personal and a business bank reconciliation

OA 12 Reconcile the bank statement with the check register

Financial Services:

OA 4 Apply the concepts of maintaining a checkbook and reconciling a bank statement

OB 3 Possess general knowledge of the following: checking, savings, loans, certificates of deposit, investments, IRAs, customer services, trust services, ATMs, credit/debit card

Scenario

Your older brother Kyler, who is taking part in a study-abroad program this semester in England, fell behind on his banking in the weeks leading up to his departure for Europe. Each time that Kyler wrote a check, made a purchase, or deposited funds into his checking account, he jotted down information about the transaction, but he failed to enter the information into his check register. Now, Kyler has no idea how much money he has left to pay for his expenses in England, and he has asked you to help him take control of his finances.

Tasks

A. Record the following transactions in Kyler's checkbook register:

August Purchases, Payments, and Deposits

Date	Transaction	Amount	Description
08/02/2012	Check #1102	$630.00	Jack's Bookstore—Book for next semester
08/06/2012	Deposit	$25.00	Refund for book returned to Jack's Bookstore
08/07/2012	Deposit	$350.00	Payment for landscaping work
08/07/2012	Debit Card	$30.00	Jennie's Crab Legs
08/08/2012	Debit Card	$25.22	Marathon—Gas
08/10/2012	Deposit	$0.02	Interest earned
08/15/2012	Deposit	$200.00	Payment for babysitting for Jack & Jill
08/15/2012	Electronic Withdrawal	$79.50	State Farm—Car insurance
08/22/2012	Debit Card	$7.50	Mike's Pop Shop
08/25/2012	Check #1103	$250.00	Union Grove Apartments—Rent
08/28/2012	Debit Card	$12.00	Al's Grocery
08/29/2012	ACH Deposit	$330.00	Paycheck from ice cream shop
08/31/2012	Bank Fee	$5.00	Recorded on bank statement
08/31/2012	Check #1104	$75.15	Kentucky Electric—Utilities
08/31/2012	Check #1105	$250.00	Education Services, Inc.—Student loan
08/31/2012	Deposit	$200.00	From parents for books

Name: ______________________________ Date: ______________

Tasks (cont'd)

AD-Auto Deposit • **AP**-Automatic Payment • **ATM**-Cash Withdrawal • **DC**-Debit Card • **FT**-Funds Transfer • **SC**-Service Charge • **TD**-Tax Deductible

NUMBER OR CODE	DATE	TRANSACTION DESCRIPTION	PAYMENT FEE WITHDRAWAL (–)		✓	DEPOSIT CREDIT (+)		BALANCE $ 2,550.44	

Tasks (cont'd)

B. Use Kyler's check register and bank statement to reconcile his bank account. Use the bank reconciliation form provided.

123 Main Street
Main Street, KY
(859) 555-5555

Account Statement

Account Number: 123456789
Statement Period: August 1, 2012 through August 31, 2012

Account Summary:

Beginning Balance	$2,550.44
Credits/Deposits	$905.02
Debits/Payments	$1,039.22
Ending Statement Balance	$2,416.24

Checking Activity:

Credits/Deposits

08/06	Deposit	+	25.00
08/07	Deposit	+	350.00
08/15	Deposit	+	200.00
08/29	Deposit	+	330.00
08/10	Interest	+	0.02

Debits/Payments

08/03	Check 1102	–	630.00
08/27	Check 1103	–	250.00
08/07	Debit Card	–	30.00
08/08	Debit Card	–	25.22
08/22	Debit Card	–	7.50
08/28	Debit Card	–	12.00
08/15	Electronic Funds Transfer	–	79.50
08/31	Bank Fee	–	5.00

Name: ______________________________ Date: ______________

Tasks (cont'd)

Bank Reconciliation Form

Outstanding Withdrawals

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Withdrawals (B) __________

Outstanding Deposits

Date	Detail	Amount
______	______	______
______	______	______
______	______	______
______	______	______
______	______	______

TOTAL Outstanding Deposits (D) __________

(A) Ending Bank Statement Balance __________

(B) TOTAL Outstanding Withdrawals __________

(C) Line (A) - Line (B) __________

(D) TOTAL Outstanding Deposits __________

(E) Adjusted Ending Balance __________
Line (C) + Line (D)

Line (E) should match the ending balance on your check register.

C. After completing Kyler's check register and reconciling his account, write a short letter to Kyler. In the letter, explain the steps that you followed to fill out his register and reconcile his account.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Enters all transactional data into check register correctly with no mathematical errors
- Completes reconciliation form properly with no mathematical errors
- Thoroughly explains processes used to complete the check register and reconcile the account

3

- Enters most transactional data into check register correctly with few or no mathematical errors
- Completes reconciliation form properly with few mathematical errors
- Adequately explains processes used to complete the check register and reconcile the account

2

- Enters some transactional data into check register correctly with many mathematical errors
- Completes reconciliation form improperly but with few or no mathematical errors
- Provides limited explanation of processes used to complete the check register and reconcile the account

1

- Enters little or no transactional data into check register correctly with many mathematical errors
- Completes reconciliation form improperly with many mathematical errors
- Provides little or no explanation of processes used to complete the check register and reconcile the account

Unit 4

Ownership Structures

Kentucky Accounting and Finance Foundations Curriculum Guide

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Lesson 9.1 Types of Business Ownership

There are three major types of business ownership. They are sole proprietorships, partnerships, and corporations. Choosing the right form of business ownership is essential to a firm's success. There are advantages and disadvantages to each of the major forms of ownership. In addition to the three major types, there are also specialized forms of business organizations with which you should be familiar. Franchises, cooperatives, and non-profits will be defined later in this unit.

Lesson 9.2 Proprietorships

A **sole proprietorship** is a business owned by one person. Most proprietorships are small businesses such as jewelry stores, restaurants, hair-styling salons, and professional businesses such as physicians, attorneys, and accountants. More than two-thirds of U.S. businesses are operated as sole proprietorships. The sole proprietor has complete responsibility for business decisions and is usually the manager. From an accounting viewpoint, the proprietorship's accounting records do not include the proprietor's personal financial records. However, from a legal perspective, the business is the proprietor. You have **unlimited liability** or full responsibility for your company's debts. If you lose more money than you make, you have to make up the difference. You could lose your personal savings, your property, and even your car if your business cannot pay its debts.

iStockphoto/Thinkstock

Owning your own business is easy to do. Depending on local laws, you may need only a license or permit to start a sole proprietorship. You get to be your own boss. You get to keep all of the profit, and you claim all the income or losses from the business on your personal tax return, meaning that all of the profits and losses from the business flow through the business to you—the sole proprietor.

On the other hand, there are disadvantages, too. You have to pay for everything yourself. You have to buy your own supplies, pay for advertising, rent office space, and pay taxes. You might have to use your personal savings or borrow money from the bank to start your business and keep it going. How is your record keeping? Do you have the business skills needed to operate a business? You might have to hire an office manager or accountant to help run your business.

Lesson 9.3 Partnerships

If you don't have the money to start a sole proprietorship, you could go into business with a partner. A **partnership** is a business owned and managed by a small group, often not more than two or three people, who become partners and share the risks and rewards. By written agreement, these partners share the profits or losses and have unlimited liability for the debts of their business. Many retail establishments and professional organizations are partnerships. Most are small or medium sized, but some are gigantic, exceeding 2,000 partners. Accounting treats the partnership as a separate organization, distinct from the personal affairs of each partner. However, from a legal perspective, a partnership is the partners. To start a partnership, you need to draw up a partnership agreement, which is a contract that outlines the rights and responsibilities of each partner.

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There are several advantages to a partnership. You might only need a license to start it; you pay taxes only on your personal profits; and it's easier to obtain capital. Your partners bring different skills to the business. The business can run more efficiently, and each partner has an incentive to do a good job.

Disadvantages include sharing profits, the potential for disagreements with a partner, and sharing unlimited legal and financial liability. If one partner makes a bad decision, all partners are equally responsible.

Lesson 9.4 Corporations

A **corporation** is a business owned by a number of people and operated under written permission from the state in which it is located. The written permission is called a **certificate of incorporation**. The corporation acts as a single individual on behalf of its owners. By buying shares of stock, people become owners of corporations. They are then known as **shareholders**, sometimes called stockholders. By law, the corporation is treated as one person. It is a legal entity with a life separate from its owners. It can own property, pay taxes, make contracts, and be sued. A corporation can have few owners or millions of owners, like Coca-Cola, IBM, Texaco, and General Motors.

Comstock/Thinkstock

To raise money, you can sell stock or shares of ownership in your corporation. The new owners (stockholders) pay a set price for each share. For each share the stockholder owns, the stockholder will get a share of the profits and a vote on how the business is run.

You must also have a board of directors who control the corporation. They don't actually run the day-to-day business operations of the company, but they hire officers to do it. You get to pick the first board of directors, but each year the stockholders get to vote on them.

A major advantage of a corporation is its limited liability. If your company loses money, the stockholders lose only what they invested. Since your corporation exists separately from you, if it goes out of business, you can't have your personal property or savings taken away from you. Another advantage is that the corporation doesn't end if the owners sell their shares. As long as your business makes money, you can continue the company by reselling the shares. You can also raise more capital at any time by selling new shares.

A disadvantage of a corporation is that you often have to pay more taxes. The federal government and some state governments tax corporate profits. The owners are taxed on their income from the corporation, and the corporation itself has to pay taxes; this is known as double taxation. The government also closely regulates corporations. It's more difficult to start a corporation than a sole proprietorship or a partnership, and running it can be much more complicated.

Lesson 9.5 Specialized Forms of Business Organizations

As you can now see, choosing the right form of business ownership is central to a firm's success. In addition to the three major forms of ownership, there are some specialized types of business ownership structures: limited partnerships, limited liability partnerships (LLP), S corporations, limited liability companies (LLC), franchises, cooperatives, and non-profit corporations.

Limited Partnerships

Limited partnerships are similar to a regular partnership; they are not a taxable entity, and losses and gains are passed through to the partners. The difference is the two classes of partners. One class is called the limited partners which are typically investors. Limited partners do not make management decisions; the maximum liability is limited to their initial investment; and they can transfer ownership without dissolving the partnership. The other class of partners is called the general partners which typically are those who promote the business. General partners manage the day-to-day operations of the business, and they are personally liable for losses if the business fails. In order to change a partner, it must be written in an agreement signed by the partners.

Two main benefits of a limited partnership are to raise capital and to shelter income from taxation.

Limited Liability Partnerships (LLPs)

In the early to mid-1990's, many states passed legislation permitting the creation of a new business form called the limited liability partnership. LLPs are established according to the terms of the state enabling legislation. Typically, the partners must register with the state, pay a fee, include the term "limited" in their partnership name, and maintain appropriate professional liability insurance.

The purpose of an LLP is to allow those who want to operate a business in the form of a partnership to have the benefit of limited liability. LLPs remove a partner's personal liability for another partner's mistakes, misconduct, negligence, and wrongful acts. In other words, a partner's liability for the malpractice and negligence of another partner is limited to the partnership's assets, not personal assets.

S Corporations

An incorporated business can have the opportunity to form an S corporation. Federal tax laws, in certain situations, allow a business to escape most corporate income tax. The owners of the business would benefit by having limited liability without double taxation. In order for a corporation to qualify for an S corporation, they must have no more than 35 shareholders and meet other Internal Revenue Code requirements.

Lesson 9.5 Specialized Forms of Business Organizations (cont'd)

Limited Liability Companies (LLCs)

Most states have passed laws that authorize what are known as limited liability companies. **Limited Liability Companies (LLCs)** offer a business structure designed to combine the tax advantages of a partnership with the operating advantages of a corporation. **Professional Limited Liability Companies (PLLCs)** are designed for businesses that offer a professional service such as public accountants, attorneys, and physicians. Due to a 1988 ruling by the IRS, LLCs retain the limited liability of corporations but are treated as partnerships for tax purposes; therefore, they do not pay federal income tax as a separate entity. Instead, members report profits and losses from the business as part of their individual tax return.

An LLC is created by filing articles of organization with the Secretary of State and paying a fee. An LLC will operate according to an agreement among the members. It operates like a corporation as a separate entity and may own property, pay taxes, make contracts, and be sued. LLCs may be easily dissolved by death, bankruptcy, or retirement of a member. If unanimously agreed upon by remaining members, the business can continue operations. In some states, LLCs are limited to a lifetime of 30 years.

Limited Liability Companies have considerable advantages over other forms of business structures. LLCs are easier to create than limited partnerships and have no restrictions on the maximum number of investors like S corporations. Furthermore, LLCs protect their members from personal liability, unlike a limited partnership in which the general partners have unlimited liability.

Franchises

If you have stayed in a national motel chain, eaten in a fast-food restaurant, or purchased a car from a dealership, you have likely bought services and goods from a franchised business. A **franchise** is a written contract granting permission to sell someone else's product or service in a prescribed manner, over a certain period of time, and in a specified territory. The person or group who receive the franchise is called the **franchisee.** The parent company granting the franchise is called the **franchisor**. For example, if you decide to open a McDonald's restaurant, you are the franchisee. McDonald's, the parent company, is the franchisor.

The franchise agreement states the duties and rights of both parties. The franchisee agrees to run the business in a certain way. The name of the business, the products or services offered, the design and color of the building, the price of the products or services, and even the uniforms of the employees are determined by the franchisor.

Lesson 9.5 Specialized Forms of Business Organizations (cont'd)

Cooperatives

A **cooperative** is an organization owned and operated by its members for the purpose of saving money on the purchase of certain goods and services. A cooperative is like a corporation in that it exists as a separate entity from the individual businesses. You also need a government charter to start one. A cooperative can also sell stock and choose a board of directors to run it. Most of the profits a cooperative earns may be refunded directly to members at the end of the business year. Examples of cooperatives include: Ocean Spray, Welch's, Ace Hardware, and Blue Grass Energy.

Non-Profit Corporations

Not everyone goes into business to make a profit. You might want to start a business whose purpose is to help children, the poor, or animals. A **non-profit organization** is a type of business that focuses on providing a service rather than making a profit. Examples include: the American Red Cross, Meals on Wheels, and Boy Scouts of America. Private hospitals, schools, and museums can also be set up that way.

Like a corporation, a non-profit has to register with the government and might be run by a board of directors. Because the non-profit corporation does not make a profit, however, it doesn't have to pay taxes. Instead of investors, it relies on government grants and donations from businesses and individuals. Donors don't get dividends, but they can deduct their donations from their taxes.

Table 9-1

Comparison of the Three Basic Forms of Business Ownership

	Proprietorship	Partnership	Corporation
Owner(s)	Proprietor—there is only one owner.	Partners—there are two or more owners.	Stockholders—there are generally many owners.
Life of the organization	Limited by the owner's choice or death.	Limited by the owner's choices, or death.	Indefinite
Personal liability of the owner(s) for the business's debt	Proprietor is personally liable.	Partners are personally liable.	Stockholders are not personally liable.
Legal status of the organization	The proprietorship is the proprietor.	The partnership is the partners.	The corporation is separate from the stockholders.

Lesson 10.1 E-Commerce

The world's newest marketplace is not even an actual place. Thousands of businesses and individuals are taking advantage of e-commerce. E-commerce, or **electronic commerce**, is the buying and selling of goods and services via the Internet. Businesses can now directly reach customers anywhere in the world. Anyone with Internet access is now a potential customer. Internet access hasn't only changed the way products are sold, but it has changed the way business activities are conducted. Any company can go online to sell any product. Putting catalogs on the Internet saves a lot of money in printing and mailing costs, and the consumer can shop 24/7.


George Doyle/Stockbyte/Thinkstock

Federal laws that protect Internet and TV shoppers are the same as those that govern purchases made by phone. The seller must send you the goods within 30 days or the specified time stated by the company. This clock begins as soon as the company receives your credit card number.

One of the main concerns to both the consumer and e-tailer would be privacy. How secure is the personal information given in a transaction? Many web browsers can automatically encrypt or scramble your personal and credit card information before it is sent over the Internet. Whenever possible, shop only from merchants that have a positive reputation with consumers. Keep a record of your receipt, online order confirmation, and merchant's Internet address. The American Institute of Certified Public Accountants (AICPA) helped to create WebTrust. WebTrust is an assurance service that uses technology, consulting, and audit skills to combat security and privacy issues when conducting shopping, banking, and other transactions online.

ELECTRONIC COMMERCE

"A Matter of Trust"

#7

Takin' Care of Business

CPA... Imagine the possibilities!

AICPA

#7 ELECTRONIC COMMERCE "A Matter of Trust"

Overview

As business was changing and expanding in the early 1900's, the public sector and the government turned to **Certified Public Accountants (CPAs)** to protect the interest of investors and the general public by requiring all public companies to undergo an annual audit of their financial statements in order to "assure" the financial integrity of the company. CPAs were — and still are — charged with this responsibility because they are known for their integrity, independence and objectivity as well as their business expertise. Once again, due to changes in business practices, specifically the evolution of technology and the role the Internet plays in business today, CPAs are being called upon to protect and serve the public interest.

The expansion and advancement of the Internet has allowed an increasing number of companies and consumers to transact business over the Internet. The buying and selling of products and services online is known as electronic or "e"-commerce.

However, as has been shown by the setbacks to "dot com" companies, success is far from guaranteed. One reason is that some consumers are uncertain about "doing business" over the Internet and therefore avoid doing so. Consumers, for instance, have concerns about the privacy of their transactions, the confidentiality and security of their personal information — such as a credit card number — and even the legitimacy of the company on a web site.

WebTrust was created by the **American Institute of Certified Public Accountants (AICPA)** and the Canadian Institute of Chartered Accountants (CICA) to meet the needs of businesses and consumers concerned about issues such as security and privacy when shopping, banking and engaging in other personal or business transactions over the Internet. The objective of WebTrust is to build confidence among consumers and businesses "doing business" over the Internet.

WebTrust is a natural extension of the services provided by CPAs. An assurance service, WebTrust involves a mix of technology, consulting and traditional auditing skills. In addition, since the CPA is known as a trustworthy professional, the general public is confident in their work.

Through WebTrust, CPAs conduct an examination of web sites and online businesses and verify that the business and its operations comply with WebTrust Principles and Criteria. If a business does comply with all WebTrust Principles and Criteria, the business and its web site are given a **WebTrust seal of approval**, which is intended to provide assurance to consumers that they can transact business electronically with confidence on the web site.

In assessing an e-commerce site, the CPA examines the manner in which business is transacted, such as the taking and fulfilling of orders. The CPA will also assess the transaction integrity of the business by determining whether consumers receive the item ordered based on the agreed-upon price and within the specified time period. In addition, the CPA assesses whether personal and confidential information is transmitted securely and kept private.

When a business and its web site earn the WebTrust seal, consumers can view the WebTrust seal, the CPA's report, criteria used to evaluate the web site, date the seal was awarded, and other web sites that have earned the WebTrust seal.

If a web site does not pass the CPA's exam, a seal will not be issued. Due to the dynamic nature of the Internet, the WebTrust seal is valid for a limited period of time, usually six months. The web site and business must then undergo another audit to earn a new WebTrust seal.

For more information about WebTrust, including a list of the web sites that have passed the WebTrust examination, WebTrust providers and a case study, visit **www.WebTrust.org**.

Activities

It's a Matter of Trust

Visit at least two webs sites that you have purchased merchandise from or, if you have not purchased merchandise on the Internet, find two retailers that do business using a web site.

Evaluate the Business Practices Disclosure of each site by scoring the Business Practices Criteria listed below. When you complete the scoring, total the points and rate the web sites chosen according to the Web Site Rating Schedule below.

Score each criteria as: 5 = excellent, 3 = good, and 1 = poor. If you are unable to find this information on the site, enter a zero in the appropriate column.

Business Practice	Web site #1	Web site #2
Time frame for fulfillment of orders for goods or services		
Time frame and process for informing customers of back orders or other order exceptions and the customer options made available		
Normal method of delivery, including customer options, if any		
Payment terms, including customer options, if any		
Electronic payment methods and related charges to customers		
How the customer may cancel recurring charges, if any		
Product return policies, if any		
Condition of goods (i.e., new, used, or reconditioned)		
Street address (not a post office box or e-mail address)		
Telephone number (a number to reach an employee on a timely basis; not a voice mail system or message machine)		
Days and hours of operation		
Total Points		

Web Site Rating Schedule

Points	Business Practice Disclosure
50 or more	Excellent
44 to 49	Above Average
38 to 43	Average
32 to 37	Below Average
26 to 31	Poor
25 or less	***Does the business exist?!***

The Order of Business

Assume that you have visited the Web site of a music retailer and have ordered a CD on-line. Use the list below to sequence the events that take place and then diagram the sequence to illustrate the "order of business."

Sequence	Event
	CD arrives at buyer's home
	Buyer's credit card account is debited (charged)
	Seller processes order
	Seller packages CD and sends to delivery service
1	Buyer searches for CD on seller's Web site
	Seller's bank account is credited
	Buyer decides whether site provides secure transmission of information
	Seller verifies that buyer's credit card is valid
	Service fees are paid to credit card company
	Buyer enters credit card number

On-line Entrepreneur

Using your knowledge of Business Practice Disclosures and the "order of business" as it is transacted over the Internet, design a "new" web-based business for grocery shopping.

First, list the traditional steps and activities of both the shopper and the grocery store. Then diagram the activities of each in their proper sequence and explain how the activities of the grocery store are carried out. Use this information and your diagram to design a web site that will allow shoppers to place an order via the web site and receive the groceries — *in a reasonable amount of time* — Jwithout ever leaving their home.

Lesson 11.1 Advantages and Disadvantages of the Three Basic Forms of Business Ownership

Type of Ownership	Advantages	Disadvantages
Sole Proprietorship	Easy to start business	Capital is limited to what the owner can supply or borrow.
	Owner makes all the decisions and is own boss.	Owner is liable (responsible) for all debts, even losing personal property if business fails.
	Owner receives all profits.	Long hours and hard work often necessary
		Life of the business depends upon the owner; it ends if the owner quits or dies.
Partnership	Fairly easy to start the business	Each partner is liable for business debts made by all partners, even losing personal property if business fails.
	More sources of capital available	Each partner can make decisions; more than one boss
	Partners may offer additional business knowledge or skills to the partnership.	Partnership ends if a partner quits or dies.
		Each partner shares the profit.
Corporation	More sources of capital available	Difficult to start the corporation
	Specialized managerial skills available	Owners do not have control of decisions made each day, unless they are officers of the company.
	Owners liable up to the amount of their investments	Business activities of the corporation limited to those stated in the certificate of incorporation
	Ownership can be easily transferred through sale of stock; business not affected by change of ownership	

Lesson 11.2 Ownership Structures—Assignment 1

1. What are some advantages of a sole proprietorship?
2. What are the disadvantages of a sole proprietorship?
3. What is the difference between a sole proprietorship and a partnership?
4. If a partner makes a bad business decision, what is the responsibility of the other partners?
5. What are the disadvantages of a corporation?
6. How many people must be involved in a partnership? Is there a limit on the number?
7. What happens when a partner leaves the business or dies?
8. Define unlimited liability. What does it mean to the owners?
9. What are shares of ownership in a corporation called?
10. What is the major advantage of a corporation? Explain your answer.
11. Define a non-profit organization.
12. Explain how a cooperative works.
13. What are some advantages of a cooperative?
14. What is e-commerce, and why are so many businesses becoming involved?
15. What is WebTrust?
16. How are limited partnerships similar to a regular partnership?
17. Explain the differences between limited and general partners.
18. What steps are necessary in forming an LLP?
19. What is the main purpose of an LLP?
20. What are the main differences in an S corporation and a standard corporation?
21. What are the advantages of an LLC compared to other forms of business?

Lesson 11.3 Critical Thinking—Assignment 2

This assignment can be completed in groups or as an individual.

1. Martha Collinsberry and her partner, Wesley Allen, failed in their business venture. The debts are about $8,000 greater than the value of the business. Martha has personal property worth more than $10,000, but Wesley owns nothing. Could Martha's personal property be taken to settle the debts of the business? Explain.
2. Which of the types of businesses described in this chapter would have the easiest time obtaining money to expand? Why?

Lesson 11.4 Local Business Profile—Assignment 3

Interview an owner at a local business in the community. The business can be organized as a sole proprietor, partnership, corporation, or any of the specialized forms of business.

You must include the following information:

1. Name of Business
2. History of Business: Year of Establishment, How it evolved
3. Name(s) of Owner(s)
4. Business Address
5. Phone Number/Email Address/Website
6. Type of business: service, retail, or manufacturer
7. Number of Employees
8. Company logo and/or slogan
9. What does s/he enjoy about the job?
10. What does s/he find difficult in running his/her business?
11. What is the business structure? How was the business structure chosen?
12. What are the advantages and disadvantages for the company's business structure?
13. What business structure would you recommend for someone just starting a new business? Why?
14. Optional...picture of business

Lesson 11.5

Analyzing Types of Business Structures—Assignment 4

Create a table in Word or Excel for all of the specialized business structures: Limited Partnerships, LLPs, LLCs, S Corporations, Franchises, Cooperatives, and Non-Profit organizations. Include the following in the table for each structure:

1. **Continuity**- What happens if owner leaves or new owner joins the company?
2. **Control**- What control does the owner hold?
3. **Liability**- Are personal assets at risk?
4. **Taxes**- Are there any tax breaks?

Take advantage of all your resources in completing this assignment. Use your binder, the Internet, and other resources as necessary.

The Kentucky Secretary of State Business Services Division link may be helpful
http://sos.ky.gov/business/filings/entities.htm

Skill Standards

Academic:

AA 1 Utilize effective verbal and non-verbal communication skills

AA 3 Communicate and follow directions/procedures

AB 1 Locate and interpret written information

AB 3 Identify relevant details, facts, and specifications

AB 5 Demonstrate competence in organizing, writing, and editing using correct vocabulary, spelling, grammar, and punctuation

AB 6 Demonstrate the ability to write clearly and concisely using industry specific technology

AC 1 Utilize critical-thinking skills to determine best options/outcomes (e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning)

AC 2 Utilize innovation and problem-solving skills to arrive at the best solution for current situation

Employability:

EG 4 Locate and verify information

Accounting:

OD 4 Compare and contrast the different types of ownership and business structures

Scenario

You have just been given the opportunity to start a new business selling specialty flip flops. After careful research, you have discovered that the cost of getting started will be $5,000. You just graduated college, and you have a total of $1,500 in savings.

Tasks

A. Identify and describe three different ownership structures you could choose for your new business.

B. Explain which ownership structure would be the most beneficial to you in regards to liability, taxes, continuity, and control.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Thoroughly describes three different ownership structures
- Thoroughly explains reasons for choosing a particular ownership structure
- Well organized and communicated effectively

3

- Adequately describes three different ownership structures
- Generally explains reasons for choosing a particular ownership structure
- Generally well organized and communicated effectively

2

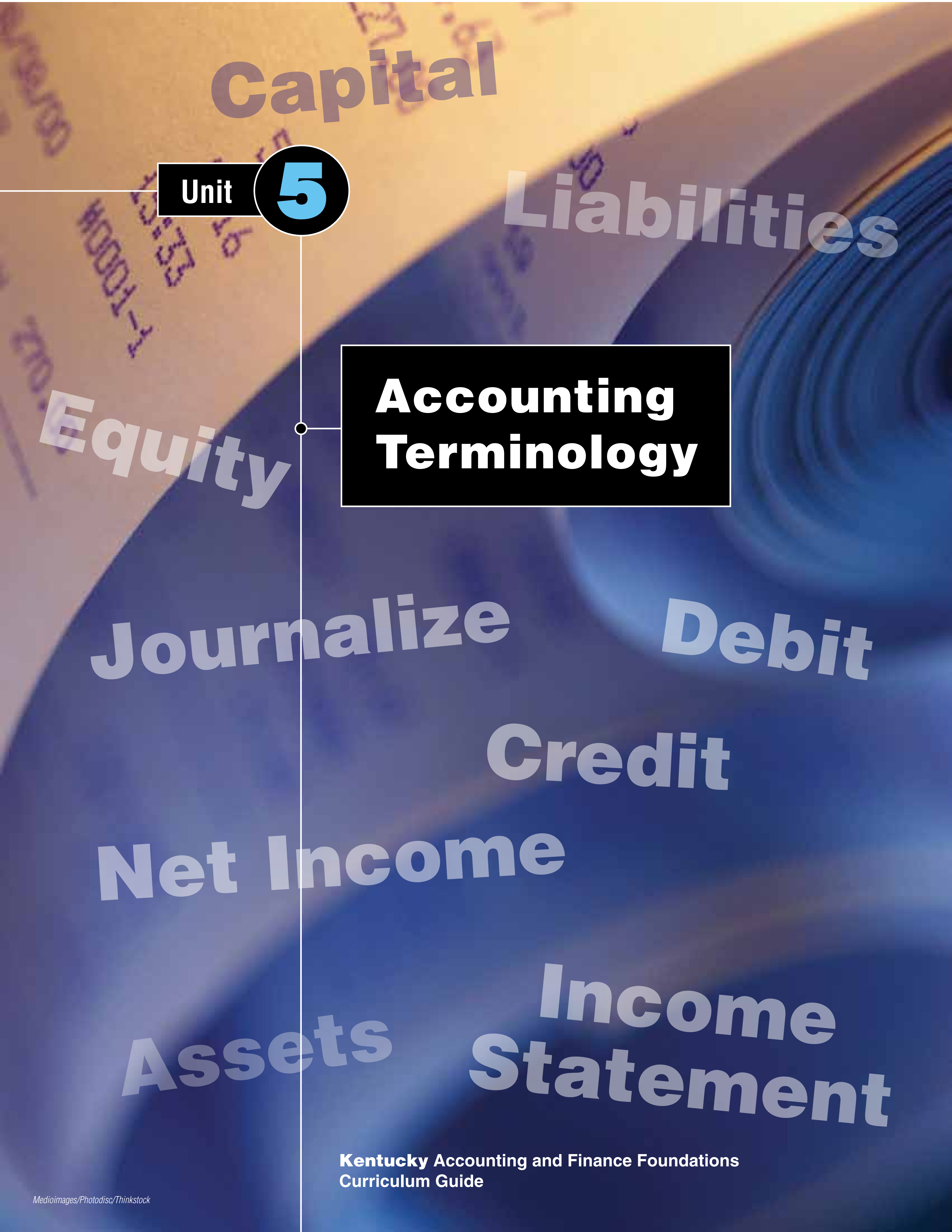
- Provides limited explanation of different ownership structures
- Gives limited explanation for choosing a particular ownership structure
- Limited organization and communication of content

1

- Provides little or no explanation of ownership structures
- Gives little or no explanation for choosing a particular ownership structure
- Little or no organization with ineffective communication

Unit 5

Accounting Terminology



Medioimages/Photodisc/Thinkstock

Kentucky Accounting and Finance Foundations
Curriculum Guide

Introduction

What is accounting? Accounting is the official language for business that provides information about a company's financial position. Specifically, accounting is the planning, recording, interpreting, and analyzing of financial information. Accounting is used not only to prepare financial information but also to understand and communicate the financial operations of all types of organizations.

Accounting information can be broken down into three main categories:
Operating, Financial, and Managerial.

Lesson 12.1 Accounting Structure

Operating Information

Operating information constitutes the greatest amount of accounting information, and it provides the basis for the other two types of accounting information. This information is needed on a day-to-day basis in order for the organization to conduct its business. Everyday employees need to get paid; sales need to be tracked; the amounts owed to other organizations or individuals need to be tracked; the amount of money the organization has needs to be monitored; the amounts customers owe the organization need to be checked; and inventory needs to be accounted for.

Financial Accounting Information

Managers, shareholders, banks, creditors, the government, the public, etc., use financial accounting to make decisions involving the organization and the operations. Shareholders need information about what their investment is worth and whether they should buy or sell shares. Bankers and other creditors want to know whether the organization has an ability to pay back money lent, and managers want to know how the company is doing compared to other companies. This information would be very difficult to read and compare if every company used a different system for recording its financial position. Financial accounting information is subject to a set of ground rules that dictate how the information is reported, which ensures uniformity.

Managerial Accounting Information

In order for the managers of a company to make the best decisions, they need to have specific information prepared. They use this information for three main management functions: planning, implementation, and control. Financial information is used to set budgets, analyze different options on a cost basis, modify plans as the need arises, and control and monitor the work being done.

Lesson 12.2 Accounting Framework

Accounting is used to make judgments about a company's financial position. Because accounting is considered a universal language, all businesses must use the same reporting practices to record financial information. In order to have consistent recording methods, our accounting system is based on a basic set of principles called **United States Generally Accepted Accounting Principles (US GAAP)**. These principles have evolved over time from many sources.

The Securities and Exchange Commission (SEC) has the authority to establish US GAAP. The SEC, however, has allowed a series of private organizations to determine US GAAP. Currently, the organization that has the authority to set accounting standards is the Financial Accounting Standards Board (FASB). FASB is a non-governmental agency funded by the accounting profession and contributions from business organizations.

Lesson 12.3 Certified Public Accountants

As you learned in Unit 1, Certified Public Accountants (CPAs) act as advisors to individuals, businesses, financial institutions, nonprofit organizations, and government agencies on a wide range of financial matters. For example, many individuals turn to CPAs for help in preparing their taxes and planning their personal finances. They also often rely on CPAs for assistance in building college funds, planning for retirement, and creating estate plans.

On the other hand, business owners and managers have traditionally depended on CPAs for auditing services and advice on developing effective accounting systems, maximizing operating results, and resolving management issues. In addition, CPAs frequently assist businesses in designing and installing data processing/management information systems.

Lesson 12.4 The Fundamental Purpose of the AICPA

The American Institute of Certified Public Accountants (AICPA) is the national, professional organization for all Certified Public Accountants (CPA). The AICPA's mission is to provide members with the resources, information, and leadership that enable them to provide valuable services in the highest professional manner to benefit the public as well as employers and clients.

In fulfilling the mission, the AICPA works with state CPA organizations and gives priority to those areas where public reliance on CPA skills is most significant.

AICPA OBJECTIVES

To achieve the mission, the Institute:

A. Advocacy

Serves as the national representative of CPAs before governments, regulatory bodies, and other organizations in protecting and promoting members' interests.

B. Certification and Licensing

Seeks the highest possible level of uniform certification and licensing standards and promotes and protects the CPA designation.

C. Communications

Promotes public awareness and confidence in the integrity, objectivity, competence, and professionalism of CPAs and monitors the needs and views of CPAs.

D. Recruiting and Education

Encourages highly qualified individuals to become CPAs and supports the development of outstanding academic programs.

E. Standards and Performance

Establishes professional standards; assists members in continually improving their professional conduct, performance, and expertise; and monitors such performance to enforce current standards and requirements.

(from www.aicpa.org)

Lesson 12.5 Accounting and US GAAP

Accounting is the language of business used to communicate financial information. The presentation and calculation of financial information must be standardized; therefore, accounting is based on several general statements that serve as guidelines for record keeping and preparing financial statements. These general statements are officially referred to as the United States Generally Accepted Accounting Principles (US GAAP)—accounting principles that are used to prepare, present, and report financial statements. By using these principles as the foundation, readers of financial statements and other accounting information do not need to make assumptions about what the numbers mean.

For instance, the difference between reading that a truck has a value of $9,000 on the balance sheet and understanding what that $9,000 represents is significant. Can you sell the truck for $9,000? If you had to buy the truck today, would you pay $9,000? Or, perhaps the original purchase price of the truck was $9,000.

Although US GAAP is not an official law, the U.S. Securities and Exchange Commission (SEC) requires that public companies follow US GAAP in their financial reporting. US GAAP ensures that company financial statements are reliable and based on accepted standardized principles. US GAAP is typically divided into three parts:

Basic Assumptions for US GAAP:

1. Entity Assumptions
2. Going Concern Assumptions
3. Monetary Unit Assumptions
4. Time Period Assumptions

Principles for US GAAP:

1. Cost Principle
2. Matching Principle
3. Revenue Recognition Principle
4. Disclosure Principle

Constraints of US GAAP:

1. Materiality
2. Cost-Benefit Relationship
3. Consistency Principle
4. Conservatism Principle

Lesson 12.6

US GAAP Accounting: Assumptions, Principles, and Constraints

1. **Entity Assumption**

   Accounting records are kept for entities and not the people who own or run the company.

   The entity assumption presumes that the business is a separate entity from its owners or other firms. Even in proprietorships and partnerships, the accounting records for the business must be kept separate from those of the owner(s). The concept entity states that a business is considered its own person; therefore, its records must be kept separate. For example: a business can marry (merger). A business can have a baby (subsidiary). A business can die (it closes or discontinues operations).

2. **Going Concern Assumption**

   Financial statements are prepared with the expectation that a business will remain in operation indefinitely.

   This concept implies that financial statements do not represent a company's worth if its assets were to be **liquidated** (the ease an asset can be converted to cash), but rather that the assets will be used in future operations. This concept also allows businesses to spread (amortize) the cost of an asset over its expected useful life.

3. **Monetary Unit Assumption**

   For an accounting record to be made, the assumption presumes a stable currency to be the unit of record.

   Financial statements show only a limited picture of the business. Consider a situation where there is a labor strike pending or the business owner's health is failing; these situations have a huge impact on the operations and financial security of the company, but this information is not reflected in the financial statements.

4. **Time Period Assumption**

   This concept defines a specific interval of time for which an entity's reports are prepared.

   This can be a fiscal year (July 1 - June 30), natural year (January 1 - December 31), or any other meaningful period such as a quarter or a month. Once a time period is determined, it must not be changed.

5. **Cost Principle**

   An asset is entered into the accounting records at the price paid to acquire it.

   Because the "worth" of an asset changes over time, it would be impossible to accurately record the market value for the assets of a company. To simplify practices, the amount recorded is the purchase price of the asset.

6. **Matching Principle**

   To avoid overstatement of income in any one period, the matching principle requires that revenues and related expenses be recorded in the same accounting period.

   If you bill $20,000 of services in a month, in order to accurately represent the income for the month, you must report the expenses you incurred while generating that income in the same month.

7. **Revenue Recognition Principle**

   Revenues are recognized when they are earned or realized.

   The rule is to recognize or acknowledge revenue when we are reasonably certain that it exists and is measurable. Likewise, we recognize expenses as soon as they are reasonably possible—when we know that we have spent money on something or need to make a payment on a debt. The reason for accounting in this manner is so that financial statements do not overstate the company's financial position. Accounting chooses to err on the side of caution and to protect investors from inflated or overly positive results.

   Realization or revenue recognition is assumed to occur when the seller receives cash or a claim to cash (accounts receivable) in exchange for goods or services. Revenue (income) is only recorded when it actually occurs and not at the point in time when a contract is awarded. For instance, if a company is awarded a contract to build an office building, the revenue from that project would not be recorded in one lump sum, but rather it would be divided over time according to the work actually being done.

8. **Disclosure Principle**

   Companies must fully disclose information that may impact decisions of users of financial information.

   Disclosures are presented in the financial statements as part of the notes to the financial statements. The information disclosed helps the users of the financial statements to make financial, managerial, or investing decisions.

9. **Materiality**

   An accounting practice that states an organization only records events that are significant enough to justify the usefulness of the information.

   Technically, each time a sheet of paper is used, the asset "Office Supplies" is decreased by such a small amount that individually recording transactions is not cost effective. Only when substantial events (an entire ream or case of paper) occur do entries need to be made.

10. **Cost-Benefit Relationship**

    This constraint is in place to ensure that the financial information provided by an organization is beneficial enough to justify the cost of preparing it.

    When developing its financial statements, the organization must take into consideration the costs involved in preparing the information and the benefits users will derive from the financial statements.

    This principle also exists to ensure that companies use conservative estimates and judgments when preparing and providing their financial information. For example, a company cannot predict the amount of money they will not collect from customers; instead, the company will make a conservative estimate based on past experience to determine uncollectible amounts.

11. Consistency Principle

Once an entity decides on one method of reporting (e.g., method of accounting for inventory), it must use that same method for all subsequent events. In addition, companies should follow the accounting procedures that align with their industry practices.

The consistency principle ensures that differences in financial position between reporting periods are a result of changes in the operations and not changes in the way for which items are accounted. In order for financial statement users to be able to compare an organization's financial statements from different time periods, consistent accounting policies and procedures must be applied by the organization at all times.

12. Conservatism Principle

The conservatism principle requires an organization to select the accounting method that is least likely to overstate assets (revenues) and understate liabilities (expenses) in the current period.

When choosing between two solutions or accounting methods, the one that is least likely to overstate cash, revenue, or other assets should be selected.

By understanding and applying these principles, you will be able to read, prepare, and compare financial statements with clarity and accuracy. The bottom line is that the ethical practice of accounting mandates reporting income as accurately as possible and when there is uncertainty, choosing to err on the side of caution.

Lesson 13.1 Accounting Equation

Accounts can be classified one of five ways: assets, liabilities, owner's equity, revenue, and expenses. Anything of value that is owned is called an **asset** (asset = own). Assets have value because they can be used either to acquire other assets or to operate a business. Some examples of accounts that can be classified as assets are: cash, petty cash, prepaid insurance, supplies, equipment, and accounts receivable.

An amount owed to a business is called a **liability** (liability = owe). Some examples of liabilities are accounts payable and notes payable.

The amount remaining after the value of the liabilities is subtracted from the assets (amount owned - amount owed) is called **owner's equity**. Owner's equity is the amount of the business actually owned by the owner. An equation can be written in order to better understand the relationship between assets, liabilities, and owner's equity. The two accounts most commonly classified as owner's equity are the capital and drawing accounts. The **capital** account is used to summarize the owner's equity in the business. The **drawing** account is used when an owner withdraws either cash or merchandise for *personal* use.

Revenue is any income earned from the sale of a good or service and results in an increase in owner's equity. Examples of revenue are fees earned for services performed and cash received from the sale of merchandise. An example of a revenue account is sales.

An **expense** is the price paid for goods or services used to operate a business, resulting in a decrease in owner's equity. In order for a business to generate any revenue, expenses must be incurred. Examples of expenses are rent, advertising, and utilities.

The **accounting equation** is written as:

Assets = Liabilities + Owner's Equity

The accounting equation must always be in balance, and for that reason our accounting system is called a **dual entry system or double entry system**.

13.1.1 Word Bank

Accounting

Accounting Equation

Accounts Payable

Accounts Receivable

AICPA

Asset

Credit

Debit

Double-entry accounting/ Dual entry accounting

Financial Accounting Information

Financial Accounting Standards Board

Generally Accepted Accounting Principles

Invoice

Liability

Managerial Accounting Information

Normal Balance

Operating Information

Owner's Equity

Purchase Order

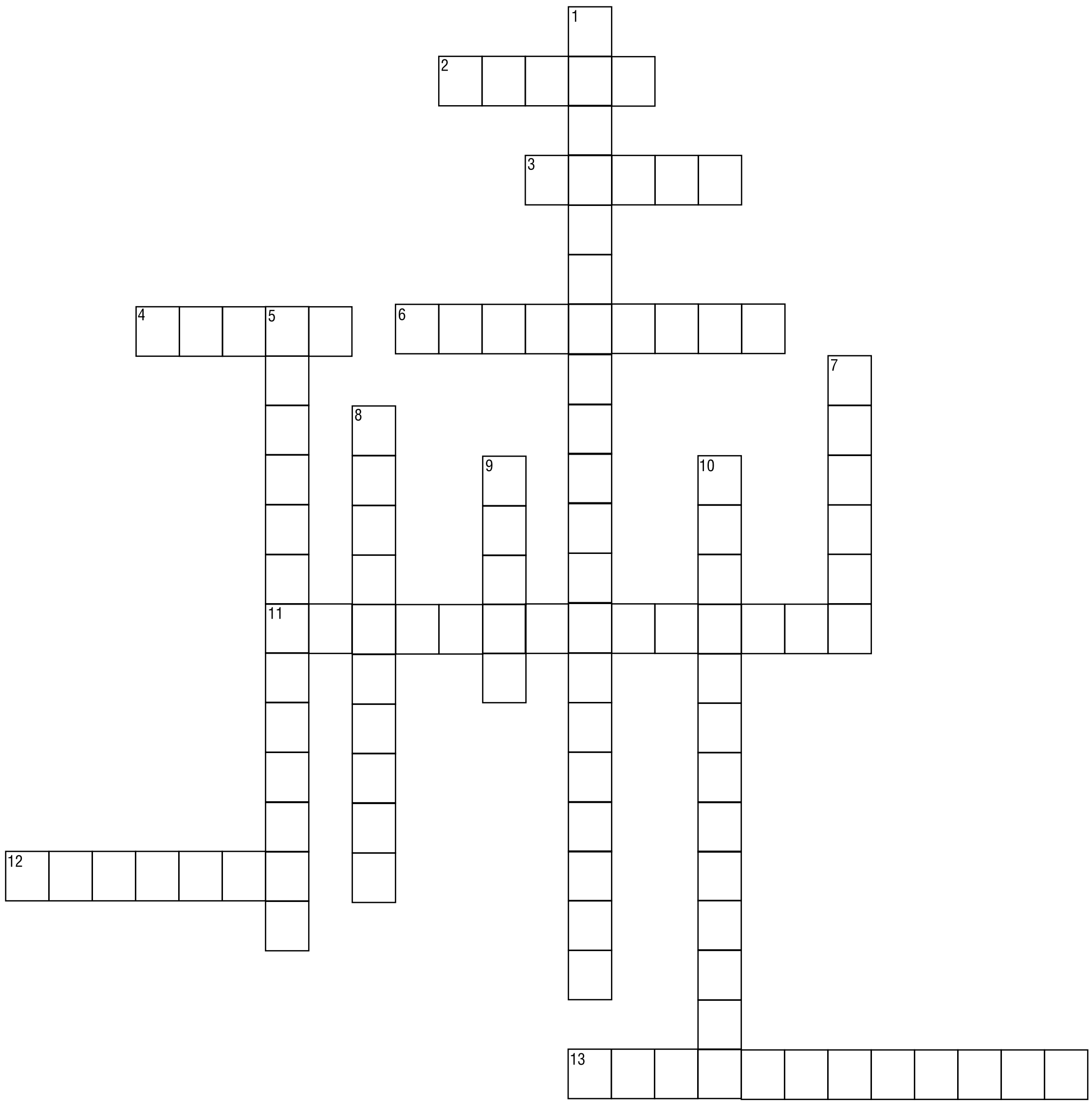
Sales

Source Document

T account

Transaction

13.1.2 Word Bank Crossword Puzzle



Across

2. Left side of the T account
3. Revenue account
4. American Institute of Certified Public Accountants
6. Something you owe
11. A form on which information is obtained
12. A form describing goods or services sold
13. Assets minus liabilities

Down

1. Information used by managers
5. Grants permission for a company to place an order
7. Right side of T account
8. Language of business
9. Something you own
10. Increase side of T account

Name: ______________________________ Date: ______________

Lesson 13.2 Classifying Assets, Liabilities, and Owner's Equity

Instructions:

Classify each item listed below as an asset, liability, owner's equity, revenue, or expense by placing a check mark in the Assets, Liabilities, Owner's Equity, Revenue, or Expense column.

		Asset	Liability	Owner's Equity	Revenue	Expense	Drawing
1.	Cash						
2.	Steve McNight, Capital						
3.	Prepaid Insurance						
4.	Sales						
5.	Rent Expense						
6.	Supplies						
7.	Accounts Payable						
8.	Anything owned						
9.	Owner's capital account						
10.	Any amount owed						
11.	Advertising Expense						
12.	Accounts Receivable						
13.	Owner's Drawing Account						

Lesson 13.3 Assets = Liabilities + Owner's Equity

Assets	=	Liabilities	+	Owners Equity
1. $85,000	=	_______	+	$78,000
2. _______	=	$ 9,000	+	$14,456
3. $22,700	=	$ 3,450	+	_______
4. $18,543	=	_______	+	$11,854
5. _______	=	$ 5,477	+	$15,432
6. _______	=	$ 9,727	+	$34,621
7. $30,000	=	_______	+	$23,754
8. _______	=	$ 4,180	+	$19,876
9. $29,123	=	$10,775	+	_______
10. $95,678	=	_______	+	$72,728
11. _______	=	$ 8,970	+	$36,170
12. $30,910	=	$ 8,769	+	_______
13. $55,555	=	_______	+	$46,464
14. _______	=	$ 6,590	+	$19,860
15. $30,140	=	$ 9,989	+	_______
16. $59,297	=	_______	+	$43,864
17. _______	=	$16,678	+	$65,432
18. $22,975	=	$ 5,543	+	_______
19. $35,256	=	_______	+	$25,722
20. _______	=	$12,345	+	$38,910

Name: ______________________________ Date: ______________

Lesson 13.5 The Chart of Accounts

The **chart of accounts** is a listing of accounts that consists of accounts representing the different parts of the accounting equation (assets, liabilities, and stockholders' equity) and accounts representing different forms of revenue and expense (revenues, expenses, gains, and losses). The accounts representing the different parts of the accounting equation are called **balance sheet accounts**, while the accounts representing different revenues and expenses are referred to as **income statement accounts**. These accounts reflect the operations of a business.

The accounts are organized into ledgers. A **ledger** is a group of accounts. A **general ledger** contains all accounts needed to prepare a financial statement. In order to keep all accounts in order, accounts are listed in the chart of accounts and given an **account number**. Most charts of accounts are organized into five general ledger divisions: [1] assets, [2] liabilities, [3] owner's equity, [4] revenue, and [5] expenses.

The procedure for arranging accounts, assigning account numbers, and keeping records current is called **file maintenance**. Account numbers are assigned based on the account's location in the general ledger. For example, the first digit of an asset account is 1; liabilities, 2; owner's equity, 3; revenue, 4; and expenses, 5. Existing accounts are numbered by 10s so new accounts can easily be added.

Lesson 13.5 The Chart of Accounts (cont'd)

Chart of Accounts			
Balance Sheet Accounts		Income Statement Accounts	
	(100) Assets		(400) Revenue
110	Cash	410	Sales
120	Petty Cash		(500) Expenses
130	Accounts Receivable—M. Allen	510	Advertising Expense
140	Accounts Receivable—J. Jones	520	Insurance Expense
150	Supplies	530	Miscellaneous Expense
160	Prepaid Insurance	540	Rent Expense
	(200) Liabilities	550	Supplies Expense
210	Accounts Payable—ABC Corp	560	Utilities Expense
220	Accounts Payable—XYX Supply		
	(300) Owner's Equity		
310	M. Walters, Capital		
320	M. Walters, Drawing		
330	Income Summary		

Notice on the above chart of accounts all the balance sheet accounts are numerically organized with the first digit of the account number being 1, 2, or 3. All the income statement accounts begin with a 4 or 5. Notice also that expense accounts are organized within their category in alphabetical order.

Account numbering in the chart of accounts is based on the following rules:

- Cash is always the first account listed under assets.
- Assets are organized based on **liquidity**. Liquidity is the ease with which an asset can be converted to cash.
- Individual expense accounts are listed alphabetically on the chart of accounts within the expense category.

The organization of the accounts makes it easier to read and understand financial statements.

Lesson 13.5.1 Preparing a Chart of Accounts

Jeff Dixon is the sole owner of a service business called House Clean. House Clean uses the following accounts to record financial transactions for the business.

Advertising Expense
Accounts Receivable—Joan Jones
Accounts Receivable—Sam Walters
Accounts Payable—Miller Cleaning Supplies Co.
Accounts Payable—Wayne Office Co
Cash
Insurance Expense
Jeff Dixon, Capital
Jeff Dixon, Drawing
Miscellaneous Expense
Notes Payable - Security Bank
Prepaid Insurance
Rent Expense
Repair Expense
Sales
Supplies
Supplies Expense
Telephone Expense

Directions:

1. Prepare a Chart of Accounts for House Clean by separating the list above into the proper account types and then numbering each section and account correctly.

House Clean

Chart of Accounts

2. Jeff has decided to add the following two expense accounts to better track his expenditures in these areas: Gasoline Expense and Utilities Expense. Write the correct account numbers for each new account.

Gasoline Expense ________________ Utilities Expense ________________________

Lesson 14.1 Transactions

Changes to the accounting equation are called **transactions**. All transactions affecting the accounting equation will impact the chart of accounts to keep the accounting equation in balance.

Examples:

Transaction 1

Received cash from owner as an investment, $7,500

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	**7500**	+		+		+		=		+	**7500**	+		-		-	

When the owner invests cash into the business, the Capital and Cash accounts are affected. Capital is classified as owner's equity, and cash is classified as an asset. When the business receives cash as an investment, the amount of cash increases (don't get confused by thinking since the owner spent money on the business, cash decreases). The business cash account and the owner's personal cash account must be kept separate, and the capital account increases. (See Accounting Concept: Entity)

Transaction 2

Paid cash for supplies $300

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	**-300** **7200**	+	+300	+		+		=		+	7500	+		-		-	

When the business purchases supplies for cash, the two accounts affected are Cash and Supplies. Both Cash and Supplies are classified as assets. When supplies are purchased, the amount of supplies increases. When an owner uses cash to make a purchase, the amount of cash decreases. By increasing one asset and decreasing another asset, the accounting equation stays in balance. It is also standard accounting practice.

Transaction 3

Paid cash for insurance $550

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	**-550** **6650**	+	300	+		+	**+550**	=		+	7500	+		-		-	

When a company pays cash for insurance, the two accounts affected are Cash and Prepaid Insurance. Both Cash and Prepaid Insurance are classified as assets. The amount of insurance coverage a company has increases when the company purchases insurance. Whenever a business uses cash, the amount in the cash account is decreased.

To better understand why the term prepaid is used when analyzing insurance, think about prepaid cell phones or student lunch accounts. An initial amount of money is paid upfront before any services are required.

Transaction 4

Accounts payable is when a company buys something on account from another entity and will pay at a later date. The company who is selling something thus becomes a **vendor**. Accounts Payable is a liability account, because money is owed and must be paid at a later date.

Bought supplies on account, Office Supply, $450

	Assets								=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	**6650**	+	**+450** **750**	+		+	550	=	**+450** **450**	+	7500	+		-		-	

When a company purchases supplies using credit (buying on account), the two accounts affected are Supplies and Accounts Payable or the company from which the purchase was made; in this situation, Office Supply Company.

Supplies are classified as an asset, and Office Supply Company is a liability because you now owe them money. When you purchase supplies, the amount the company has in supplies is increased. When a company purchases something on account (Office Company)—in this case, supplies, the amount owed to Office Company is increased.

Transaction 5

Paid cash on account, Office Company, $200

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	**-200 6450**	+	750	+		+	550	=	**-200 250**	+	7500	+		-		-	

When a company uses cash to pay an account to which a charge was made, in this situation, Office Company, the accounts affected are Cash and the liability (Office Company). Cash is classified as an asset, and Office Company is a liability, because you now owe them money. When a company pays on a liability, the amount owed to the company is decreased. When you pay cash, the amount the company has in cash decreases.

Transaction 6

Received cash from sales, $1,200

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	**+1200** **7650**	+	750	+		+	550	=	250	+	7500	+	**+1200**	-		-	

When cash is received for sales, the Cash and Revenue accounts are affected. Cash is classified as an asset, and Sales is classified as a revenue account. When cash is received, the amount of cash increases so you debit Cash. The amount of sales also increases, which is a Revenue credit.

Transaction 7

Paid cash for rent, $800

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550	=	250	+	7500	+	1200	-		-	
7.	**-800** **6850**	+	750	+		+	550	=	250	+	7500	+	1200	-	**800**	-	

When cash is paid for rent, the two accounts affected are Cash and the Rent Expense account. Cash is classified as an asset. Anytime you pay cash, cash decreases. Rent Expense is classified as an expense. Although expenses are their own specific classification, they do decrease owner's equity.

Transaction 8

Accounts receivable is when a **customer** charges on account with a business. A transaction that says "sold on account" indicates the use of an accounts receivable account. Accounts Receivable is an asset account, because money is owed to the company and will be collected at a later date.

Sold Services on account to Lisa Cook, $1,000

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550	=	250	+	7500	+	1200	-		-	
7.	-800 6850	+	750	+		+	550	=	250	+	7500	+	1200	-	800	-	
8.	6850	+	750	+	**+ 1000** **1000**	+	550	=	250	+	7500	+	**+1000** **2200**	-	800	-	

When services are sold on account, the two accounts affected are Accounts Receivable, Lisa Cook and Sales. Accounts Receivable is classified as an asset. Anytime someone buys something and is going to pay you at a later date, accounts receivable increases. Sales are classified as a revenue. Although revenues are their own specific classification, they do increase owner's equity. When sales are made, increase the revenue account.

Transaction 9

Received Cash from Lisa Cook on Account, $750

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550	=	250	+	7500	+	1200	-		-	
7.	-800 6850	+	750	+		+	550	=	250	+	7500	+	1200	-	800	-	
8.	6850	+	750	+	+ 1000 1000	+	550	=	250	+	7500	+	+1000 2200	-	800	-	
9.	**+750** **7600**	+	750	+	**-750** **250**	+	550	=	250	+	7500	+	2200	-	800	-	

When Cash is received from a person who owes us money, the two accounts affected are Cash and Accounts Receivable, Lisa Cook. Cash is classified as an asset. Anytime we received cash we increase the cash account. Accounts Receivable is also classified as an asset. Anytime someone pays us what they owe us, accounts receivable decreases because we have received the money.

Transaction 10

The **drawing** account is used when an owner withdraws either cash or merchandise for *personal* use.

Paid cash to the owner for personal use, $900

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable Office Supply	+	Your Name, Capital	+	Rev.	-	Expenses	-	Drawing
1.	7500	+		+		+		=		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		=		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	=		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550	=	250	+	7500	+	1200	-		-	
7.	-800 6850	+	750	+		+	550	=	250	+	7500	+	1200	-	800	-	
8.	6850	+	750	+	+ 1000 1000	+	550	=	250	+	7500	+	+1000 2200	-	800	-	
9.	+750 7600	+	750	+	-750 250	+	550	=	250	+	7500	+	2200	-	800	-	
10.	**-900** **900**	+	750	+	250	+	550	=	250	+	7500	+	2200	-	800	-	**900** **900**

When cash is withdrawn from the business by the owner for his own personal use, the two accounts affected are Cash and Your Name, Drawing. Cash is classified as an asset; anytime you pay cash, cash decreases. Your Name, Drawing is classified as a drawing account. Although Drawing is its own specific classification, Drawing does decrease owner's equity.

14.1.1 Account Analysis and Identification

Use the number to identify which accounts are involved in the transactions and the letters to identify which account group they are in. Use a (+) to show an increase or a (-) to show a decrease. Follow the example given below.

A=Assets L=Liabilities C=Capital D=Drawing R=Revenue E=Expenses

1. Cash
2. Accounts Receivable
3. Prepaid Insurance
4. Equipment
5. Accounts Payable
6. Owner's Equity
7. Drawing
8. Revenue (Sales)
9. Rent Expense
10. Repair Expense
11. Salary Expense
12. Utilities Expense

Transaction	Accounts affected		Category	
Ex: Paid cash for utility expense	12	1	-A	+E
1. The owner invested personal cash into the business				
2. Paid cash for rent				
3. Bought equipment on account				
4. Received cash for services performed				
5. Paid salaries of employees				
6. Owner withdrew cash for personal use				
7. Performed services to be collected at a later date				
8. Paid cash for phone bill				
9. Paid cash for prepaid insurance				
10. Received cash from sales				

Name: ______________________ Date: ____________

14.1.3 Transactions

Instructions:

Decide which accounts in the accounting equation are changed by each of the following transactions. Place a plus (+) in the appropriate column if the account is increased. Place a minus (-) in the appropriate column if the account is decreased. Transaction 1 has been done for you.

Transactions

1. Received cash from owner, Whitney Newhouse, as an investment, $3,000.00.
2. Received cash from sales, $450.00.
3. Paid cash for telephone bill, $85.00.
4. Paid cash to owner for personal use, $350.00.
5. Paid cash for supplies, $200.00.
6. Paid cash for rent, $850.00.
7. Sold service on account to Lisa Cook, $525.00.
8. Paid cash for equipment repairs, $120.00.
9. Bought supplies on account from Allen Company, $340.00.
10. Paid cash for insurance, $215.00.
11. Received cash on account from Lisa Cook, $495.00.
12. Paid cash on account to Allen Company, $200.00.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Accounts Receivable, Lisa Cook	+	Supplies	+	Prepaid Insurance	=	Accounts Payable/ Allen Company	+	Whitney Newhouse, Capital	+	Revenue	-	Expenses	-	Drawing
1.	+3000	+		+		+		=		+	+3000	+		-		-	
Bal.		+		+		+		=		+		+		-		-	
2.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
3.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
4.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
5.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
6.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
7.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
8.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
9.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
10.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
11.		+		+		+		=		+		+		-		-	
Bal.		+		+		+		=		+		+		-		-	
12.		+		+		+		=		+		+		-		-	
Totals		**+**		**+**		**+**		**=**		**+**		**+**		**-**		**-**	

Name: ______________________________ Date: ______________

Lesson 14.2 T Accounts

Although the accounting equation can be used to record individual transactions, it becomes difficult for a business to keep track of a large number of transactions this way. It also becomes difficult for a business to keep accurate records of what is happening in its organization using this approach. Due to these issues, it is better for a business to use separate records for each account. To begin to understand this concept of separate records, we introduce T accounts to represent the accounting equation.

Assets =	Liabilities + Owner's Equity
Left Side	Right Side

T accounts are devices used to analyze transactions. All amounts recorded on the left side of the T account are debits (dr), and all amounts recorded on the right side are credits (cr).

Assets =	Liabilities + Owner's Equity
Left Side Debit Side	Right Side Credit Side

Two basic rules regulate increases and decreases of account balances:

1. Account balances increase on the normal balance side of an account.
2. Account balances decrease on the side opposite the normal balance side of an account.

The side of the account increased is called the **normal balance**. Assets are on the left side of the accounting equation and have normal debit balances (left side). Liabilities are on the right side of the equation and have normal credit balances (right side). The owner's capital account is on the right side of the equation and has a normal credit balance (right side).

Hint–Remember

Debit + DEA

You increase the Drawing, Expense, and Assets with a Debit.

Assets = Liabilities + Owner's Equity

Assets	
Debit + Normal Balance	Credit –

Liabilities	
Debit –	Credit + Normal Balance

Owner's Equity	
Debit –	Credit + Normal Balance

+ *means increase account*
– *means decrease account*

Analyzing How Transactions Affect Accounts

There are three things to remember when determining a transaction's effect on the accounting equation:

a. A transaction that increases total assets must also increase total liabilities or owner's equity.
b. A transaction that decreases total assets must also decrease total liabilities or owner's equity.
c. Some transactions may increase one account and decrease another account on the same side of the equation (one asset increases/one asset decreases).

When accounts are recorded, not only must the accounting equation stay in balance; in addition, debits must equal credits. When determining how to break a transaction into parts, follow these steps:

a. Determine which accounts are affected.
b. Determine how each account is classified (asset, liability, owner's equity).
c. Does the account increase or decrease?

Now let's look back at the same transactions from the accounting equation in Lesson 14.1 and see how they are analyzed in the T accounts.

Transaction 1

Received cash from owner as an investment, $7,500

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Your Name, Capital.
b. Cash is an asset and Your Name, Capital is an owner's equity.
c. Cash increases.
   Your Name, Capital increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	**7500**	+		+		+		*		+	**7500**	+		-		-	

We see from the accounting equation that we increase Cash by $7,500, and since cash is an asset and on the left side of the accounting equation when we are using T accounts, we place the $7,500 on the debit side of the Cash account as seen below. The second part of the transaction is an increase to the Owner's Equity account, and since it is on the right side on the accounting equation, it is increased on the right or credit side. Therefore, we place $7,500 on the credit side of the Your Name, Capital account.

Assets = Liabilities + Owner's Equity

Assets		Liabilities	
Debit	Credit	Debit	Credit
+	–	–	+
7,500			7,500

Transaction 2

Paid cash for supplies, $300

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Supplies.
b. Cash and Supplies are both assets.
c. Cash decreases.
   Supplies increase.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	

We see from the accounting equation that we decrease Cash by $300, and since Cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $300 on the credit side of the Cash account as seen below. The second part of the transaction is an increase to Supplies, since Supplies is an asset and on the left side of the accounting equation. We increase supplies by putting $300 on the left side or debit side of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = **Liabilities + Owner's Equity**

Supplies

Debit	Credit
+	–
300.00	

Cash

Debit	Credit
+	–
	300.00

<u>Transaction 3</u>

Paid cash for insurance, $550

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Prepaid Insurance.
b. Cash and Prepaid Insurance are both assets.
c. Cash decreases.
Supplies increase.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	<u>-300</u> 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	**<u>-550</u> 6650**	+	300	+		+	**+550**	*		+	7500	+		-		-	

We see from the accounting equation that we decrease Cash by $550, and since cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $550 on the credit side of the Cash account as seen below. The second part of the transaction is an increase to prepaid insurance; since prepaid insurance is an asset and on the left side of the accounting equation, we increase prepaid insurance by putting $550 on the left side or debit side of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = Liabilities + Owner's Equity

Prepaid Insurance

Debit	Credit
+	–
550.00	

Cash

Debit	Credit
+	–
	550.00

Transaction 4

Bought supplies on account, Office Supply, $450

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Supplies and Accounts Payable, Office Supply.
b. Supplies are an asset and Accounts Payable, Office Supply is a liability.
c. Supplies increases.
   Accounts Payable, Office Supply increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	**6650**	+	**+450** **750**	+		+	550	=	**+450** **450**	+	7500	+		-		-	

We see from the accounting equation that we increase Supplies by $750, and since Supplies are assets and on the left side of the accounting equation, when we are using T accounts, we place the $750 on the debit side of the Supplies account as seen below. The second part of the transaction is an increase to Accounts Payable, Office Supply because we owe them money that we will pay them later. Since Accounts Payable, Office Supply is a liability and on the right side of the accounting equation, we increase Accounts Payable, Office Supply by putting $750 on the right or credit side of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = Liabilities + Owner's Equity

Supplies	
Debit	Credit
+	–
450.00	

Accounts Payable/Office Supplies	
Debit	Credit
–	+
	450.00

Transaction 5

Paid cash on account, Office Supply, $200

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Accounts Payable, Office Supply.

b. Cash is an asset and Accounts Payable, Office Supply is a liability.

c. Cash decreases.
Accounts Payable, Office Supply decreases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	**-200** **6450**	+	750	+		+	550	=	**-200** **250**	+	7500	+		-		-	

We see from the accounting equation that we decrease the amount of Cash we have on hand by $200, and since Cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $200 on the credit side (right side) of the Cash account as seen below. The second part of the transaction is a decrease Accounts Payable, Office Supply because we have paid them all or part of what we owe them and owe them less than we did before. Since Accounts Payable, Office Supply is a liability and on the right side of the accounting equation, we decrease Accounts Payable, Office Supply by putting $200 on the left or debit side of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = **Liabilities + Owner's Equity**

Supplies	
Debit	Credit
+	–
	200.00

Accounts Payable/Office Supplies	
Debit	Credit
–	+
200.00	

Transaction 6

Received cash from sales, $1,200

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Revenue.
b. Cash is an asset and Revenue is Owner's Equity.
c. Cash increases.
   Revenue increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	**+1200 7650**	+	750	+		+	550		250	+	7500	+	**+1200**	-		-	

We see from the accounting equation that we increase the amount of cash we have on hand by $1,200, and since Cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $1,200 on the debit side (left side) of the Cash account as seen below. The second part of the transaction is an increase to Revenue because we have sold more product than we had before. Notice on the T account below that Sales, although classified as a Revenue, is under the owner's equity side of the accounting equation. This is because revenue increases owner's equity. Since Revenue is an increase to owner's equity, sales are treated the same way as the Owner's Equity account. Therefore, to increase Revenue, we place $1,200 on the credit (right side) of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = **Liabilities + Owner's Equity**

Cash

Debit	Credit
+	–
1,200	

Revenue (Sales)

Debit	Credit
–	+
	1,200

Transaction 7

Paid cash for rent, $800

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Rent Expense.

b. Cash is an asset and Rent Expense is an expense that affects owner's equity.

c. Cash decreases.
Rent Expense increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550		250	+	7500	+	1200	-		-	
7.	**-800 6850**	+	750	+		+	550	=	250	+	7500	+	1200	-	**800**	-	

We see from the accounting equation that we decrease the amount of Cash we have on hand by $800, and since Cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $800 on the credit side (right side) of the Cash account as seen below. The second part of the transaction is an increase to Rent Expense because we have paid more money in expenses than we had before. Notice on the T account below that Rent Expense, although classified as an expense, is under the Owner's Equity side of the accounting equation. This is because expenses decrease Owner's Equity. Since any expense is a decrease to Owner's Equity, it is treated the opposite way as a normal Owner's Equity account; therefore, to increase Rent Expense, we place $800 on the debit (left side) of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = Liabilities + Owner's Equity

Cash		Rent Expense	
Debit	Credit	Debit	Credit
+	–	–	+
	800	800	

Transaction 8

Sold Services on account to Lisa Cook, $1,000

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Revenue and Accounts Receivable, Lisa Cook.

b. Accounts Receivable, Lisa Cook is an asset and Revenue affects Owner's Equity.

c. Accounts Receivable increases.
Revenue increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550		250	+	7500	+	1200	-		-	
7.	-800 6850	+	750	+		+	550	=	250	+	7500	+	1200	-	800	-	
8.	6850	+	750	+	**+1000** **1000**	+	550	=	250	+	7500	+	**+1000** **2200**	-	800	-	

We see from the accounting equation that we increase the amount of money that Lisa Cook owes us by $1000, and since Accounts Receivable, Lisa Cook is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $1000 on the debit side (left side) of the Accounts Receivable, Lisa Cook account as seen below. The second part of the transaction is an increase to Revenue because we have sold more product than we had before. Notice on the T account below that Sales, although classified as a Revenue, is under the Owner's Equity side of the accounting equation. This is because revenue increases Owner's Equity. Since Revenue is an increase to Owner's Equity, it is treated the same way as the Owner's Equity account; therefore, to increase Revenue, we place $1,000 on the credit (right side) of the T account. Notice, we ALWAYS have equal debits and credits.

Assets		=	**Liabilities + Owner's Equity**	
Accounts Receivable, Lisa Cook			**Revenue (Sales)**	
Debit	Credit		Debit	Credit
+	–		–	+
1000				1000

Transaction 9

Received Cash from Lisa Cook on Account, $750

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Accounts Receivable, Lisa Cook.

b. Cash and Accounts Receivable, Lisa Cook are both assets.

c. Cash increases.
Accounts Receivable increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550		250	+	7500	+	1200	-		-	
7.	-800 6850	+	750	+		+	550	=	250	+	7500	+	1200	-	800	-	
8.	6850	+	750	+	+1000 1000	+	550	=	250	+	7500	+	+1000 2200	-	800	-	
9.	**+750 7600**	+	750	+	**-750 250**	+	550	=	250	+	7500	+	2200	-	800	-	

We see from the accounting equation that we increase the amount of Cash we have on hand by $750, and since Cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $750 on the debit side (left side) of the Cash account as seen below. The second part of the transaction is a decrease to Accounts Receivable, Lisa Cook because she has paid us all or part of what she owed us and owes us less than she did before. Since Accounts Receivable, Lisa Cook is an asset and on the left side of the accounting equation, we decrease Accounts Receivable, Lisa Cook by putting $750 on the credit (right side) of the T account. Notice, we ALWAYS have equal debits and credits.

Assets = Liabilities + Owner's Equity

Cash

Debit	Credit
+	–
750	

Accounts Receivable, Lisa Cook

Debit	Credit
+	–
	750

Transaction 10

Paid cash to the owner for personal use, $900

When we look at the three questions discussed earlier, we see

a. The two accounts affected are Cash and Your Name, Drawing.

b. Cash is an asset and Your Name, Drawing is a drawing account that affects Owner's Equity.

c. Cash decreases.
Your Name, Drawing increases.

	Assets							=	Liabilities	+	Owner's Equity						
Trans. No.	Cash	+	Supplies	+	Accounts Receivable, Lisa Cook	+	Prepaid Insurance	=	Accounts Payable/ Office Supply	+	Your Name, Capital	+	Revenue	-	Expenses	-	Drawing
1.	7500	+		+		+		*		+	7500	+		-		-	
2.	-300 7200	+	+300	+		+		-		+	7500	+		-		-	
3.	-550 6650	+	300	+		+	+550	*		+	7500	+		-		-	
4.	6650	+	+450 750	+		+	550	=	+450	+	7500	+		-		-	
5.	-200 6450	+	750	+		+	550	=	-200 250	+	7500	+		-		-	
6.	+1200 7650	+	750	+		+	550		250	+	7500	+	1200	-		-	
7.	-800 6850	+	750	+		+	550	=	250	+	7500	+	1200	-	800	-	
8.	6850	+	750	+	+1000 1000	+	550	=	250	+	7500	+	+1000 2200	-	800	-	
9.	+750 7600	+	750	+	-750 250	+	550	=	250	+	7500	+	2200	-	800	-	
10.	**-900 6700**	+	750	+	250	+	550	=	250	+	7500	+	2200	-	800	-	**900 900**

We see from the accounting equation that we decrease the amount of Cash we have on hand by $900, and since Cash is an asset and on the left side of the accounting equation, when we are using T accounts, we place the $900 on the credit side (right side) of the Cash account as seen above. The second part of the transaction is an increase to Your Name, Drawing because we have paid more money out of the business to the owner. Notice on the T account above that Your Name, Drawing, although classified as a Drawing Account, is under the Owner's Equity side of the accounting equation. This is because Drawing decreases Owner's Equity. Since the Drawing Account is a decrease to Owner's Equity, the Drawing Account is treated the opposite way as a normal Owner's Equity account; therefore, to increase Your Name, Drawing, we place $900 on the debit (left side) of the T account. Notice, we ALWAYS have equal debits and credits.

Assets		=	**Liabilities + Owner's Equity**	
Cash			**Sales**	
Debit	Credit		Debit	Credit
+	–		–	+
	900		900	

Lesson 14.3 Normal Balance Sheet

Use this as a guide to help you learn the Normal Balances of accounts.

Normal Balance Worksheet

Assets = **Liabilities + Owner's Equity**

Cash, Prepaid Ins., Supplies, Acct. Rec.
or any other asset

ANY ASSET

Debit	Credit
Increase NB +	Decrease –

Capital

Debit	Credit
–	+ NB

Any Liability (**Acct.Pay.**)

Debit	Credit
–	+ NB

Sales (Rev.) Affects OE
Rec.cash, sold services

Debit	Credit
–	+ NB

Expenses and Withdrawal
Affect OE–

Debit	Credit
+ NB	–

Name: ______________________ Date: ______________

Lesson 14.4 Account Classification and Normal Balances

Classify the accounts:

Put the correct letter on the line in front of the number. Use the following letters to answer the questions.

A = Assets
L = Liability
C = Capital
R = Revenue
E = Expenses

____ 1. Accounts Receivable
____ 2. Owner's Equity
____ 3. Salary Expense
____ 4. Accounts Payable
____ 5. Supplies
____ 6. Rent Expense
____ 7. Drawing
____ 8. Prepaid Insurance
____ 9. Cash
____ 10. Sales

What is the normal balance?

Put a "D" for Debit and a "C" for Credit.

____ 1. Rent Expense
____ 2. Accounts Payable
____ 3. Supplies
____ 4. Cash
____ 5. Capital
____ 6. Drawing
____ 7. Revenue
____ 8. Accounts Receivable
____ 9. Sales
____ 10. Prepaid Insurance

Name: ____ Date: ________________

Lesson 14.5 Analyzing Transactions No. 1

This exercise provides continuing practice in analyzing transactions into debit and credit parts.

INSTRUCTIONS:

- Using the following account titles, write the accounts affected by each transaction in Column 2.
- For each account title, write the account classification in Column 3.
- For each account title, place a check mark in either Column 4 or 5 to indicate the normal balance.
- For each account title, place a check mark in either Column 6 or 7 to indicate if the account is increased (+) or decreased (-) by this transaction.
- For each account title, place a check mark in either Column 8 or 9 to indicate if the account is changed by a debit or a credit.

Transactions

1. Paid cash for advertising.
2. Paid cash for repairs.
3. Received cash from owner as an investment.
4. Paid cash for miscellaneous expense.
5. Bought supplies on account from Gable Supplies.
6. Paid cash on account to Gable Supplies.
7. Paid cash for water bill.
8. Paid cash for supplies.
9. Paid cash for rent.
10. Received cash from sales.
11. Paid cash for insurance.
12. Sold services on account to Lisa Cook.
13. Received cash on account from Lisa Cook.
14. Paid cash to the owner for personal use.

1	2	3	4	5	6	7	8	9
Trans. No.	Accounts Affected	Account Classification	Account's Normal Balance		How Is Account Affected?		Entered in Account as a	
			Debit	Credit	+	-	Debit	Credit
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								

Name: ______________________________ Date: ______________

Lesson 14.6 Analyzing Transactions No. 2

Analyze the following transactions to determine which accounts are involved, whether the account increases or decreases, and in which account group they belong. Follow the example below. Identify each account as either a debit or credit. Identify with DR for Debit and CR for Credit.

Example: Paid cash for rent

+ Expense (Rent Expense) DR – Assets (Cash) CR

1. Bought new equipment with cash.
2. Received cash from sales.
3. Withdrew cash for personal use.
4. Sold services on account.
5. Paid cash for supplies.
6. Paid cash for prepaid insurance.
7. Bought supplies on account.
8. Received cash payment from customer for their account balance.
9. Paid cash for phone bill.
10. Paid cash on account to accounts payable.
11. Owner invested cash into the business.
12. Received payment from Accounts Receivable account.
13. Received cash from sales.
14. Paid cash for advertising expense.
15. Bought supplies on account.
16. Paid cash on Accounts Payable account.
17. Withdrew cash for personal use.
18. Sold services on account to AR.
19. Received cash from owner as investment.
20. Paid cash for insurance.

Name: ______________________________ Date: ______________

Lesson 14.7 Classification of Accounts and Normal Balances

Match the description with the BEST answer. You may use the answers more than once.

A. Increase	D. Liability	G. Expense
B. Decrease	E. Capital	H. Debit
C. Asset	F. Revenue	I. Credit

1. A debit to a revenue will __________ the revenue account.
2. Prepaid insurance is classified as a(n) __________.
3. To increase an asset you have to __________.
4. A __________ will decrease Accounts Payable.
5. A debit to Utilities Expense will __________ the expense account.
6. The normal balance of the drawing account is __________.
7. The normal balance is the __________ side of the account.
8. An accounts receivable is decreased with a __________.
9. An investment by the owner will __________ Capital.
10. To increase Accounts Payable you must __________ the Accounts Payable account.
11. The normal balance for Accounts Receivable is __________.
12. A __________ will increase the Drawing account.
13. An expense has a normal balance of __________.
14. If the owner withdraws money for personal use, the withdrawal will __________ the Drawing account.
15. A(n) __________ will cause Capital to be increased.
16. Credits to Cash will __________ the Cash account.
17. An investment by the owner will increase __________.
18. A debit to rent expense will __________ the rent expense account.
19. When a customer pays on their account, this will __________ their balance owed.
20. Anything of value that is owned is considered to be a(n) __________.
21. Anything owed by a company is considered to be a(n) __________.
22. Owner investing money into the company will __________ the __________ account.
23. Cash paid to cover advertising expense will __________ the cash account and __________ the advertising expense account.
24. Cash paid on Accounts Payable will __________ cash and __________ accounts payable.
25. Accounts Receivable is a(n) __________.
26. Accounts Payable is a(n) __________.
27. The normal balance for an asset account is __________.
28. The normal balance for drawing account is __________.
29. When an owner withdraws money for personal use, s/he is drawing on __________ account.

Lesson 14.8 Debit and Credit Problems 1–4

Directions:

- Use the T accounts to complete the following problems.
- Use date in parentheses beside each transaction.
- Add up and total debit and credit sides of each account.
- Check your work by making sure debits = credits. Then determine the normal balance for each account using the forms provided.

Problem 1

June 1 Owner invested $5,000 in business.
2 Business paid rent for the first month of $500.
3 Business bought supplies on account for $350.
4 Sold services on account for $800.
5 Paid $100 on account for supplies bought on June 3rd.
6 Received cash for sales $560.
7 Paid cash for supplies for $100.
8 Owner withdrew $200 for personal use.
9 Received $400 from customers paying on account from June 4th.
10 Purchased supplies on account for $300.

Problem 2

July 1 Owner invested $8,000 in business.
2 Business bought equipment on account for $1,000.
3 Business paid this month's rent of $1,000.
4 Received cash from account for $1,200.
5 Paid $200 on account for equipment purchased on July 2nd.
6 Sold services on account of $1,600.
7 Owner withdrew $300 for personal use.
8 Received $200 from customers paying on account from July 6th.
9 Purchased supplies on account for $700.
10 Paid cash for supplies for $500.

Lesson 14.8 Debit and Credit Problems 1–4 (cont'd)

Problem 3

August 1 Owner invested $6,000 cash into business.
2 Business paid this month's rent of $1,300.
3 Business bought supplies for $500 on account.
4 Received cash from account for services provided for $1,700.
5 Business paid utilities for $180.
6 Paid $200 on account for supplies bought on August 3rd.
7 Provided services on account for $2,100.
8 Owner withdrew $500 for personal use.
9 Received $300 from customers paying on account from August 7th.
10 Purchased supplies on account for $300.
11 Paid cash for prepaid insurance for $500.

Problem 4

September 1 Owner invested $7,000 cash.
2 Sold services on account for $2,500.
3 Business paid rent for $850.
4 Received $500 cash from customer paying on account from September 2nd.
5 Business paid wages (Wages Expense) for $900.
6 Sold services on account for $1,860.
7 Purchased supplies on account for $400.
8 Owner withdrew $600 for personal use.
9 Paid cash for prepaid insurance for $700.
10 Paid $200 on account for supplies bought on September 7th.

Lesson 14.8

Debit and Credit Problems 1–4 (cont'd)
Blank T Account, Problem 1

Cash

Accounts Receivable

Supplies

Pre-Paid Insurance

Equipment

Accounts Payable

Capital

Drawing

Sales

Advertising Expense

Miscellaneous Expense

Rent Expense

Utilities Expense

Wage Expense

Name: ______________________ Date: ____________

Lesson 14.8 Debit and Credit Problems 1–4 (cont'd)
Blank T Account, Problem 2

Cash

Accounts Receivable

Supplies

Pre-Paid Insurance

Equipment

Accounts Payable

Capital

Drawing

Sales

Advertising Expense

Miscellaneous Expense

Rent Expense

Utilities Expense

Wage Expense

Name: ______________________________ Date: ______________

Lesson 14.8

Debit and Credit Problems 1–4 (cont'd)
Blank T Account, Problem 3

Cash

Accounts Receivable

Supplies

Pre-Paid Insurance

Equipment

Accounts Payable

Capital

Drawing

Sales

Advertising Expense

Miscellaneous Expense

Rent Expense

Utilities Expense

Wage Expense

Name: ______________________ Date: __________

Lesson 14.8

Debit and Credit Problems 1–4 (cont'd)
Blank T Account, Problem 4

Cash

Accounts Receivable

Supplies

Pre-Paid Insurance

Equipment

Accounts Payable

Capital

Drawing

Sales

Advertising Expense

Miscellaneous Expense

Rent Expense

Utilities Expense

Wage Expense

Name: ______________________________ Date: ______________

Lesson 14.9

Proof of Debits and Credits and Normal Balances

Problem 1

Proof of Debits and Credits			Normal Balance	
Account Titles	Debit	Credit	Debit	Credit
Totals				

Problem 2

Proof of Debits and Credits			Normal Balance	
Account Titles	Debit	Credit	Debit	Credit
Totals				

Name: ______________________ Date: ______________

Lesson 14.9

Proof of Debits and Credits and Normal Balances (cont'd)

Problem 3

Proof of Debits and Credits			Normal Balance	
Account Titles	Debit	Credit	Debit	Credit
Totals				

Problem 4

Proof of Debits and Credits			Normal Balance	
Account Titles	Debit	Credit	Debit	Credit
Totals				

Name: ______________________________ Date: ______________

Lesson 14.11 Spring Fling with T Accounts

You are going on a Spring Break trip with friends to the beach. You need to book your hotel and calculate your expenses.

Using T accounts, complete the following transactions.

Chart of Accounts:

100 Assets
110 Cash
120 Account Receivable
130 Supplies
140 Room and Board

200 Liabilities
210 AP-Visa
220 Parents

300 Owner's Equity
310 Owner, Capital
320 Owner, Drawing

400 Revenue
410 Sales

500 Expenses
510 Food Expense
520 Gasoline Expense
530 Hotel Expense
540 Leisure Expense

April

1. You booked your hotel using your Visa card for $800. (Room and Board)
2. Received cash for birthday from family for $600.
3. You put cash from parents into savings account for your trip, $500. (capital)
4. You paid cash to purchase sunscreen for $6.00. (supply)
5. You pay cash on your Visa account, $250. (AP)
6. Paid cash for meal at McDonalds for $7.50. (Food expense)
7. Received paycheck for $190 cash and deposited it into savings. (capital)
8. Paid cash on Visa bill for hotel expense for $150. (AP)
9. Received cash from sale of X-Box for $225. (sales)
10. Invested $100 cash in savings account for trip. (capital)
11. Received cash from paycheck for $150. (capital)
12. Paid cash for gasoline for trip for $175. (expense)
13. Borrowed cash from parents to pay back upon return for $100. (AP)
14. Gave cash loan to friend for $50. (AR)
15. Purchased food with cash for $100 for 3 days. (expense)
16. Received cash from friend for loan for $25.
17. Withdrew cash from savings for personal use for $100.
18. Received cash from sale of video games for $25. (sales)

14.12.1 Reverse T Transaction Quiz

Directions for quiz:

Review the following T accounts. Then, select the transaction that best describes each entry, and label the entry on the line provided.

1 Paid cash for rent for $500.
2 Purchased supplies on account for $1,000.
3 Owner invests $10,000 in business.
4 Owner withdrew cash for personal use for $60.
5 Paid cash for advertising for $500.
6 Owner invests $5,000 in business.
7 Paid cash for supplies for $500.
8 Bought supplies on account from Accounts Payable account for $800.
9 Paid cash for prepaid insurance for $2,000.
10 Purchased supplies on account from Accounts Payable account for $200.
11 Sold services on Accounts Receivable account for $3,000.
12 Paid cash for utility bill for $100.
13 Received cash on account from Accounts Receivable account for $1,500.
14 Paid cash to owner for personal use for $50.
15 Sold services on account to Accounts Receivable for $400.
16 Received cash from sales for $15,000.
17 Received cash on Accounts Receivable account for $400.
18 Bought supplies on account from AP account for $200.
19 Paid cash on account to Accounts Payable for $1,000.
20 Received cash on Accounts Receivable account for $1,000.

Cash

	Debit	Credit
1 **Given:** Paid cash for rent for $500.		500.00
______________________	10,000.00	
______________________		60.00
______________________		500.00
______________________	5,000.00	
______________________		500.00
______________________		2,000.00
______________________		100.00
______________________	1,500.00	
______________________		50.00
______________________	15,000.00	
______________________	400.00	
______________________		1,000.00
______________________	1,000.00	

14.12.1 Reverse T Transaction Quiz (cont'd)

Accounts Receivable

Debit	Credit
3,000.00	
1,500.00	
400.00	
400.00	
1,000.00	

Supplies

Debit	Credit
1,000.00	
500.00	
800.00	
200.00	
200.00	

Pre-Paid Insurance

Debit	Credit
2,000.00	

Accounts Payable

Debit	Credit
	1,000.00
	800.00
	200.00
	200.00
1,000.00	201.00

Capital

Debit	Credit
	10,000.00
	5,000.00

Drawing

Debit	Credit
60.00	
50.00	

14.12.1 Reverse T Transaction Quiz (cont'd)

Sales

Debit	Credit
	3,000.00
	400.00
	15,000.00

Advertising Expense

Debit	Credit
500.00	

1 **Given:** Paid cash for rent for $500.

Rent Expense

Debit	Credit
500.00	

Utilities Expense

Debit	Credit
100.00	

Name: ______________________ Date: ____________

Lesson 14.13 T Account Problem

- Using the T accounts provided, complete the following problem.
- Analyze each transaction into debits and credit parts. Write the debit and credit amounts in the proper T accounts to show how each transaction changes account balances. Write the date of the transaction in parentheses before each account.
- You will only use one T account for each separate account for the entire problem.

June

1. Received cash from owner as an investment for $3,000.00
2. Paid cash for supplies for $60.00
3. Paid cash for rent for $200.00
4. Received cash from sales for $350.00
5. Paid cash for repairs for $10.00
6. Sold services on account to John Colbert for $200.00
7. Bought supplies on account from Bright's Cleaning for $500.00
8. Paid cash for insurance for $100.00
9. Received cash from owner as an investment for $900.00
10. Received cash from sales for $300.00
11. Bought supplies on account from Lincoln Office Supplies for $50.00
12. Received cash on account from John Colbert for $125.00
13. Paid cash for miscellaneous expense for $5.00
14. Paid cash on account to Bright's Cleaning for $50.00
15. Paid cash for electric bill (Utilities Expense) for $35.00
16. Paid cash for advertising for $30.00
17. Sold services on account to Shana Riley for $220.00
18. Paid cash to owner for personal use for $600.00
19. Received cash on account from Shana Riley for $100.00

Lesson 14.13 T Account Problem (cont'd)

Cash

Accounts Receivable

Accounts Receivable

Supplies

Pre-Paid Insurance

Accounts Payable

Accounts Payable

Capital

Drawing

Sales

Advertising Expense

Miscellaneous Expense

Rent Expense

Repair Expense

Utilities Expense

Lesson 15.1 Source Documents

Before understanding the use of source documents, there must first be an understanding of the difference between accounts receivable and accounts payable. **Accounts receivable** is when a **customer** charges on account with a business. A transaction that says "sold on account" indicates the use of an accounts receivable account. Accounts Receivable is an asset account because money is owed to the company and will be collected at a later date.

Accounts payable is when a company buys something on account from some other entity and will pay at a later date. The company that is selling something thus becomes a **vendor**. Accounts Payable is a liability account because money is owed and must be paid at a later date.

A business paper from which information is obtained is called a **source document**. Source documents prove a transaction occurred. The accounting standard *objectivity* is applied when source documents are prepared for a transaction. A transaction should be journalized only if it actually occurs.

For example, if a company is awarded a large contract to build an office building for $1 million dollars, the transaction should not be recorded in one lump sum, but rather divided over time according to the work that is actually being done. The amounts recorded must be accurate and true. Nearly all transactions result in the preparation of a source document.

Examples of source documents include:

- check stubs
- calculator tapes
- memorandums
- purchase orders
- invoices
- receipts

Check: A business form ordering a bank to pay cash from a bank account. The source document for cash payments is a check.

Lesson 15.1 Source Documents (cont'd)

Purchase order: A business form granting permission to place an order. Because businesses need to keep track of orders being placed, some require a purchase order number be given when ordering. This purchase order number authorizes an employee to make a purchase, in turn helping prevent unauthorized purchases. Companies that require the use of purchase orders guarantee payment upon completion of the purchasing cycle.

Country Décor
221 Norman Bay Road
NORMAN BAY, NSW 2252
Phone 024 111-5115
fax 024 111-6116

Purchase Order **2052**

PURCHASE ORDER

Name Camden Crafts
Address 27a Great Lakes Road
City CAMDEN NSW 2570
Phone 024 579-1212

ABN: 5509x212511

Date: May 4, 2012

Qty	Goods Provided	Unit Price	TOTAL
5	Lamp Stand (hand turned)	$22.00	$1110.00
5	Beechwood Coffee Table	$78.00	$390.00
6	Beechwood Corner Table	$84.00	$384.00
1	Pedestal Table & 6 chairs	$998.00	$998.00
12	Cottage Style Stool (TEAK)	$35.00	$420.00
	All Prices inclusive of GST		

Payment Details

- ○ Cash
- ○ Credit Card
- ● Check

Received: ______________________

Office Use Only

Lesson 15.1 Source Documents (cont'd)

Invoice: A form describing the goods or services sold, the quantity, and the price. When a service is sold on account, the seller prepares a form showing information about the sale. An invoice used as a source document for recording a sale on account is called a sales invoice. A sales invoice is prepared in duplicate. The original is given to the customer. Sales invoices are pre-numbered in sequence to help account for all sales invoices.

The Coffee Roasting Company

Sales Invoice 987 Campus Lane, Corvallis, OR 97331 No: 95416

Bill To: MonCaf Montreux Cafe 500 Perdue Avenue Portland, OR 97201	
Date of Invoice	14-Apr-12

Corresponding Documents		
Sales Order Number	Shipment Number for SO	Bill of Lading Number
404	1	405

Coffee Mix Name	**Mix Code**	**Mix Type**	**Quantity Sold**	**Price per Pound**	**Extended Price**
Columbian Dark	CD-3	Reg	400	$6.10	$2,440.00
House Special	HS-3	Decaf	350	$7.40	$2,590.00
Vienna Roast	VR-3	Reg	450	$6.40	$2,880.00
		SubTotals	**1,200**		$7,910.00
		Freight:			$395.50
		Total Payment			**$8,305.50**

Lesson 15.1 **Source Documents** (cont'd)

Receipt: A business form giving written acknowledgement for cash received. When cash is received from sources other than sales, a receipt is prepared. The receipts are pre-numbered to help account for all receipts.

XYZ Comapny
101 Main St.
Suite 2
Anytown, CA 90099

Number

Date ______________

RECEIPT

Received from ________________________________ $ ______________

________________________________ Dollars

for ________________________________

Amount of account		☐	Cash
This payment		☐	Check
Balance due		☐	Money Order

By ______________________

Memorandum: A form on which a brief message is written describing a transaction. When no other source document is prepared for a transaction or when additional explanation is needed about a transaction, a memorandum is used to describe the transaction.

Align info. using the TAB key!

Memo

Your Initials go here

```
TO:         Employee's Name
FROM:       Your Name  Q.H.
DATE:       Today's Date
SUBJECT:    One or two words
```

Bought Supplies on account from Butler Supply, $500.00

Lesson 15.1 Source Documents (cont'd)

Calculator tape: Businesses collect cash at the time services are rendered to customers. At the end of each day, a business uses a printed electronic calculator tape that shows the total amount of cash received from sales for that day. By totaling all the individual sales, a single source document is produced for the total sales of the day.

iStockphoto/Thinkstock

Now that you are familiar with the terms associated with source documents, here is what a cycle for using source documents looks like.

- Jimmy is an employee at XYZ Corporation, authorized to make a purchase from Office Supply Company.
- XYZ Corporation requires the use of **purchase orders**.
- Jimmy places an order with Office Supply Company for print cartridges.
- At the time the order is placed, he uses purchase order number 1234.
- Office Supply Company ships the cartridges, along with an **invoice** for the total amount due.
- When the invoice gets to the accounts payable department at XYZ Corporation, the invoice is matched with the purchase order number.
- When the accounts payable department confirms the amount on the purchase order with the amount invoiced, a **check** is written to pay the amount charged.
- The check, which includes the invoice number, is then sent to Office Supply Company, completing the purchasing cycle.

Lesson 15.3 Completing the Accounting Cycle

Collecting and analyzing the source documents and then recording the transactions in journals are the first two steps of the accounting cycle. The **accounting cycle** is the process or series of steps that accountants use to provide financial data that are useful to decision makers. To complete the accounting cycle, an accountant follows the following steps:

1. Analyze the transactions and source documents.
2. Journalize entries into the general journal.
3. Post the general journal to the general ledger.
4. Prepare adjusting entries, vouchers, and the trial balance.
5. Prepare financial statements.
6. Analyze and review the financial statements.
7. Prepare closing entries.
8. Post the closing entries to the trial balance.

The accounting cycle begins when a transaction occurs and ends when closing entries are posted to the trial balance. This series of steps is completed each accounting period. The accounting cycle helps to ensure that business transactions are recorded accurately and kept orderly within the accounting records.

15.3.1 Completing the Accounting Cycle

Instructions:

Complete the diagram below.

Name: ______________________________ Date: ______________

Lesson 15.4 Accounting Terminology Test

1. What is the accounting equation?

2. What does US GAAP stand for?

3. FASB governs US GAAP; what does FASB stand for?

4. There are 12 standards that US GAAP created, which are the main guidelines for accounting. One of the standards is "entity assumption." What does "entity assumption" mean?

5. To balance the accounting equation, every transaction affects _____ accounts.
6. _________________ is an example of the owner's equity account.
7. Every transaction must have a __________ and a __________.
8. Asset is something you _________________.
9. Liability is something you ________________.
10. If you paid cash for office furniture: ____________________ is debited and ____________________ is credited.
11. If you bought supplies on account, Office Supply Company: ____________________ is debited and ____________________ is credited.

For 12-15, make appropriate T accounts:

12. Owner, Martha Collins, invested cash, $2,000.00.
13. Paid cash for office furniture, $350.00.
14. Paid cash for insurance, $270.00.
15. Bought supplies on account, Office Supply Company, $450.00.

Name: ____ Date: ____________________

Lesson 15.6 Culminating Project A

Newton Park is the largest amusement park on the East Coast and has thrill rides that defy gravity. Determine which of the 12 US GAAP accounting assumptions, principles, and constraints is violated in these business transactions for Newton Park:

1. Newton Park purchased 500 T-shirts at a cost of $5.00 each. Newton Park plans to sell these T-shirts in their gift shops for $10.00 each. The T-shirts were recorded in the general ledger by increasing assets by $5,000 and decreasing cash by $5,000.

2. Newton Park has purchased $1,000,000 in Rides and Equipment since opening the park. If the Rides and Equipment were to be sold today, the estimated sales price is $500,000. Newton Park has plans for future growth because of record-breaking attendance. Newton Park is reporting the Rides and Equipment at an amount of $500,000.

3. Newton Park sold $250,000 of Season Passes during May and reported $250,000 at the time of sale in Theme Park Admissions Revenue.

4. Newton Park estimates that the cost of lanyards for season pass holders is only $.25 each. Newton Park records an increase to Lanyard Expense each time a lanyard is distributed to a season pass holder.

5. The president of Newton Park purchased a sports utility vehicle for $40,000 for personal use. Newton Park is reporting the cost of the SUV on the company financial statements.

6. A lawsuit was filed against Newton Park for a claimed injury in the amount of $600,000. Newton Park was in compliance with all safety standards and it is unlikely they will have to pay the claim. Newton Park has reported the claim of $600,000 on their financial statements as a liability.

7. When Newton Park purchases funnel cake ingredients for the concession stands, they sometimes record the purchases as an expense and sometimes they record the purchases as an asset.

8. Newton Park operates from May through August each year. Newton Park is considering waiting to record all of the seasons' payroll expense until the end of the summer to make life easier for the accounting department. The employees have worked all summer operating the ticket booths, rides, gift shops and concessions.

9. Attendance at Newton Park was very low during the last week in August due to a large number of severe thunderstorms. Newton Park is considering issuing accounting statements for August 1-21 instead of August 1-31. All other accounting statements have been issued on a monthly basis.

10. Newton Park recorded the value of a Bumper Car at $2,000 based on the Park Manager's opinion. The Bumper Car was purchased at a cost of $5,000 based on the original invoice.

Name: ______________________________ Date: ______________

Lesson 15.7 Culminating Project B

Provide at least one example of a transaction for Newton Park that could have resulted in the following transactions described below:

1. Increase an asset and decrease an asset.

2. Increase an asset and increase a liability.

3. Increase an asset and increase equity.

4. Decrease an asset and decrease a liability.

5. Decrease an asset and decrease equity.

6. Increase a liability and decrease equity.

7. Decrease a liability and increase equity.

Name: ______________________________ Date: ______________

Skill Standards

Academic:

AB 6 Demonstrate the ability to write clearly and concisely using industry specific technology

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

Accounting:

OB 1 Identify and describe the purpose of generally accepted accounting principles (GAAP)

OB 3 Utilize the accounting equation in several mathematical forms

OB 5 Analyze and record business transactions

Financial Services:

OA 1 Understand and apply the accounting equation

Scenario

Triple A's Law Service uses the following Chart of Accounts to record their business transactions. You have been hired to organize and enter the firm's transactions for the accounting period.

Triple A's Law Service's CHART OF ACCOUNTS

Assets (100)	Liabilities (200)	Owner's Equity (300)	Revenue (400)
110 Cash	210 Accounts Payable, Furniture World	310 Aubrey's Capital	410 Sales
120 Accounts Receivable		320 Aubrey's Drawing	
130 Supplies		330 Income Summary	Expenses (500)
140 Prepaid Insurance			510 Rent Expense
150 Office Equipment			520 Utilities Expense
160 Office Furniture			
170 Store Equipment			

Tasks

A. Identify and explain the 12 US GAAP standards that you will need to consider when entering Triple A's Law Service's business transactions.

B. Enter the following Triple A's Law Service business transactions in the appropriate T accounts, and total the debits and credits for the different accounts.

1. Aubrey deposited $10,000 to open her business.
2. Aubrey purchased a desk for her office for $3,500 on account.
3. Aubrey received $1,000 for services.
4. Aubrey wrote a check for $200 for rent.
5. Aubrey withdrew $500 to get a makeover.
6. Aubrey performed an evaluation for the Board of Education and agreed to be paid $2,000 later.
7. Aubrey bought supplies for $130.
8. Aubrey sent a $50 check to Furniture World to pay on her account.
9. Aubrey contributed a computer worth $500 to the business.
10. Aubrey received a $1,000 check from the Board of Education for services performed earlier in the month.
11. Aubrey bought office furniture for $2,000 cash.
12. Aubrey paid her utility bill for $300.
13. Aubrey provided services for the city council and received $1,000.
14. Aubrey bought a calculator for $150.

Triple A's Law Service

110 Cash
Debit | Credit

120 Accounts Receivable
Debit | Credit

130 Supplies
Debit | Credit

140 Prepaid Insurance
Debit | Credit

150 Office Equipment
Debit | Credit

160 Office Furniture
Debit | Credit

170 Store Equipment
Debit | Credit

Furniture World
210 Accounts Payable
Debit | Credit

310 Aubrey's Capital
Debit | Credit

320 Aubrey's Drawing
Debit | Credit

330 Income Summary
Debit | Credit

410 Sales Revenue
Debit | Credit

510 Rent Expense
Debit | Credit

520 Utilities Expense
Debit | Credit

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Inputs all of the business transactions into the T accounts correctly.
- Thoroughly explains all 12 US GAAP standards.
- Well organized and communicated effectively.

3

- Inputs most of the business transactions into the T accounts correctly.
- Adequately explains most or all of the 12 US GAAP standards.
- Generally well organized and communicated effectively.

2

- Inputs some of the business transactions into the T accounts correctly.
- Somewhat explains some of the 12 US GAAP standards.
- Limited organization and communication of content.

1

- Inputs most or all of the business transactions into the T accounts incorrectly.
- Provides little or no explanation of the 12 US GAAP standards.
- Little or no organization with ineffective communication.

Unit 6

Journalizing

John Fox/Stockbyte/Thinkstock

Kentucky Accounting and Finance Foundations Curriculum Guide

Lesson 16.1 The Accounting Cycle: Steps Two through Four

As you learned in Unit 5, the accounting cycle always begins with business transactions and events. After analyzing the source documents for these transactions and determining their effect on the accounting equation (step one of the accounting cycle), you need to also determine how these transactions affect the company's performance and financial position. To do so, you post business transactions in the general journal and use that information to prepare the trial balance. Ultimately, the completion of the accounting cycle provides useful financial statements for decision makers.

Lesson 16.1 The Accounting Cycle: Steps Two through Four (cont'd)

Step Two: Journalizing Entries into the General Journal

The **general journal** is the day-to-day record of business transactions, listed in the order in which the transactions occurred. Because the general journal is where business transactions are initially recorded, it is also sometimes referred to as the **book of original entry**.

The general journal should include a listing of every business transaction. When recording a transaction in the general journal, you should include the date of the transaction, the chart of account affected by the transaction, a brief description of the transaction, and the debit or credit amount. Entering business transactions in the general journal is called **journalizing**. Journalizing each transaction is the second step of the accounting cycle and comes just prior to posting the transactions to the **general ledger**.

Step Three: Posting the General Journal to the General Ledger

The general ledger is the complete record of financial transactions over the life of the business. Because it contains so much data, the general ledger is truly the most essential aspect of the business financial structure. The general ledger includes **subsidiary ledgers**, which are used to simplify the primary ledger and keep track of specific types of business transactions. Examples of subsidiary ledgers include accounts receivable, accounts payable, revenues, and expenses. The general ledger is often referred to as the **book of final entry** because it is the source of data for company financial statements.

Step Four: Preparing Adjusting Entries, Vouchers, and the Trial Balance

After posting the general journal to the general ledger, you should prepare the trial balance. The **trial balance** lists all the debit and credit balances for a specific accounting period. To ensure that the debit and credit business transactions are in balance, the trial balance should include every general ledger account. Remember, all debits should equal all credits. So, by preparing the trial balance, you can find errors in the double-entry accounting and/or transactions that were posted to the general ledger erroneously.

When preparing the trial balance, keep in mind that there are some business transactions, such as depreciation, accruals, and/or other adjustments, which are not entered into the general journal until the end of the accounting period, yet they still should be included in the trial balance process. Accountants call these transactions adjusting entries. **Adjusting entries** are recorded at the end of an accounting period to adjust general ledger accounts. Adjusting entries are used primarily to match revenues and expenses as a requirement of the matching principle of US GAAP. Most adjusting entries, such as depreciation, are entries that should be recorded over an extended period of time.

Lesson 16.1 The Accounting Cycle: Steps Two through Four (cont'd)

Computerized Accounting Systems

Computerized accounting systems have eliminated the use of physical book ledgers as well as some of the manual recording of business transactions in the general journal and the posting of these business transactions into the general ledger. Computerized accounting systems such as QuickBooks, Peachtree, Quicken, ERPs (Enterprise Resource Planning Systems), and Excel workbooks provide accountants and business owners with more options for keeping the general journal and for posting transactions into the general ledger. In most cases, you can use a computerized accounting system to manually enter the chart of accounts for a specific business and then enter the source documents directly into the software.

However, regardless of whether the business is using a computerized accounting system to record business transactions into the general ledger or manually recording them, the accounting cycle is still completed in the same order. Technology is certainly a more efficient way of doing business, but technology does not always possess the judgment or logic to find mistakes.

Name: ______________________________ Date: ______________

16.1.1 Another Look at the Accounting Cycle

1. What are the 8 steps of the accounting cycle?

    1. ______________________________
    2. ______________________________
    3. ______________________________
    4. ______________________________
    5. ______________________________
    6. ______________________________
    7. ______________________________
    8. ______________________________

2. The __________________ is the day-to-day record of business transactions, listed in the order in which the transactions occurred.

3. Because the general journal is where business transactions are initially recorded, it is also sometimes referred to as the __________________ .

4. Entering business transactions in the general journal is called __________________ .

5. The general ledger includes __________________ , which are used to simplify the primary ledger and keep track of specific types of business transactions.

6. The general ledger is often referred to as the __________________ because it is the source of data for company financial statements.

7. The __________________ lists all the debit and credit balances for a specific accounting period.

8. __________________ are recorded at the end of an accounting period to adjust general ledger accounts.

9. __________________ have eliminated the use of physical book ledgers as well as some of the manual recording of business transactions in the general journal and the posting of these business transactions into the general ledger.

10. __________________ is certainly a more efficient way of doing business, but technology does not always possess the judgment or logic to find mistakes.

Lesson 16.2 Journalizing in the General Journal

Journalizing in the general journal must include all of the accounts from the chart of accounts. If you need an account that is not listed, you should create a new account in the chart of accounts relevant to the business transaction.

Journalizing in the general journal is typically divided into five basic steps:

1. Record the date.
2. Record the relevant chart of account number.
3. Record a description of the chart of account number.
4. Record the debit or credit.
5. Record a description of the transaction that took place.

> **It's important to have the pages of the general journal numbered—all of the transactions are in chronological order.**

Page 1

General Journal

Step 1

	Date	Account Number	Description of Transaction		Debit	Credit
1	XX/XX/20YY	110	Cash Step 3		$30,000.00	Step 4
2	Step 2	310	Capital, Mrs. King			$30,000.00
3			Deposit to open the business account.		Step 5	
4	XX/XX/20YY	170	Store Equipment		$2,500.00	
5		210	Accounts Payable, Displays Inc.			$2,500.00
6			Mrs. King bought glass shelves for displays.			
7						
8						
9						
10						

Sometimes, you may have an entry that requires more than one debit and/or credit, also called a **compound entry**. To make reading and analyzing the general journal easier, you should line up the debits to the left and the credits to the right when recording business transactions.

Name: ______________________________ Date: ______________

16.2.1 Journalizing Entries

Instructions:

Remember Mrs. King's Interiors? In Unit 5, you created T accounts for the business's financial transactions. Now, use King's Interiors Chart of Accounts and the transaction history provided below to input those same business transactions into the general journal.

King's Interiors **Assets = Liabilities + Owner's Equity**

King's Interiors Chart of Accounts

110	Cash
120	Accounts Receivable
130	Supplies
210	Accounts Payable
310	Capital, Mrs. King
320	Owner's Draw, Mrs. King
330	Income Summary Account
410	Revenue, Design Services
420	Revenue, Design Products
510	Rent Expense
520	Utilities Expense

Example 1

12/01/20YY	Mrs. King deposited $30,000 to open her business account.
12/05/20YY	Mrs. King bought glass shelves for displays for $2,500 on account.
12/07/20YY	Mrs. King bought supplies for $400 cash.
12/07/20YY	Mrs. King received payment for designing services $3,000.
12/09/20YY	Mrs. King completed a design for Star Bank and agreed to be paid later. $5,000.
12/15/20YY	Mrs. King wrote a check for $500 to pay for December's rent.
12/20/20YY	Mrs. King sent a check to Displays Inc. for $1,000 to pay on her account.
12/21/20YY	Mrs. King withdrew $600 to get a makeover.
12/21/20YY	Mrs. King contributed a computer worth $500 to the business.
12/21/20YY	Mrs. King paid her December utility bill for $200.
12/23/20YY	Mrs. King bought an antique desk for her office for $5,000 on account.
12/29/20YY	Mrs. King received a check from Star Bank to pay on their account. $2,500.
12/29/20YY	Mrs. King bought a calculator for $250.
12/30/20YY	Mrs. King bought some office furniture for $2,000 cash.

Name: ______________________ Date: ____________

16.2.1 Journalizing Entries (cont'd)

Page____

General Journal

	Date	Account Number	Description of Transaction		Debit	Credit
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Name: ______________________________ Date: ______________

16.2.1 Journalizing Entries (cont'd)

Page____

General Journal

	Date	Account Number	Description of Transaction		Debit	Credit
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						

Lesson 16.3 Posting to the General Ledger

After journalizing each transaction, the next step in the accounting cycle is posting to the general ledger—the final book of entry. The general ledger is the running total of all accounts listed in the chart of accounts. (If you store the chart of accounts on a hard drive, the total of the accounts in the data files is the ledger.)

There are a couple of different ways to post general journal entries into the general ledger. One way to post to the general ledger is to include every detail from the general journal. But, if you prefer not to record quite so much data in the general ledger, you can total the debits and/or credits for each account from the general journal and post just those totals in the general ledger, as illustrated below. If using an accounting system, you could "drill down" on a specific account to access more details.

So, posting Mrs. King's Interiors' general journal data (from the last exercise) into the general ledger would look like this:

General Ledger

	December 20YY					Beginning Balance	$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1	12/31/20YY	110	Cash		$30,550.00		$30,550.00
2	12/31/20YY	120	Accounts Receivable		$2,500.00		$33,050.00
3	12/31/20YY	130	Supplies		$10,650.00		$43,700.00
4	12/31/20YY	210	Accounts Payable			$6,500.00	$37,200.00
5	12/31/20YY	310	Capital, Mrs. King			$30,500.00	$6,700.00
6	12/31/20YY	320	Owner's Draw, Mrs. King		$600.00		$7,300.00
7	12/31/20YY	330	Income Summary Account				$7,300.00
8	12/31/20YY	410	Revenue, Design Services			$8,000.00	-$700.00
9	12/31/20YY	420	Revenue, Design Products				-$700.00
10	12/31/20YY	510	Rent Expense		$500.00		-$200.00
11	12/31/20YY	520	Utilities Expense		$200.00		$00.00

The general ledger includes all business transactions from the very beginning of the business. For some business entities, there could be over a thousand different accounts listed in the chart of accounts and, therefore, in the general ledger. To provide additional detailed information for each of these many accounts, you should create and use subsidiary ledgers.

Lesson 16.3 Posting to the General Ledger (cont'd)

Each subsidiary ledger includes additional information pertinent to one certain account. For example, the accounts payable subsidiary ledger would contain additional vendor information and balances. Likewise, the accounts receivable subsidiary ledger would include customer information and balances.

All data within the general journal and subsidiary ledgers is all-inclusive in the general ledger. In other words, everything that appears in the general journal and in subsidiary ledgers is reflected in some shape and form in the general ledger.

Let's use the general ledger for Mrs. King's Interiors to prepare and view individual subsidiary ledgers:

Cash Subsidiary Ledger 110

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1	12/01/20YY	110	Cash		$30,000.00		$30,000.00
2	12/07/20YY	110	Cash			$400.00	$29,600.00
3	12/09/20YY	110	Cash		$3,000.00		$32,600.00
4	12/15/20YY	110	Cash			$500.00	$32,100.00
5	12/20/20YY	110	Cash			$1,000.00	$31,100.00
6	12/21/20YY	110	Cash			$600.00	$30,500.00
7	12/21/20YY	110	Cash			$200.00	$30,300.00
8	12/29/20YY	110	Cash		$2,500.00		$32,800.00
9	12/29/20YY	110	Cash			$250.00	$32,550.00
10	12/30/20YY	110	Cash			$2,000.00	$30,550.00

Lesson 16.3 Posting to the General Ledger (cont'd)

Accounts Receivable Subsidiary Ledger 120

December 20YY						Beginning Balance	$0.00
	Date	**General Ledger**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1	12/09/20YY	120	Accounts Receivable		$5,000.00		$5,000.00
2	12/29/20YY	120	Accounts Receivable			$2,500.00	$2,500.00

Supplies Subsidiary Ledger 130

December 20YY						Beginning Balance	$0.00
	Date	**General Ledger**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1	12/05/20YY	130	Supplies		$2,500.00		$2,500.00
2	12/07/20YY	130	Supplies		$400.00		$2,900.00
3	12/21/20YY	130	Supplies		$500.00		$3,400.00
4	12/23/20YY	130	Supplies		$5,000.00		$8,400.00
5	12/29/20YY	130	Supplies		$250.00		$8,650.00
6	12/30/20YY	130	Supplies		$2000.00		$10,650.00

Lesson 16.3 **Posting to the General Ledger** (cont'd)

Accounts Payable Subsidiary Ledger 210

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1	12/05/20YY	210	Accounts Payable			$2,500.00	$2,500.00
2	12/20/20YY	210	Accounts Payable		$1,000.00		$1,500.00
3	12/23/20YY	210	Accounts Payable			$5,000.00	$6,500.00

Capital Subsidiary Ledger 310

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1	12/01/20YY	310	Capital, Mrs. King			$30,000.00	-$30,000.00
2	12/21/20YY	310	Capital, Mrs. King			$500.00	-$30,500.00

Owner's Draw Subsidiary Ledger 320

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1	12/21/20YY	320	Owner's Draw, Mrs. King		$600.00		$600.00

Lesson 16.3 Posting to the General Ledger (cont'd)

Revenue, Design Services Subsidiary Ledger 410							
December 20YY						**Beginning Balance**	**$0.00**
	Date	**General Ledger**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1	12/01/20YY	410	Income, Design Services			$3,000.00	-$3,000.00
2	12/21/20YY	410	Income, Design Services			$5,000.00	-$8,000.00

Expenses Subsidiary Ledger 510–599							
December 20YY						**Beginning Balance**	**$0.00**
	Date	**General Ledger**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1	12/15/20YY	510	Rent Expense		$500.00		$500.00
2	12/21/20YY	520	Utilities Expense		$200.00		$700.00

Name: ______________________ Date: ______________

16.3.1 Completing Subsidiary Ledgers

Use the general journal provided below to complete subsidiary ledgers for the business.

Page 1

General Journal

	Date	Account Number	Description of Transaction		Debit	Credit
1	12/01/20YY	110	Cash		$12,500.00	
2		310	Capital, David Smith			$12,500.00
3			Deposit to open business account.			
4	12/05/20YY	130	Supplies		$995.00	
5		210	Accounts Payable			$995.00
6			Bought filing cabinets for accounting records.			
7	12/07/20YY	130	Supplies		$400.00	
8		110	Cash			$400.00
9			Bought supplies with cash.			
10	12/07/20YY	110	Cash		$3,000.00	
11		410	Revenue, Tree & Lawn Services			$3,000.00
12			Received payment for Tree & Lawn Services removal services.			
13	12/09/20YY	120	Accounts Receivable		$5,000.00	
14		410	Revenue, Tree & Lawn Services			$5,000.00
15			Received payment on account for tree removal services.			
16	12/15/20YY	510	Rent Expense		$500.00	
17		110	Cash			$500.00
18			Rent payment for December.			
19	12/20/20YY	210	Accounts Payable		$1,000.00	
20		110	Cash			$1,000.00
21			Payable to Advertising Inc. on account.			

Name: ______________________ Date: ______________

16.3.1 Completing Subsidiary Ledgers (cont'd)

						Page 2

General Journal

	Date	Account Number	Description of Transaction		Debit	Credit
22	12/21/20YY	320	Owner's Draw, David Smith		$600.00	
23		110	Cash			$600.00
24			David Smith withdrew to get shutters for his home			
25	12/21/20YY	130	Supplies		$500.00	
26		310	Captial, David Smith			$500.00
27			David Smith contributed a computer to his business.			
28	12/21/20YY	520	Utilities Expense		$200.00	
29		110	Cash			$200.00
30			Paid utility bill for December.			
31	12/23/20YY	130	Supplies		$5,000.00	
32		210	Accounts Payable			$5,000.00
33			Bought an antique desk for office on account.			
34	12/29/20YY	110	Cash		$995.00	
35		120	Accounts Receivable			$995.00
36			Received payment for Tree & Lawn removal Services from Star Bank.			
37	12/29/20YY	130	Supplies		$250.00	
38		110	Cash			$250.00
39			Purchased calculator for office.			
40	12/30/20YY	130	Supplies		$2,000.00	
41		110	Cash			$2,000.00
42			Purchased office furniture with cash.			
			Total		$32,940.00	$32,940.00

Name: ______________________ Date: ______________

16.3.1 Completing Subsidiary Ledgers (cont'd)

Cash Subsidiary Ledger 110							
December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

Accounts Receivable Subsidiary Ledger 120							
December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							

Name: ______________________ Date: ____________

16.3.1 Completing Subsidiary Ledgers (cont'd)

Supplies Subsidiary Ledger 130

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							
4							
5							
6							
7							

Accounts Payable Subsidiary Ledger 210

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							
4							

Name: ______________________ Date: ____________

16.3.1 Completing Subsidiary Ledgers (cont'd)

Capital Subsidiary Ledger 310

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							

Owner's Draw, David Smith Subsidiary Ledger 320

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							

Name: ______________________ Date: ______________

16.3.1 Completing Subsidiary Ledgers (cont'd)

Revenue, Tree & Lawn Services Subsidiary Ledger 410

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							

Expenses Subsidiary Ledger 510–599

December 20YY						Beginning Balance	$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1							
2							
3							

Lesson 17.1 Correcting Entries

At the end of each accounting period—whether it be a month, a quarter, or a year—accountants devote time to checking their work, just as you might check a math assignment before turning it in. That's because even the most talented accountant or most expensive accounting software can make mistakes. Numbers sometimes get transposed—or switched—when transactions are journalized. Transactions can be entered twice by accident. And, sometimes, the wrong amount is simply entered for a transaction.

Accountants analyze and review their work—the debits and credits within the general ledger—by preparing a trial balance. The goal of preparing the trial balance is to balance all of the debits and credits within the general ledger. If you find that the debits and credits are not equal, then there may be an error in the ledger somewhere. And, when you find that error, you need to prepare a **voucher**.

What is a voucher? It's basically a summary of a particular transaction. Accountants use vouchers to input correcting and adjusting journal entries into the general ledger. The voucher details the accounts in the chart of accounts that are affected, describes the correction or adjustment, and includes documentation showing that the correction or adjustment is necessary. (Most accounting software applications include a voucher "template" that you can use to standardize your vouchers.)

Let's assume that you are responsible for closing Mrs. King's Interiors' accounting records for the calendar year. While doing so, you discovered that a transaction was journalized incorrectly. Apparently, according to the most recent rent statement, the rent increased by $50 during December. And, in fact, the business paid the full $550—the increased amount. But, the general ledger shows that only $500 was paid. So, you need to create a correcting entry for December's rent payment.

To create a correcting journal entry for the business's December rent payment, you should:

1. **Use a journal voucher template.** By using the same voucher template every time and simply updating the necessary information, the accounting records for different correcting and adjusting will be consistent.

2. **Select a journal entry number.** Many systems generate a journal entry number for you based on what input screen you are in. If you have to create the correcting entry manually, though, just make sure that you always follow the same process for every journal entry number that you create—because of the consistency principle. Journal entry numbers should be in chronological order and distinctly different from the chart of account numbers. Since this is Mrs. King's Interiors Design's first accounting period and first journal voucher, we will start with JE1 for the first journal entry number.

3. **Input information into the voucher.** Input the necessary information for the correcting journal entry, including the date that the rent was paid, the chart of account numbers that will need to be corrected and/or updated, the debit and credit information, and a brief description of what the journal voucher is changing in the general ledger.

Lesson 17.1 Correcting Entries (cont'd)

4. **Include supporting documents.** Make sure that your journal voucher includes documentation (i.e., the rent statement, the rent check, and the original general journal entry) that support the correcting entry.

   Here's an example of what that journal voucher might look like:

   Journal 0001-JE1 (JE1 = General Ledger Reference):

Mrs. King's Interiors

Journal Voucher

NO:0001

Office: 1234 Office Month: December Year: 20YY

Ref. No	Description	General Ledger Account	Debit	Credit
JE 1	Rent Expense	510	50.00	
	Cash	110		50.00
	Correcting Entry. This journal entry (voucher) was created because the amount recorded in the general ledger was $500.00 and the amount paid was $550.00. All supporting documentation is attached (the statement, the check and the original general journal entry).			
		Column Totals	50.00	50.00

Prepared by: Bob Smith Date: 12/31/20YY

Authorized by: Mrs. Mary King Date: 12/31/20YY

Name: ____________________ Date: __________

17.1.1 Correcting Entries

Prepare a correcting journal entry (voucher) based on David Smith's Tree & Lawn Services' information provided below.

A $2,000.00 office supply transaction was entered into David's accounting records on 12/30/20YY. The transaction posted to the Supplies General Ledger Account Number 130 and Cash General Ledger Account 110. Unfortunately, the entry was incorrect. Instead, the transaction should be reported for $2,225.00 on 12/30/20YY. The journal voucher number is JE4, and the journal voucher log number is NO: 0004.

David Smith's Tree & Lawn Services

Journal Voucher

NO:

Office: 1234 Office Month: __________ Year: __________

Ref. No	Description	General Ledger Account	Debit	Credit
	Column Totals			

Prepared by: ____________________ Date: __________

Authorized by: ____________________ Date: __________

Lesson 17.2 Adjusting Entries and Depreciation

Accountants also use vouchers to enter a variety of different adjusting entries into the general ledger. Adjusting entries, remember, are journal entries that are recorded at the end of an accounting period to adjust general ledger accounts. Examples of adjusting entries include depreciation and inventory.

Depreciation is the reduction in value of goods or assets occurring over a set period of time. Business assets such as equipment, furniture, fixtures, computers, buildings, and cars should all be depreciated. But, no asset should be depreciated fully in a single accounting period. Instead, you should record the depreciation expense over the useful life of the asset—the estimated length of time that the asset will be used.

Accountants use several different methods to calculate depreciation. However, we'll focus here on just the most commonly used method: the straight-line method. The straight-line depreciation method formula is:

$$\text{Depreciation Expense} = \frac{\text{Asset Value} - \text{Salvage Value}}{\text{Useful Life of the Asset (in years)}}$$

To calculate the depreciation expense for an asset, you need to know three things—the asset value, which is the original cost of the asset; the salvage value, which is the estimated value of the asset at the end of its useful life; and the useful life of the asset, which is the estimated length of time that the asset will be used.

Let's say, for example, that we want to use the straight-line method to calculate the depreciation expense for Mrs. King's Interior's office furniture. Mrs. King purchased the furniture for $2,000. Its estimated useful life is five years, and its salvage value is $200. Given that information, our calculations are:

$$\text{Depreciation Expense} = \frac{\$2{,}000 - \$200}{5 \text{ years}}$$

$$\text{Depreciation Expense} = \frac{\$1{,}800}{5 \text{ years}}$$

$$\text{Depreciation Expense} = \$360$$

So, the depreciation expense for Mrs. King's office furniture is $360.00.

Now that you've calculated the depreciation expense for this accounting period, you need to make sure that depreciation expense appears as an account in the chart of accounts.
If it does not, you need to add it as a new account named Depreciation Expense, with the account number 530. You need to make sure there is an account on the asset side of the equation – Less: Accumulated Depreciation 131—as well.

> The Less: Accumulated Depreciation account is known as a contra asset account. The use of contra asset accounts allows the general ledger to reflect the original cost of the fixed asset and accumulated depreciation separately.

Lesson 17.2 Adjusting Entries and Depreciation (cont'd)

As a result, King's Interiors' new chart of accounts should be:

King's Interiors Chart of Accounts

110	Cash
120	Accounts Receivable
130	Supplies
131	**Less: Accumulated Depreciation**
210	Accounts Payable, Furniture World
310	Capital, Mrs. King
320	Owner's Draw, Mrs. King
330	Income Summary Account
410	Revenue, Design Services
420	Revenue, Design Products
510	Rent Expense
520	Utility Expense
530	**Depreciation Expense**

Lesson 17.2 Adjusting Entries and Depreciation (cont'd)

Finally, to create the depreciation adjusting journal entry, you should follow the same steps that you did when creating a correcting entry for the rent expense. The key is to input information pertaining to the depreciation in the voucher and include documentation related to the office furniture depreciation expense with the adjusting entry. The voucher should look something like this when you are finished:

Journal Entry (Voucher) 0002-JE2:

Mrs. King's Interiors

Journal Voucher

NO:0002

Office: 1234 Office Month: December Year: 20YY

Ref. No	Description	General Ledger Account	Debit	Credit
JE2	Depreciation Expense Less: Accumulated Depreciation Adjusting Entry. This journal entry (voucher) was created to record the supplies (furniture) purchased 12/29/20YY for $2000.00. All supporting documentation is attached (the depreciation schedule using straight-line method over the useful life of 5 years)	530 131	360.00	 360.00
	Column Totals		360.00	360.00

Prepared by: Bob Smith Date: 12/31/20YY

Authorized by: Mrs. Mary King Date: 12/31/20YY

Name: ______________________ Date: __________

17.2.1 Depreciation

Use the information provided to calculate the depreciation expense for the accounting period ending 12/31/20YY. Then, create the journal entry (voucher) for this depreciation expense, and identify what documentation should be attached to the voucher to support the depreciation expense.

Company A purchased a computer for $1,850.00 on 01/01/20YY. The computer has a useful life of five years. If Company A sells the computer at the end of the five years, the computer will have a salvage value of $200.00.

Depreciation Expense = $\dfrac{\quad - \quad}{\qquad}$

Depreciation Expense = $\dfrac{\qquad}{\qquad}$

Depreciation Expense =

Name: ____________________ Date: __________

17.2.1 Depreciation (cont'd)

The Depreciation Expense General Ledger Account is 530, and the contra account Less: Accumulated Depreciation General Ledger Account is 131. The journal voucher number should be JE5 and recorded in the journal voucher log as NO: 0005.

Company A

Journal Voucher

NO:

Office: 1234 Office Month: __________ Year: __________

Ref. No	Description	General Ledger Account	Debit	Credit
		Column Totals		

Prepared by: ____________________ Date: __________

Authorized by: ____________________ Date: __________

What supporting documentation should be attached to this voucher?

Lesson 17.3 Preparing the Trial Balance

After preparing and posting the correcting and adjusting journal entries to the general ledger, you should prepare the trial balance, which is, as you'll recall, a tally of the debit and credit balances in the general ledger at the end of the accounting period. The trial balance should include only the accounts from the general ledger that have balances. Although the trial balance is a working document and not a financial statement, it is still a very important tool. Accountants use the trial balance to analyze and review the different account balances and identify any abnormalities that exist.

When analyzing and reviewing the trial balance, make sure that you:

- **Check the balances.** If the general ledger balances are carrying an abnormal balance (that is, if you find that the ending balance is not the normal balance), or if the ending balances are higher or lower than normal, this may be an indication that there is an error in the accounts somewhere.

- **Look for duplicate entries.** If you are showing a difference that is divisible by 2, an entry was probably entered twice.

- **Investigate transposed numbers.** If there is a difference in the ending balances—and especially if the difference is divisible by 9 –there may be a transposition error somewhere. You or a coworker may have switched two digits when entering a transaction.

- **Review source documents.** If something simply does not look right, trace the transactions back to the source documents.

Lesson 17.3 Preparing the Trial Balance (cont'd)

Mrs. King's Interiors' trial balance should look similar to this:

Mrs. King's Interiors Trial Balance							
Period ending – December 31, 20YY						Beginning Balance	$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1	12/31/20YY	110	Cash		$30,550.00		$30,550.00
2	12/31/20YY	120	Accounts Receivable		$2,500.00		$33,050.00
3	12/31/20YY	130	Supplies		$10,650.00		$43,700.00
4	12/31/20YY	131	Less: Accumulated Depreciation			$360.00	$43,340.00
5	12/31/20YY	210	Accounts Payable, Furniture World			$6,500.00	$36,840.00
6	12/31/20YY	310	Capital, Mrs. King			$30,500.00	$6,340.00
7	12/31/20YY	320	Owner's Draw, Mrs. King		$600.00		$6,940.00
8	12/31/20YY	410	Revenue, Design Services			$8,000.00	-$1,060.00
9	12/31/20YY	510	Rent Expense		$500.00		-$560.00
10	12/31/20YY	520	Utility Expense		$200.00		-$360.00
11	12/31/20YY	530	Depreciation Expense		$360.00		$0.00
				Total	**$45,360.00**	**$45,360.00**	$0.00

Do you see that the debit and credit columns are equal and that the total ending balance is zero? Based on this trial balance, we can assume that Mrs. King's Interiors' accounting records are "in order" and contain no irregularities.

Name: ______________________ Date: ____________

17.3.1 Preparing the Trial Balance

The general journal entries have posted to the general ledger, and you are now tasked with completing the trial balance for the period ending 12/31/20YY. Use the general ledger provided below to complete the trial balance template.

General Ledger

December 20YY						Beginning Balance	$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1	12/31/20YY	110	Cash		$10,500.00		$10,500.00
2	12/31/20YY	120	Accounts Receivable		$1,500.00		$12,000.00
3	12/31/20YY	130	Supplies		$1,200.00		$13,200.00
4	12/31/20YY	140	Furniture				$13,200.00
5	12/31/20YY	210	Accounts Payable			$4,500.00	$8,700.00
6	12/31/20YY	310	Capital, Joe Joey			$7,500.00	$1,200.00
7	12/31/20YY	320	Owner's Draw, Joe Joey		$250.00		$1,450.00
8	12/31/20YY	330	Income Summary Account				$1,450.00
9	12/31/20YY	410	Revenue, Design Services			$2,200.00	-$750.00
10	12/31/20YY	420	Revenue, Design Products				-$750.00
11	12/31/20YY	510	Rent Expense		$550.00		-$200.00
12	12/31/20YY	520	Utilities Expense		$200.00		$0.00
13	12/31/20YY	530	Office Expense				$0.00
14	12/31/20YY	540	Liability Insurance Expense				$0.00
				Total	$14,200.00	$14,200.00	

Name: ______________________________ Date: ______________

17.3.1 Preparing the Trial Balance (cont'd)

The Trial Balance:

Trial Balance

Period ending –					Beginning Balance		$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1							
2							
3							
4							
5							
6							
7							
8							
9							

Total ______________

Lesson 17.4 Inventory

In addition to the types of financial transactions that we've talked about already, businesses that manufacture or sell goods must also keep track of the cost of inventory—the products that they keep on hand—in their accounting records. Many computerized accounting systems track inventory for you. Nevertheless, you still need to understand how inventory is journalized.

There are two systems for accounting for inventory. The first inventory system is called a **perpetual system**. When using a perpetual inventory system, you update the accounting records after every purchase or sale of goods. Inventory is updated in the general journal and then posted into the general ledger when the transactions occur. Let's take a look at how inventory is journalized using a perpetual system.

If the Go-Getter Company purchases 100 units of merchandise for $100.00 on account on 01/01/20YY, then you should make the following entry into the general journal when using a perpetual system:

01/01/20YY

	Debit	Credit
Merchandise Inventory	$100.00	
Accounts Payable		$100.00

Then, the company sells 2 units for a total of $5.00 on credit on 01/15/20YY. Under the perpetual system, you should make the following entry into the general journal when the merchandise is sold:

01/15/20YY

	Debit	Credit
Accounts Receivable	$5.00	
Sales		$5.00
Cost of Goods Sold	$2.00	
Merchandise Inventory		$2.00

Wait a minute. What's this about Cost of Goods Sold? We haven't come across that term before. **Cost of Goods Sold** is the amount of money that a business pays for the products it sells. So, let's look back at the information that we have about purchasing inventory. The company paid $100 for 100 units of inventory. That means that each unit of inventory cost one dollar when it was purchased. Then, a couple of weeks later, the company sold two of these units of merchandise. So the total cost of goods sold is two dollars ($1.00 X 2 units = $2.00 total cost of goods sold). But, we can't debit cost of goods sold without crediting the same amount elsewhere. So, since we have two fewer units of inventory than we did before the sale, we credit two dollars to merchandise inventory. In fact, using a perpetual inventory system, the merchandise inventory account changes after each inventory-related transaction is entered into the general journal.

Lesson 17.4 Inventory (cont'd)

The second type of inventory system is a **periodic inventory** system. A periodic system records inventory purchases and sales in a purchases account and requires accounting for inventory transactions at the end of the accounting period. Let's take a look at how a periodic inventory system would handle the inventory transactions that we dealt with just a minute ago.

The Go-Getter Company purchases 100 units of merchandise for $100.00 on account on 01/01/20YY. When using the periodic inventory system, you would make the following entry into the general journal:

01/01/20YY	**Debit**	**Credit**
Purchases	$100.00	
Accounts Payable		$100.00

Now, the company sells 2 units for a total of $5.00 on credit on 01/15/20YY. You should make the following entry into the general journal when the merchandise is sold if using the periodic inventory system:

01/15/20YY	**Debit**	**Credit**
Accounts Receivable	$5.00	
Sales		$500

Then, if using a periodic inventory system, you should create the following entries at the end of the accounting period:

01/15/20YY	**Debit**	**Credit**
Merchandise Inventory	$98.00	
Purchases		$98.00

How do we calculate the ending merchandise inventory? Under a periodic system, you calculate the ending inventory as follows:

Beginning Inventory + Purchases During the Accounting Period – Cost of Goods Sold = Ending Inventory

$100 + $0 – $2 = $98

Name: ______________________________ Date: ______________

17.4.1 Accounting for Inventory

Answer each of the following questions. Use a separate sheet of paper to record your responses.

1. True or false: Businesses that maintain inventory must track the costs of inventory in their accounting records.
2. You will update the general journal and post to the general ledger after every purchase and sale of inventory if you are using a(n) ________________ inventory system.
3. A periodic system records ______________ and sales in a(n) ____________ account.
4. You will update the general ledger for inventory transactions at the end of every accounting period if you are using a(n) ___________ inventory system.
5. Using a periodic inventory system, you create the following entries at the end of the accounting period. Fill in the missing account information:

01/31/20YY

	Debit	Credit
______________	$98.00	
Purchases		$98.00

6. Complete the following formula to calculate ending inventory:

Ending Inventory = ___________________ + Purchases during the accounting period – Cost of Goods Sold

Lesson 17.5 Computerized Accounting Systems

There are several computerized accounting systems available to individuals and/or businesses who need help in successfully managing their accounting records. These accounting software applications typically offer multiple chart of accounts features and functions, post the general journal systemically to the ledger, and make "real-time" data readily available to financial decision makers. What's more, computerized journals can usually be set up to reoccur without any manual input—saving time and labor costs.

The most popular computerized accounting systems include:

1. *Quicken*—Quicken is targeted at individuals who want to manage their personal finances electronically. Quicken users can upload information from their bank statements directly into their financial records and even manage their self-employed business records. Quicken also offers teaching applications and web-based training for parents interested in teaching their children how to successfully manage their finances.

2. *QuickBooks*—As a result of Quicken's overnight success among individuals, Quicken's developers quickly expanded their product line to include software designed specifically for small business owners who have no formal accounting training. QuickBooks provides users with remote and/or multi-user access to business financial records and makes it possible to upload data into the accounting system without recreating the data. Plus, the chart of accounts, vendor records, and customer data can be easily updated.

3. *Peachtree/Sage 50*—Peachtree, now called Sage 50, requires users to have more in-depth knowledge of accounting than Quickbooks. What's nice about Peachtree/Sage 50 is that business owners can customize their software to manage their unique cash flow, customer payments, and collections. In addition, Peachtree/Sage 50's inventory tracking system is more in depth than many other software packages.

4. *Microsoft Excel*—To be successful, every accountant and financial manager must know how to use Microsoft Excel to produce reports and analyze data. The latest version of Excel, Microsoft Excel 2010, allows individuals to analyze, manage, and share information as well as track and highlight important data trends. Using Microsoft Excel, individuals can create graphs, journal vouchers, invoices, vendor logs, charts, and more. Excel users can even access their data via their smart phones and practically any computer.

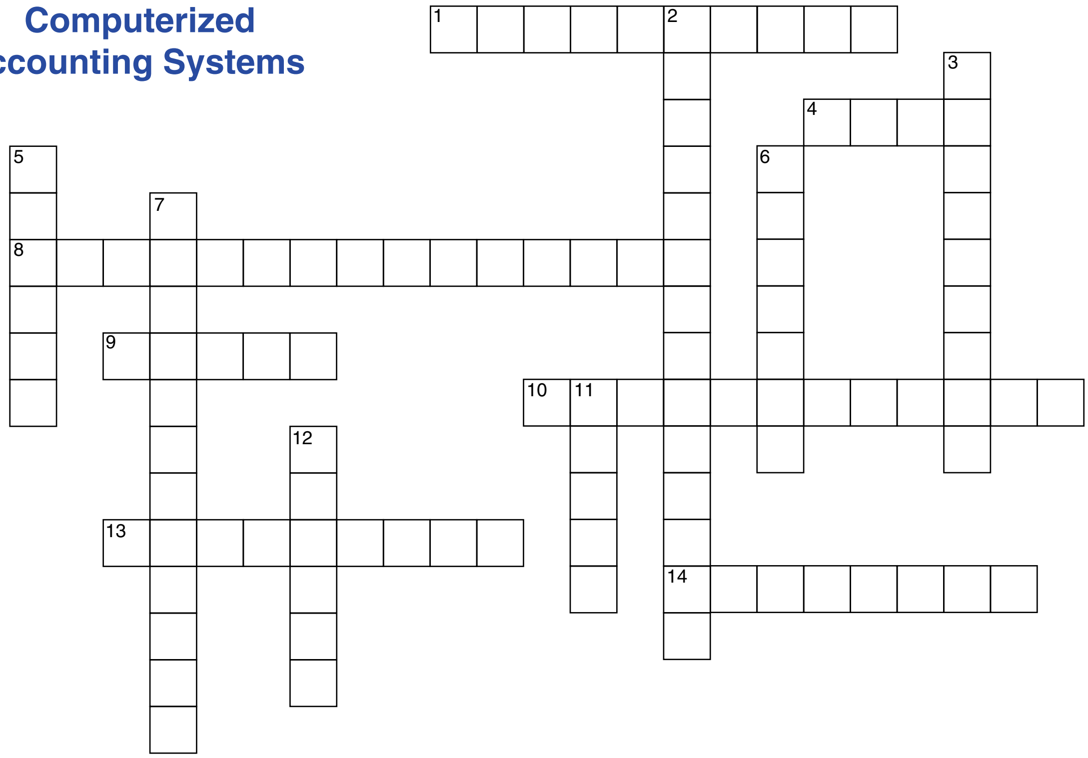
Regardless of their individual features, all of these systems are good tools for working through the Accounting Cycle. They all make journalizing an easier process, reducing errors resulting from manual input, and save time and money. Computerized accounting systems offer real-time data—a valuable feature for most managers or small business owners.

Unfortunately, security is a significant concern when working with computerized accounting systems. Viruses, fraud, and loss of data—which are all possible when you maintain your records electronically—could easily destroy a business.

Name: ______________________________ Date: ______________

17.5.1 Accounting Systems Crossword

Computerized Accounting Systems



ACROSS

1. __________ was designed specifically for small business owners with no formal accounting training.
4. You save __________ by using a computerized accounting system.
8. Every accounting system follows the __________.
9. When you maintain your records electronically, there is a chance that __________ will occur.
10. QuickBooks provides users with __________ to business financial records.
13. In Excel, you can track and __________ important data trends.
14. Accounting software applications make "__________" data readily available to decision makers.

DOWN

2. Sage 50 enables__________ to customize the software to manage their unique cash flow.
3. __________ is also known as Sage 50.
5. You can create ________, journal entries, invoices, and much more using Excel.
6. A popular accounting system targeted at individuals is __________.
7. Computerized accounting systems make __________ an easier process, reduce errors resulting from manual input, and save time and money.
11. Accountants often use Microsoft __________ to produce reports and analyze data.
12. Quicken and QuickBooks users can __________ data into the system without recreating the data.

Skill Standards

Academic:

AB 4 Record information accurately and completely

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AD 4 Use tables, graphs, diagrams, and charts to obtain or convey information

AD 5 Use deductive reasoning and problem-solving in mathematics

Accounting:

OB 5 Analyze and record business transactions

OB 6 Explain and apply the accounting process including the accounting cycle, journalizing, accounting records, posting, and adjustments

Administrative Support:

OA 3 Maintain accounting journal

Scenario

Super Star Talent Services uses the following Chart of Accounts to record its business transactions. Maria Gonzales, the owner of Super Star, has hired you to organize and enter the business transactions for the current accounting period into the general journal and then post the general journal into the summarized general ledger. After you complete these tasks, Maria also needs you to prepare the trial balance; record depreciation expense; and prepare the updated trial balance.

Super Star Talent Services' CHART OF ACCOUNTS			
Assets (100)	**Liabilities (200)**	**Owner's Equity (300)**	**Revenue (400)**
110 Cash	210 Accounts Payable	310 Maria's Capital	410 Sales
120 Accounts Receiveable		320 Maria's Drawing	
130 Supplies		330 Income Summary	**Expenses (500)**
140 Prepaid Insurance			510 Rent Expense
150 Office Equipment			520 Utilities Expense
160 Office Furniture			
170 Store Equipment			

Tasks

A. Enter the following business transactions for Super Star Talent Services in the general journal:

1. Maria deposited $12,000.00 to open her business on 12/01/20YY.
2. Maria purchased a desk for her office for $5,500.00 on account from Furniture World on 12/05/20YY.
3. Super Star Talent Services received $1,000.00 for booking a photo shoot with a client on 12/05/20YY.
4. Maria wrote a check for $550.00 for rent on 12/15/20YY.
5. Maria withdrew $500.00 to get a makeover on 12/16/20YY.
6. Maria performed a talent search for a local advertising agency on 12/20/20YY and agreed to be paid $2,000.00 later.
7. Maria bought supplies totaling $130.00 on 12/21/20YY.
8. Maria sent a $560.00 check on 12/21/20YY to Furniture World to pay on her account.
9. Maria contributed a computer worth $600.00 to the business on 12/22/20YY.
10. Maria received a $1,000 check on 12/23/20YY from the local advertising agency for services performed earlier in the month.
11. Maria bought office furniture for $2,000 cash on 12/26/20YY.
12. Maria paid her utility bill for $300 on 12/26/20YY.
13. Maria provided one of her models for a hand lotion commercial and received $1,000 on 12/28/20YY.
14. Maria bought a calculator for $150 on 12/29/20YY.

Name: ______________________________ Date: ______________

						Page ____

General Journal

	Date	Account Number	Account	Description of Transaction	Debit	Credit
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12				.		
13						
14						
15						
16						

Name: ______________________________ Date: ______________

Page ____

General Journal

	Date	Account Number	Account	Description of Transaction	Debit	Credit
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
				Total		

Name: ____________________ Date: __________

B. Post the general journal to the summarized general ledger:

General Ledger							
December 20YY						**Beginning Balance**	**$0.00**
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

Total __________

Name: ______________________ Date: __________

C. Prepare the trial balance.

Period ending – December 31, 20YY						Beginning Balance	$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

Total ______________

Name: ______________________ Date: __________

D. **Use the journal entry (voucher) provided below to create an adjusting entry to record a depreciation expense of $360.00 for the business's office furniture for the period ending 12/31/20YY.**

Journal Voucher

NO:

Office: 1234 Office Month: __________ Year: __________

Ref. No	Description	General Ledger Account	Debit	Credit
		Column Totals		

Prepared by: ______________________ Date: __________

Authorized by: ______________________ Date: __________

Name: ______________________________ Date: ______________

E. Prepare the updated Trial Balance.

Period ending – December 31, 20YY						**Beginning Balance**	**$0.00**
	Date	**General Ledger Account**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

Total ______________________

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Journalizes all of the business transactions into the general journal correctly.
- Posts to the summarized general ledger correctly.
- Prepares the trial balance correctly.
- Completes the journal entry (voucher) properly.
- Prepares the updated trial balance correctly.
- Totals the debits and credits for the different accounts properly with no mathematical errors.

3

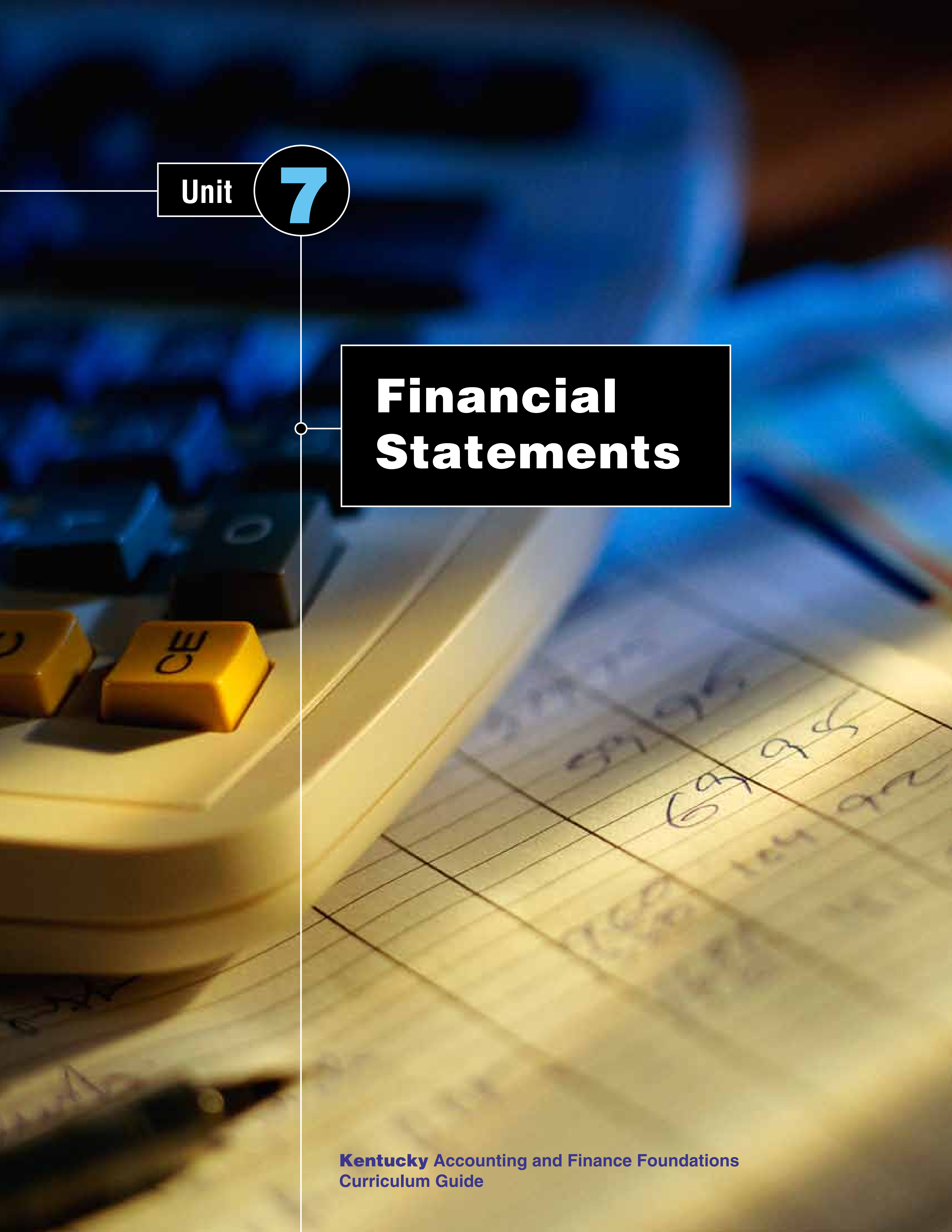
- Journalizes most of the business transactions into the general journal correctly.
- Posts to the summarized general ledger correctly.
- Prepares the trial balance correctly.
- Completes most of the journal entry (voucher) properly.
- Prepares the updated trial balance correctly.
- Totals the debits and credits for the different accounts properly with few mathematical errors.

2

- Journalizes some of the business transactions into the general journal correctly.
- Posts to the summarized general ledger correctly.
- Prepares the trial balance correctly.
- Completes some of the journal entry (voucher) properly.
- Prepares the updated trial balance correctly.
- Totals the debits and credits for the different accounts improperly or with many mathematical errors.

1

- Journalizes few or none of the business transactions into the general journal correctly.
- Posts to the summarized general ledger incorrectly.
- Incorrectly prepares the trial balance.
- Improperly completes the journal entry (voucher).
- Incorrectly prepares the updated trial balance.
- Totals the debits and credits for the different accounts improperly with numerous mathematical errors.



Unit 7

Financial Statements

In Units 5 and 6, we discussed the first four steps of the accounting cycle in detail. Those steps, you'll recall, are:

Step 1. Analyzing Transactions and Source Documents
Step 2. Journalizing Entries in the General Journal
Step 3. Posting the General Journal to the General Ledger
Step 4. Prepare adjusting entries, vouchers, and the trial balance.

In Unit 7, we move on to Step 5 of the accounting cycle, which involves preparing the financial statements.

Businesses use financial statements to communicate financial information to the public. (Remember the Disclosure Principle?). The four general purpose financial statements for companies are the:

1. Income Statement
2. Balance Sheet
3. Statement of Owner's Equity
4. Statement of Cash Flows

The income statement is prepared from the revenue and expense accounts, while the balance sheet is created using the assets and liability accounts. The net income from the income statement is combined with the dividends on the statement of retained earnings or the statement of owner's equity. Net income closes into retained earnings in the Stockholder's Equity section of the balance sheet.

The statement of cash flows explains the changes in cash and cash equivalents from one accounting period to the next. It shows cash inflows and cash outflows from a company's operating, investing, and financing activities for a particular accounting period. **Cash equivalents** are short-term, highly liquid assets or investments.

The items reported in the financial statements are organized into classes or categories known as **elements**. The FASB (Financial Accounting Standards Board) has identified ten elements of financial statements:

- Assets
- Liabilities
- Equity
- Common stock
- Revenue
- Expenses
- Distributions
- Net income
- Gains
- Losses

These elements represent broad classifications as opposed to specific items. The subclassifications of these elements are called **accounts**.

The information that financial statements contains is utilized in many different ways. Financial statement information is used to make investment and credit decisions; to assess cash flow prospects; and to learn more about business resources, claims to those resources, and changes to them. The individuals who use this information may be members of management, other individuals with direct financial interest in the company (e.g., investors and creditors), or even people with indirect financial interest in the company's activities (e.g., tax authorities, regulators, labor unions, customers, and consultants).

Managers from several different departments use financial statements. These decision makers include managers from the finance, operations, marketing, human resources, and accounting departments.

Financial statements are commonly used to evaluate a company's liquidity and profitability. **Liquidity** involves having enough money on hand to pay bills when they are due and to take care of unexpected needs for cash. **Profitability** is the ability of a company to earn income.

Corporations also use their financial statements to create annual reports. An **annual report** is an outline of a business's financial status. Corporate managers develop the annual report to explain the company's financial results for the year to stockholders. The annual report has the following components:

- The letter to the stockholders
- Financial highlights
- The four basic financial statements
- Notes to the financial statements
- A report of management's responsibilities
- Management's discussion and analysis of earnings
- The report of the certified public accountants (CPA's)

The **notes to the financial statements** contain information that aids users in interpreting the financial statements.

In addition to developing financial statements to include in the annual report, accountants also prepare interim financial statements throughout the year.

Lesson 18.1 The Income Statement

The income statement is a report of a company's operating performance, in financial terms, over a period of time. The income statement contains five major sections: revenue, cost of goods sold, gross profit, operating expenses, and net income (or net loss).

The heading on the income statement specifies four things:

- the name of the company
- the name of the financial statement
- the date
- unit of measure

The heading must contain all the above information; however, the date may change based on the type of financial statement. The income statement reporting date is for a specified period of time. The time period covered by the financial statement is called the **accounting period**.

Revenues – Expenses = Net Income

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Elements

Companies earn **revenues** from the sales of goods or services to customers. Revenues normally are reported for goods or services that have been sold to a customer **whether or not they have yet paid for them**. Many retail stores, such as fast food restaurants, receive payment immediately at the time of sale. Some stores, though, receive a promise of future payment called an **accounts receivable**, which is later collected in cash. In either case, the business recognizes total sales (both cash and accounts receivable) as revenue for the period. Some businesses also issue refunds or price allowances to customers for returned goods. These sales returns and allowances decrease the amount of sales, so they are subtracted from revenue.

Net Sales = Sales – Sales Returns and Allowances

Expenses represent the dollar amount of resources the entity used to earn revenues during the period. Expenses reported in one accounting period may actually be paid for in another accounting period. Some expenses require the payment of cash immediately, while others require payment at a later date.

Lesson 18.1 The Income Statement (cont'd)

Within the expense category is **cost of goods sold**. This expense is directly related to buying or producing the goods sold.

Each income statement has a beginning inventory which represents the value of goods is at the beginning of the period. Companies then add any purchases made during the period, which totals the *goods available for sale*. When inventory is counted at the end of the period (ending inventory), that inventory is subtracted from the goods available for sale. The difference is the cost of goods sold for the period.

Cost of Goods Sold = Beginning Inventory + Purchases – Ending Inventory

For a retailer, the costs of goods sold are the costs of purchasing merchandise. For a manufacturer, these costs are the total sum costs of direct labor and raw material.

Net income, also called the bottom line, is the excess of total revenues over total expenses. If total expenses exceed total revenues, a **net loss** is reported. When revenues and expenses are equal for the period, the business has operated at break even.

Lesson 18.1 The Income Statement (cont'd)

ABC Company
Income Statement
For the Year Ended
December 20XX
(in thousands of dollars)

Revenues		
Sales	$39,436	
Less: Sales Return and Allowances	2,000	
Total revenue		$37,436
Expenses		
Costs of goods sold		
Beginning inventory, December 1	92,000	
Purchases	19,480	
Goods available for sale	111,480	
Ending inventory, December 31	84,500	
Cost of goods sold		26,980
Gross profit on sales		10,456
Operating Expenses		
Salaries	2,000	
Rent	1,800	
Taxes	600	
Utilities	550	
Advertising	950	
Depreciation of equipment	840	
Other expenses	416	
Total operating expenses		7,156
Net income		$3,300

TIPS!

1. **Single vs. Double Underline**
One way of distinguishing totals and subtotals on financial statements is by the type of underline used. A single underline may indicate the result of addition or subtraction that is a subtotal. The double underline indicates the result of addition or subtraction that is a grand total.

2. **When are dollar signs appropriate?**
Writing a dollar sign for every monetary amount makes the financial statement more difficult to read. Ordinarily, dollar signs are included for the first amount in a list of values and for the totals. Even subtotals generally do not include the dollar sign. Another advantage of this convention is that it makes totals easier to locate.

Lesson 18.1 The Income Statement (cont'd)

Cost of Goods Sold

If you work for a company that buys and sells products, you can expect to work with the cost of sales or the cost of goods sold. Calculating the cost of goods sold, you'll recall, involves accounting for the products your company paid for during the accounting period. The beginning inventory, purchases, goods available for sale, and ending inventory all have a direct impact on the cost of goods sold. The cost of goods sold is usually included on the income statement. Here's an example of an income statement for a company that sells goods:

LMN Company
Income Statement
December 31, 20XX

Revenues		
Gross Sales		$125,000
Less: Sales Returns and Allowances		(2,000)
Net Revenues		**123,000**
Cost of Goods Sold		
Product Inventory		
Beginning Inventory January 1, 20XX		32,000
Add: Purchases	130,000	
Freight-In	20,000	
	150,000	
Less: Purchases Returns and Allowances	(2,000)	
Net Purchases		148,000
Goods Available for Sale		180,000
Less: Ending Inventory December 31, 20XX		(125,000)
Cost of Goods Sold		**55,000**
Operating Expenses		
Sales Salaries	22,000	
Advertising Expenses	2,500	
Bad Debt Expense	1,250	
Supplies Expenses	1,500	
Total Selling Expenses	27,250	
Office Salaries	15,000	
Insurance Expenses	995	
Office Supplies	1,500	
Depreciation Expense, Office Equipment	2,200	
Total General and Administrative Expenses	19,695	
Total Operating Expenses		**46,945**
Income Before Taxes		21,055
Income Tax		(2,100)
Net Income		**$18,955**

Lesson 18.1 The Income Statement (cont'd)

An important component to consider for the Cost of Goods Sold section of the income statement is the net cost of purchases. The **net cost of purchases** includes freight-in charges on the purchases, purchase returns and allowances, raw materials, labor, overhead costs, and/or discounts received by suppliers. The Purchase Returns and Allowances account includes products that your company returned because the products were wrong, defective, etc. The net cost of purchases is calculated as follows:

Add:	Purchases	130,000
	Freight-in	20,000
		150,000
Less:	Purchase discounts	$0.00
	Purchase Returns & Allowances	(2,000)
Net Purchases		**$148,000**

Freight charges and/or shipping costs may differ depending on your company's shipping agreement. For example, **FOB (free on board) shipping point** means that the seller of the goods delivers the goods to the shipping point at your company's expense. Goods shipped FOB (free on board) shipping point are included in your company's inventory upon shipment. **FOB (free on board) destination** means that the seller of the goods is required to deliver the goods to the destination point at its expense. Goods shipped FOB destination are included in your company's inventory when the products are received.

In Unit 6, we discussed the periodic inventory system and the perpetual inventory system. Under the **perpetual inventory system**, inventory is recorded throughout the accounting period. The inventory accounting records include the quantity of inventory as well as all the costs of the products your company bought or sold. Under the perpetual inventory system, the costs of the products are recorded in the Product Inventory account when the items are purchased. When the items are sold, the merchandise is transferred from the Product Inventory account to the Cost of Goods Sold account. The Purchase account is not used under the perpetual inventory system. Companies that specialize in retail or that sell high-value items tend to use the perpetual inventory system.

Under the **periodic inventory system**, the **cost of goods sold** is recorded at the end of the accounting period as an adjusting entry. To calculate the cost of goods sold under this system, the cost of the physical inventory, based on actual count, is deducted from the cost of goods available for sale. Journal entries are made at the end of the accounting period to zero the beginning inventory totals and to enter the ending inventory of the current period. Therefore, you will see the figure for inventory on hand only on the balance sheet.

Lesson 18.1 The Income Statement (cont'd)

Valuing Inventory

Under US GAAP, three different methods of inventory valuation are commonly used to calculate cost of goods sold under the Periodic Method. These methods include FIFO (first-in, first-out), LIFO (last-in, first-out) and average cost.

If your company uses the **FIFO method**, it sells the oldest units of inventory. For example, let us assume that your company bought 40 items in inventory early in an accounting period. The 25 products that you bought first cost $1.00 each to purchase, while the 15 newer items cost $2.00 each. Suppose that customers purchased 20 of those products during the period. Based on FIFO, you sold 20 of the oldest items in inventory. So, at the end of the accounting period, you would have five of the older $1.00 products left, along with all 15 of the newer $2.00 items. Therefore, your ending inventory balance would be $35.00.

If you company uses the **LIFO method** to value inventory costs, the opposite is assumed—the newest inventory is sold before any older products are sold. So, if we purchased the same 40 units in inventory early in the accounting period as in the example above, and customers still purchased 20 products, we can assume, under LIFO, that the products that cost $2.00 each were sold first—before selling the items that costs $1.00. As a result, at the end of the accounting period, you would have $20 in inventory (20 older units) remaining.

Let's get back to the cost of goods sold, though. Think for a moment about how much money your company spent on inventory during the accounting period. $55.00, right? ($1.00 X 25 = $25; $2.00 X 15 = $30; $25 + $30 = $55). Your company's cost of goods for the 20 products that it sold would be equal to the cost of the goods available for sale ($55) minus the value of the ending inventory ($20). You could also calculate the cost of goods sold by totaling the cost for each product sold during the period. In this case, using LIFO, that would be $35.00 (15 X $2.00 = $30; 5 X $1.00 = $5; $30 + $5 = $35). Either way, your cost of goods sold is the same.

Now for the third method for valuing inventory. The **average method** for accounting for inventory calculates inventory costs using the average cost of the products in inventory at the end of the accounting period. The average is determined by dividing the total cost of inventory available by the total number of products available in inventory (make sure to include the beginning inventory in both figures). Therefore, using the average method to value inventory costs, your company would take the average cost per product and multiply the number of products sold to determine the cost of goods sold. For example, if your company has 40 products available for sale during the accounting period (25 products that cost $1.00 each and 15 products that cost $2.00 each), the total cost of goods available for sale equals $55.00 ($25.00 + $30.00). The average cost per product equals $55.00 divided by 40 products, equals $1.38 per product. If 20 products are sold, value of ending inventory would be $27.60 (20 items remaining X $1.38). The cost of goods sold would be $27.60 as well (20 items sold X $1.38).

Gross Profit

After calculating the revenues and cost of goods sold (presented on the income statement), you can calculate the **gross margin or gross profit**. To do so, you should determine the difference between revenues and cost of goods sold. (Make sure that you do this before deducting general and administrative expenses.) If the gross profit exceeds the operating expenses and income taxes, your company is likely to be successful.

Lesson 18.1 The Income Statement (cont'd)

Sales Returns and Allowances

The **Sales Returns and Allowances** account—which is used in both the periodic and perpetual inventory systems—tracks product returns made by customers who were not satisfied with products, along with allowances (discounts) given to other dissatisfied customers in lieu of them returning their purchases. The account, a contra-revenue account, has a normal debit balance and is deducted from sales or revenues. (Remember: A **contra account** is an account that offsets another account.) A contra-asset account has a credit balance and offsets the asset with a debit balance. A contra-liability has a debit balance and offsets the credit balance of the corresponding liability. A contra-revenue account would offset revenues with a debit balance and the corresponding revenue account.

Tracking the Sales Returns and Allowances contra-account can help you to monitor the level of satisfaction that customers have with the products that your company sells.

Under the perpetual inventory system, if a customer returns a product, the value of that product will be transferred back into the inventory account—as long as the returned product can be resold. You would record a product return as the following journal entry:

	Debit	Credit
06/22/20YY		
Sales Returns and Allowances	$2,000	
Accounts Receivable		2,000
Record the Return of Product X from Customer Z.		

The Sales Returns and Allowance account is used to determine the net sales, or net revenues. **Net revenues** are total sales less the sales returns and allowances. You would present the net revenues on the income statement in the Revenue section as follows:

ABC Company
Income Statement (Partial Statement)
December 31, 20XX

Revenues	
Gross Sale	125,000
Less: Sales Returns and Allowances	(2,000)
Net Revenues	**$123,000**

Bad Debt and Uncollectible Receivables

The preferred method for accounting for uncollectible or bad debt expense is **the allowance method of accounting for bad debts**, which is based on experience according to US GAAP. To calculate the bad debt or uncollectible receivables, you should use a percentage of the accounting period's sales. Using this approach (called the percentage of sales method), a percentage of each sale is debited to the Bad Debt Expense account recorded on the income statement and credited to the Allowance for Doubtful Accounts on the balance sheet.

Lesson 18.1 The Income Statement (cont'd)

Let's say that the ABC Company reviewed the sales for a particular period and determined, based on past experience, that one percent of those sales is uncollectible. Also assume that at the end of that period, December 31, 20YY, the total revenues were $125,000. So, $1,250 (one percent of $125,000) should be recorded as bad debt expense as follows:

12/31/20YY	Debit	Credit
Bad Debt Expense	$1,250	
Allowance for Doubtful Accounts		$1,250

To increase the Bad Debt Expense and the Allowance for Uncollectible Accounts at 1% of the sales for the accounting period ending 12/31/20YY.

Estimating the bad debt expense as a percentage of sales is consistent with the matching principle concept of US GAAP—the bad debt is recorded in the same time period as the associated revenue. You should record the bad debt expenses under the operating expenses on the income statement.

ABC Company
Income Statement (Partial Statement)
December 31, 20XX

Operating Expenses			
Sales Salaries		22,000	
Advertising Expenses		2,500	
Bad Debt Expense		1,250	
Supplies Expenses	1,500		
Total Selling Expenses		27,250	
Office Salaries		15,000	
Insurance Expenses		995	
Office Supplies		1,500	
Depreciation Expense, Office Equipment		2,200	
Total General and Administrative Expenses		19,695	
Total Operating Expenses			**$46,945**

Lesson 18.1 The Income Statement (cont'd)

Worksheets

In Unit 6, we discussed computerized accounting systems that allow all transactions to flow through the accounting cycle electronically. If you want to review these business transactions more closely when using such a system, you can run a number of different reports. The reports allow you to analyze and research the business transactions.

It's important to see how the transactions flow manually in a worksheet (sometimes referred to as working papers). Some accountants use worksheets to manually compute business transactions to see that they flow from the trial balance to the balance sheet correctly. Here is an example of a worksheet:

ABC Company
Work Sheet
For the Month Ending December 31, 20YY

	Account Name	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
110	Cash	2,500				2,500				2,500	
120	Accounts Receivable	1,200			(b) 200	1,000				1,000	
130	Supplies	500				500				500	
150	Office Equipment	1,750				1,750				1,750	
160	Office Furniture	1,420				1,420				1,420	
165	Accumulated Depreciation				(a) 360		360				360
170	Store Equipment	2,300				2,300				2,300	
210	Accounts Payable		5,520				5,520				5,520
310	Owner's Capital		12,150				12,150				12,150
320	Owner's Draw	9,000				9,000				9,000	
330	Income Summary										440
410	Revenue, Services		2,500				2,500		2,500		
420	Revenue, Other		250				250		250		
422	Sales and Returns Allowances			(b) 200		200		200			
510	Rent Expense	1,200				1,200		1,200			
520	Utilities Expense	550				550		550			
530	Depreciation Expense			(a) 360		360		360			
		20,420	20,420	560	560	20,780	20,780	2,310	2,750	18,470	18,470
								Net Income =			
								Revenues - Expenses =			
								$2,750			
								($2,310)			
								$440			

18.1.1 Student Handout: Income Statement

Key Terms

Total sales: Earnings from the sale of goods or the performance of service

Sales returns or allowances: Refunds or adjustments for unsatisfactory merchandise or service

Net revenues or net sales: The difference between the total sales and the sales returns or allowances

Cost of goods sold: Cost to the business for merchandise or goods sold

Gross profit or gross margin: The difference between the net sales and the cost of goods sold

Operating expense: The overhead or cost incurred in operating the business

Net income or net profit: The difference between gross profit (margin) and operating expenses

How to Prepare an Income Statement

1. Use the adjusted trial balance to record *net sales*
   - (a) Record gross sales
   - (b) Record sales returns and allowances
   - (c) Subtract sales return and allowances from gross sales

   Net Sales = Gross Sales – Sales Returns and Allowances

2. Use the adjusted trial balance to record *cost of goods sold*
   - (a) Record cost of beginning inventory
   - (b) Record cost of purchases
   - (c) Record cost of ending inventory
   - (d) Add cost of beginning inventory and cost of purchases and subtract cost of ending inventory

Cost of Goods Sold = Cost of Beginning Inventory + Cost of Purchases – Cost of Ending Inventory

3. Record *gross profit from sales:* subtract cost of goods sold from net sales

   Gross Profit from Sales = Net Sales – Cost of Goods Sold

4. Use the adjusted trial balance to record total *operating expenses:* list the operating expenses and add the entries.
5. Record *net income:* subtract the operating expenses from the gross profit.

   Net Income = Gross Profit from Sales – Operating Expenses

18.1.2 Income Statement Questions

1. Learning which items belong in each of the income statement categories is an important first step in understanding their meaning. On your own, mark each of the following income statement items as revenue (R) or expense (E).

___ Cost of Goods Sold	___ Sales
___ Income Tax	___ Selling Expenses

2. Whitney's Shoe Store had sales of $85,650. Sales returns and allowances for the year total $1,450. What were the net sales?
3. In the month of June, Wes's Basketball Shop had sales of $8,790. In that same month, sales returns and allowances were $670. How much were Wes's net sales?
4. Find the cost of goods sold if the beginning inventory was $42,980; purchases made during the period totaled $12,700; and the inventory on hand at the end of the period was $39,875.
5. If beginning inventory March 1 totaled $65,500; total purchases during March totaled $18,980; and the ending inventory on March 31 was $75,340; what is the cost of goods sold?
6. Shiloh's Skate Shop had gross profit of $24,500 in June. It also had these expenses for the month: salaries and wages, $4,300; rent, $1,500; utilities, $950; advertising, $145; and other expenses, $1,075. What was the store's net income or net loss?
7. What is the name of the operating expense account on the income statement for uncollectible accounts?
8. What are the three methods of calculating the value of inventory?
9. What does it mean to ship something FOB shipping point?
10. What does it mean to ship something FOB destination point?

18.1.3 Income Statement Word Problems

1. Tyler's Supply Company had sales of $456,980 in 2012. Sales returns and allowances for that year were $3,875. What were Tyler's net sales?
2. Nathan's Bookstore had a beginning inventory on January 1 of $297,530. The amount of purchases throughout the month was $432,640. The store's ending inventory on January 31 was $310,000. What was the cost of goods sold for the month?
3. A company's net sales for the month were $64,000. The cost of goods sold for the same period was $37,580. What is the company's gross profit for the month?
4. LJ Company had a gross profit of $56,930 during October. During the same month it had these expenses: salaries, $35,795; advertising, $2,300; insurance, $8,700; and utilities, $1,940.
   a. What were LJ Company's total expenses?
   b. What was the amount of net income or net loss?
5. For the month of June, total sales at Carson Paint and Supply were $95,620. The sales returns and allowances for the month totaled $980. What were the net sales for the month?
6. If sales returns and allowances for a period total $1,560 and net sales were $67,890, what was the amount of sales for the period?
7. Find the cost of goods sold if the beginning inventory is $3,560, purchases made are $2,800, and ending inventory is $3,800.
8. If total sales were $96,940.23, sales returns and allowances were $4,210.75, and cost of goods sold were $43,922.80, what were the net sales?
9. A lumber store had net sales of $987,000 for the month of July. The cost of goods sold during the month was $645,000, and operating expenses were $212,000. Find the gross profit on sales for the month of July. Find the net income for the month.

18.1.3 Income Statement Word Problems (cont'd)

10. The Cameron Dress Boutique gives the following information for its operations: net sales, $234,985; inventory at the beginning of the month, $64,740; purchases during the month, $134,250; inventory at the end of the month, $59,260; operating expenses, $79,235. Write these figures in the correct spaces on the form below and show the:

    a. cost of goods sold
    b. gross profit on sales
    c. net income or net loss

    (Use a ( ) to indicate net loss.)

Cameron Dress Boutique
Income Statement
For Month Ended December 31, 20XX

Net Sales		______
Less Cost of Goods Sold		
Inventory, December 1		______
Add Purchases		______
Goods Available for Sale		______
Less Inventory, December 31		______
Cost of Goods Sold	a.	______
Gross Profit on Sales	b.	______
Less Operating Expenses		______
Net income (or loss)	c.	______

Lesson 18.2 Statement of Owner's Equity

The statement of owner's equity (also commonly referred to as either the statement of stockholder's equity or the statement of retained earnings) reports the way that net income and the distribution of dividends affected the owner's financial equity during the accounting period. Like all major financial statements, the statement of owner's equity has a very specific heading. The date for the statement of owner's equity is over a period of time.

The Owner's Equity section includes the Owner's Capital and Owner's Drawing accounts for a sole proprietor business. However, corporations obtain their capital by issuing stock; therefore, the Owner's Equity section is called Stockholder's Equity and includes Capital Stock, Retained Earnings, and Dividend accounts.

The net income earned during the accounting period increases the balance of retained earnings, showing the relationship of the income statement to the balance sheet. The declaration of dividends to the stockholders decreases retained earnings. The retained earnings equation that describes these relationships is:

Beginning Capital + Net income – Owner's Drawing = Ending Capital Account

OR

Beginning Retained Earnings + Net Income – Dividends = Ending Retained Earnings

Statement of Owner's Equity (Sole Proprietor)

The statement begins with beginning-of-the-year capital. The current year's net income reported on the income statement is added, and the current year's owner drawings are subtracted from this amount.

ABC Company
Statement of Owner's Equity
For the Year Ended December 31, 20XX
(in thousands of dollars)

Casey Follows, Capital, January 1, 20XX	$6,805
Add: Net income	3,300
Less: Drawing	(1,000)
Casey Follows, Capital, December 31, 20XX	$9,105

Lesson 18.2 Statement of Owner's Equity (cont'd)

Statement of Owner's Equity (Corporation)

Fitness Forever, Inc.
Statement of Stockholder's Equity
For the Year Ended December 31, 20XX

Common			
$ 90.00 Par Value			
January 1, 20XX, 700 shares issued		$63,000	
Issued during Current Year, 100 Shares		9,000	
Balance, December 31, 20XX, 800 Shares Issued			$72,000
Retained			
Balance, January, 20XX		97,500	
Net Income for the Year Ended Dec. 31, 20XX	$33,955		
Less: Dividends Declared during Current Year	8,000		
Net Increase in Retained Earnings		25,955	
Balance, December 31, 20XX			123,455
Total Stockholder's Equity, December 31, 20XX			$195,455

Lesson 18.3 The Balance Sheet

A balance sheet describes the financial situation of a company at a specific point in time. (Think about it being a snapshot of a company at a particular time.) The balance sheet lists the assets of a business and the sources of those assets. The name **balance sheet** comes from the accounting equation. Remember in Chapter 5, you determined the accounting equation must always be in balance. One way to make sure you balance is to use the accounts in the accounting equation to develop a balance sheet. This equation is also a way to represent a company's net worth.

A balance sheet can be prepared at any point in time to show the assets, liabilities, and owner's equity for a company.

The heading on the balance sheet specifies four things:

- the name of the company
- the name of the financial statement
- the date
- unit of measure

Note the date on the balance sheet is on a specific date. Also, notice the three major headings: Assets, Liabilities, and Owner's Equity.

Elements

Assets are the economic resources owned by a company. The number of asset accounts varies depending on the nature of a company's organization. Current assets are assets that are normally turned into cash within a year, while **plant and equipment** are assets that are used in transacting business and are more long term in nature. Every asset on the balance sheet is measured at the total cost incurred to acquire it. Balance sheets do not show the amounts for which assets could currently be sold.

Liabilities are the company's debts or obligations. **Current liabilities** are those that must be paid shortly. **Long-term liabilities** are those that will be paid over a long period of time (more than one year). The accounts payable category arises from the purchase of goods or services from suppliers. The notes payable section results from cash borrowings based on a formal written debt contract with a lending institution, such as a bank.

Owner's (stockholder's) equity indicates the amount of financing provided by owners of the business as well as earnings. The investment of cash and other assets in the business by the owners is called **contributed capital**. The amount of earnings (profits) reinvested in the business (and thus not distributed to stockholders in the form of dividends) is called **retained earnings**.

Assets = Liabilities + Owner's Equity

Lesson 18.3 The Balance Sheet (cont'd)

Assume that the figures below are the final totals in an example of an adjusted trial balance. How would you organize these totals into a financial statement?

Assets					-	Liabilities	+	Owner's Equity				
Cash	+	Supplies	+	Prepaid Insurance	-	Accounts Payable/ Allen Company	+	Whitney Newhouse, Capital	+	Sales	-	Expenses
2,450	+	540	+	215	=	140	+	3,000	+	1,470	-	1,405

Here is what the balance sheet based on those figures should look like:

Name of Company **Balance Sheet** **May 30, 20XX**			
Assets		**Liabilities**	
Cash	2,450	Allen Company	140
Supplies	540	**Owner's Equity**	
Prepaid Insurance	215	Whitney Newhouse, Capital	3,065
Total Assets	3,205	Total Liabilities and Owner's Equity	3,205

You may be asking yourself, "Why is my capital amount different, and where are sales and expenses?" Sales and expenses have a direct effect on the owner's equity in the company. To simplify the balance sheet, the capital figure represents capital, sales, and expenses. To get the correct figure, you take the ending capital + sales - expenses. For this problem, 3,000 + 1,470 - 1,405 = 3,205.

Adjusting Entries

A write-off of accounts receivable, which is reported on the balance sheet, has no effect on income because, as you'll recall, the allowance approach bases any bad debt expense on an estimate. The write-off is simply a removal of the receivable and a reduction of the allowance account. You would record the adjusting entry as follows:

	Debit	Credit
06/30/20YY	Debit	Credit
Allowance for Doubtful Accounts	$500	
Accounts Receivable		$500
To record the write-off of a $500 accounts receivable for customer S.		

Lesson 18.3 The Balance Sheet (cont'd)

When you record the Allowance for Doubtful Accounts contra account, you should record the amount under the Current Assets section of the balance sheet and deduct the accumulated amount for accounts receivable. You could illustrate this on the balance sheet as follows:

ABC Company
Balance Sheet
December 31, 20XX
(in thousands of dollars)

Assets	
Current Assets	
Cash	$2,000
Accounts Receivable	7,500
Less: Allowance for Doubtful Accounts	(1,250)
Short-term Investments	5,000
Product Inventory	125,000
Prepaid Rent	350
Property, Plant, & Equipment	
Office Equipment	3,000
Less: Accumulated Depreciation	(2,500)
Total Assets	**$139,100**
Liabilities	
Current Liabilities	
Accounts Payable	$1,789
Long-term Liabilities	
Long-term Notes Payable	135,000
Total Liabilities	**136,789**
Stockholder's Equity	
Retained Earnings	2,311
Total Stockholder's Equity	**2,311**
Total Liabilities & Stockholder's Equity	**$139,100**

Lesson 18.3 The Balance Sheet (cont'd)

The **net realizable value** of accounts receivable is the balance of the Accounts Receivable account adjusted for receivables that may be uncollectible and for sales returns and allowances. The write-off of the accounts receivable does not change the net realizable value of accounts receivable because the Allowance for Doubtful Accounts is a contra account for accounts receivable. Therefore, the net effect is zero on the balance sheet.

Suppose that after recording the write-off of the accounts receivable, Customer S decides that he wants to pay off the amount that he owes. First, you would reverse the entry of the write-off. Then, you would record the cash received as a normal entry as revenues received, as if the receivable had never been written off.

18.3.1 Student Handout: Balance Sheet Key Terms

Assets

<u>Current Assets</u> - assets that can be converted to cash within 1 year

Petty Cash: Currency held in the petty cash fund on business premises

Cash in Bank: Current balance in business bank accounts

Accounts Receivable: Amounts that customers owe the business for merchandise or services received but not yet paid for them.

Notes Receivable: Promissory notes and other amounts owed to the business; money advanced or loaned to others by the business

Merchandise Inventory: Value of merchandise on hand to sell to customers

Office, Store Supplies: Value of supplies on hand such as stationary, pens, file folders, labels

<u>Plant and Equipment</u> - (fixed assets) assets that are used for more than 1 year

Business Equipment: Value of equipment used by the business (tools, display cases, machinery)

Office Furniture & Equipment: Value of office furniture (desks, chairs, filing cabinets) and equipment (computers, copiers, printers)

Buildings: Value of the buildings owned by the business

Land: Value of the property and grounds on which the buildings stand and other land owned by the business

Liabilities

<u>Current Liabilities</u> - liabilities expected to be paid within 1 year

Accounts Payable - Money owed for merchandise, services or materials the business has received but has not paid for yet.

Notes Payable - Promissory notes that the business owes to a bank or formal lender

Wages Payable - Salaries that a business owes to its employees

<u>Long-term Liabilities</u> - liabilities that are not expected to be paid within 1 year

Mortgage Payable - The debt owed on the buildings and (and that the business owns)

Shareholder's Equity

As you recall, investments made by the owner of a sole proprietorship are recorded in the Owner's Capital account. If a business is organized as a corporation, the Owner's Capital account is replaced by an account named Common Stock. Common stock represents the money paid by the stockholders for their shares of stock purchased.

Remember that the annual profit was added to the Owner's Capital account at the end of the year. In a corporation all of the profits retained in the business are shown in an account called Retained Earnings. These two accounts, Common Stock and Retained Earnings, make up the Shareholder's Equity section of the corporate balance sheet.

18.3.1 Student Handout: Balance Sheet Key Terms (cont'd)

How to Prepare a Balance Sheet

1. Use the adjusted trial balance to record the total assets, working by asset category.
   (a) List the current assets, and draw a single line underneath the last entry.
   (b) Add the entries, and record the total current assets, drawing a single line underneath the total.
   (c) Repeat step 1 (a) for plant and equipment assets and 1(b) for total plant and equipment assets.
   (d) Add the category totals, and draw a double line underneath the grand total.

   Total Assets = Total Current Assets + Total Plant and Equipment

2. Use the adjusted trial balance to record the total liabilities, working by liability category.
   (a) Repeat step 1(a) for current liabilities and step 1(b) for total current liabilities.
   (b) Repeat step 1(a) for long-term liabilities and step 1(b) for total long-term liabilities.
   (c) Add the category totals, and draw a double line underneath the grand total.

   Total Liabilities = Total Current Liabilities + Total Long-Term Liabilities

3. Use the adjusted trial balance and the income statement to record total owner's equity.
   (a) List the equity entries, and draw a single line underneath the last entry.
   (b) Add the entries, and draw a single line underneath the total.

4. Record the total liabilities and owner's equity: add the total liabilities to the total owner's equity, and draw a double line underneath the grand total.

   Total Liabilities and Owner's Equity = Total Liabilities + Total Owner's Equity

5. Confirm that the double line grand totals from step 1 and 4 are the same.

   Total Assets = Total Liabilities + Owner's Equity

Questions

1. If a company has $24,130 in assets but owes creditors $9,670, how much is the capital or owner's equity of the business?
2. Nathan's Card Shop had these assets on August 31: Cash, $15,970; Accounts Receivable, $38,152; Merchandise Inventory, $185,643; Supplies, $3,200. The company owed $165,000 in Accounts Payable. What is the total amount of the company's assets, liabilities, and owner's equity?

18.3.2 Balance Sheet Word Problems & Exercise

1. If a pet store has assets of $219,542 and liabilities of $75,890, what is the amount of owner's equity?

2. Nathan's Card Shop had these assets on August 31: Cash, $3,600; Accounts Receivable, $4,890; Merchandise Inventory, $84,360; Supplies, $2,150; Store Equipment, $21,345; and Delivery Equipment, $22,567.

    a. What were Nathan's current assets?
    b. What were Nathan's long-term assets?
    c. What were Nathan's total assets?

3. Alan's Flower Shop owed the following creditors for merchandise and store supplies: Tulip Suppliers, $4,289; Rose Garden, $3,921; Lily Wholesalers, $8,452; and Lilac, Inc., $4,071. The business also owed $65,000 to Farmers Bank on a 30-year mortgage and National Bank $15,000 on a 5-year loan.

    a. What were the business's current liabilities?
    b. What were the business's long-term liabilities?

4. Tammy owns a craft store with these assets: Cash, $5,500; Merchandise, $98,000; Store Equipment, $14,890; and Store Supplies, $1,200. She has accounts payable of $12,500.

    a. What is the amount of Tammy's total assets?
    b. What is the amount of Tammy's liabilities?
    c. What is the amount of Tammy's owner's equity?

5. Sanders owns a hobby store with these assets: Cash, $8,900; Merchandise, $11,150; Store Equipment, $19,870; and Store Supplies, $2,870. He has accounts payable of $39,500.

    a. What is the amount of Sanders' total assets?
    b. What is the amount of Sanders' liabilities?
    c. What is the amount of Sanders' owner's equity?

18.3.2 Balance Sheet Word Problems & Exercise (cont'd)

6. On June 30, Carl's Car Company had the following assets and liabilities. Complete the balance sheet by calculating:

   a. total assets
   b. total liabilities
   c. capital
   d. total liabilities and capital

Carl's Car Company
Balance Sheet
June 30, 20XX

Cash	$2,834		Liabilities	$7,530
Inventory	43,713		Accounts Payable	12,780
Shop Supplies	2,570		First National Bank	
Shop Equipment	28,800		Total Liabilities	b. ________
Total Assets	a. ________		Carl Sherrow, Capital	c. ________
			Total Liabilities and Capital	d. ________

18.3.2 Balance Sheet Word Problems & Exercise (cont'd)

7. Exercise - Balance Sheet - Q-Tex Corporation

The following account balances were obtained from the general ledger accounts as of December 31, 20XX. Prepare an expanded balance sheet for the Q-Tex Corp.

Accounts Payable	$10,750
Accounts Receivable	6,700
Building	37,500
Cash in Bank	7,500
Common Stock	$100 Par Value, 500 shares issued
Land	22,000
Merchandise Inventory	14,800
Mortgage Payable	25,000
Notes Payable	5,700
Office Equipment	18,000
Office Supplies	1,200
Retained Earnings	15,500
Sales Tax Payable	750

18.3.2 Balance Sheet Word Problems & Exercise (cont'd)

7.

Q-Tex Company
Balance Sheet
December 31, 20XX

ASSETS

Current Assets

______________	______	
______________	______	
______________	______	
______________	______	
Total Current Assets		______

Property, Plant & Equipment

______________	______	
______________	______	
______________	______	
Total Property, Plant & Equipment		______
TOTAL ASSETS		======

LIABILITIES

Current Liabilities

______________	______	
______________	______	
______________	______	
Total Current Liabilities		______

Long-Term Liabilities

______________	______	
Total Long-Term Liabilities		______
TOTAL LIABILITIES		______

STOCKHOLDER'S EQUITY

______________________	______	
______________________	______	
TOTAL STOCKHOLDER'S EQUITY		______
TOTAL LIABILITIES & SHAREHOLDER'S EQUITY		======

18.3.4 Comprehensive Financial Statement Problems

1. **A to Z Auto Parts**

   A) Prepare the income statement for the period ended December 31, 20XX, using the account balances provided. Include component percentages for net sales, cost of merchandise sold, gross profit on sales, total expenses, and net income.

   B) Compute the ending balance in the Owner's Capital account as of December 31, 20XX, using the account balances and information provided.

   C) Prepare the balance sheet as of December 31, 20XX, using the account balances and information provided.

2. **Electron Games**

   A) Prepare the income statement for the period ended December 31, 20XX, using the account balances provided. Include component percentages for net sales, cost of merchandise sold, gross profit on sales, total expenses, and net income.

   B) Compute the ending balance in the Owner's Capital account as of December 31, 20XX, using the account balances and information provided.

   C) Prepare the balance sheet as of December 31, 20XX, using the account balances and information provided.

18.3.4 Comprehensive Financial Statement Problems (cont'd)

A to Z Auto Parts
Income Statement
For Year Ended December 31, 20XX

			%OF NET SALES
Revenue:			
Sales			
Less: Sales Returns & Allowances			
Net Sales			
Cost of Merchandise Sold:			
Merchandise Inventory, Jan. 1, 20XX			
Purchases			
Total Cost of Merchandise Available for Sale			
Less Merchandise Inventory, Dec. 31, 20XX			
Cost of Merchandise Sold			
Gross Profit on Sales			
Expenses:			
Advertising Expense			
Credit Card Fee Expense			
Insurance Expense			
Miscellaneous Expense			
Rent Expense			
Supplies Expense - Office			
Supplies Expense - Store			
Utilities Expense			
Total Expenses			
Net Income			

18.3.4 Comprehensive Financial Statement Problems (cont'd)

A to Z Auto Parts
Ledger Account Balances
For Year Ended December 31, 20XX

	DEBIT	CREDIT
Cash	23,780	
Petty Cash	300	
Accounts Receivable	9,624	
Merchandise Inventory - 12/31/20XX	215,420	
Supplies - Office	1,480	
Supplies - Store	2,554	
Prepaid Insurance	2,286	
Accounts Payable		9,666
Sales Tax Payable		1,788
Craig Payne, Capital		212,800
Craig Payne, Drawing	37,350	
Sales		286,500
Sales Returns & Allowances	1,700	
Purchases	160,700	
Advertising Expense	5,580	
Credit Card Fee Expense	2,940	
Insurance Expense	2,700	
Miscellaneous Expense	2,398	
Rent Expense	18,000	
Supplies Expense - Office	4,000	
Supplies Expense - Store	3,310	
Utilities Expense	3,230	
Merchandise Inventory - 1/1/20XX	228,820	

18.3.4 Comprehensive Financial Statement Problems (cont'd)

Calculate Owner's Equity at 12/31/XX

Beginning Owner's Capital _______________
+ Net Income/(- Net Loss) _______________
- Owner's Drawing _______________
= Owner's Capital, 12/31/XX _______________

A to Z Auto Parts
Balance Sheet
December 31, 20XX

ASSETS		
Cash		
Petty Cash		
Accounts Receivable		
Merchandise Inventory		
Supplies – Office		
Supplies – Store		
Prepaid Insurance		
TOTAL ASSETS		
LIABILITIES		
Accounts Payable		
Sales Tax Payable		
TOTAL LIABILITIES		
OWNER'S EQUITY		
Craig Payne, Capital		
TOTAL LIABILITIES + OWNER'S EQUITY		

18.3.4 Comprehensive Financial Statement Problems (cont'd)

Electron Games
Income Statement
For Year Ended December 31, 20XX

			% OF NET SALES
Revenue:			
Sales			
Less: Sales Returns & Allowances			
Net Sales			
Cost of Merchandise Sold:			
Merchandise Inventory, Jan. 1, 20XX			
Purchases			
Total Cost of Merchandise Available for Sale			
Less Merchandise Inventory, Dec. 31, 20XX			
Cost of Merchandise Sold			
Gross Profit on Sales			
Expenses:			
Advertising Expense			
Credit Card Fee Expense			
Insurance Expense			
Miscellaneous Expense			
Rent Expense			
Supplies Expense - Office			
Supplies Expense - Store			
Utilities Expense			
Total Expenses			
Net Income			

18.3.4 Comprehensive Financial Statement Problems (cont'd)

Electron Games
Ledger Account Balances
For Year Ended December 31, 20XX

	DEBIT	CREDIT
Cash	24,490	
Petty Cash	500	
Accounts Receivable	11,230	
Merchandise Inventory -12/31/20XX	251,320	
Supplies - Office	1,720	
Supplies - Store	2,980	
Prepaid Insurance	2,640	
Accounts Payable		11,280
Sales Tax Payable		2,080
John Forbes, Capital		245,540
John Forbes, Drawing	43,550	
Sales		355,760
Sales Returns & Allowances	23,500	
Purchases	187,500	
Advertising Expense	6,520	
Credit Card Fee Expense	3,430	
Insurance Expense	3,190	
Miscellaneous Expense	2,550	
Rent Expense	21,600	
Supplies Expense - Office	4,670	
Supplies Expense - Store	3,860	
Utilities Expense	3,770	
Merchandise Inventory - 1/1/20XX	266,960	
	599,020	614,660

18.3.4 Comprehensive Financial Statement Problems (cont'd)

Calculate Owner's Equity at 12/31/XX

Beginning Owner's Capital ______________

+ Net Income/(- Net Loss) ______________

- Owner's Drawing ______________

= Owner's Capital, 12/31/XX ______________

Electron Games
Balance Sheet
December 31, 20XX

ASSETS		
Cash		
Petty Cash		
Accounts Receivable		
Merchandise Inventory		
Supplies – Office		
Supplies – Store		
Prepaid Insurance		
TOTAL ASSETS		
LIABILITIES		
Accounts Payable		
Sales Tax Payable		
TOTAL LIABILITIES		
OWNER'S EQUITY		
John Forbes, Capital		
TOTAL LIABILITIES + OWNER'S EQUITY		

Lesson 18.4 Statement of Cash Flows

The statement of cash flows divides cash inflows (receipts) and outflows (payments) into three primary categories of cash flows in a typical business:

1. Cash flows from operating activities
2. Cash flows from investing activities
3. Cash flows from financing activities

The heading identifies the name of the company, the title of the report, the unit of measure used, and the date. Like the income statement, the cash flow statement covers a specified period of time.

As discussed earlier, reported revenues do not always equal cash collected from customers because some sales may be on credit (accounts receivable). Also, expenses reported on the income statement may not be equal to the cash paid out during the period because expenses may be incurred in one period and paid for in another. Because the income statement does not provide information concerning cash flows, accountants prepare the statement of cash flows to report inflows and outflows of cash. The cash flow statement equation describes the causes of the change in cash reported on the balance sheet from the end of the last period to the end of the current period:

+/- Cash Flows from Operating Activities (CFO)
+/- Cash Flows from Investing Activities (CFI)
+/- Cash Flows from Financing Activities (CFF)
Change in Cash

Elements

Cash flows from operating activities are cash flows that are directly related to earning income. This section lists cash received from customers and cash payments from normal daily activities. The net amount is reported as cash provided by operating activities.

Cash flows from investing activities include cash flows related to the acquisition or sale of the company's productive assets. Productive assets are purchases required to help the business keep up with demand.

Cash flows from financing activities are directly related to the financing of the enterprise itself. They involve the receipt or payment of money to investors and creditors (except for suppliers).

Lesson 18.4 Statement of Cash Flows (cont'd)

ABC Company
Statement of Cash Flows
For the Year Ended December 31, 20XX
(in thousands of dollars)

Cash flows from operating activities	
Cash collected from customers	$33,563
Cash paid to suppliers and employees	(30,854)
Cash paid for interest	(450)
Cash paid for taxes	(1,190)
Net cash flow from operating activities	1,069
Cash flows from investing activities	
Cash paid to purchase manufacturing equipment	(1,625)
Net cash flow from investing activities	(1,625)
Cash flows from financing activities	
Cash received from bank loan	1,400
Cash paid for dividends	(1,000)
Net cash flow from financing activities	400
Net decrease in cash during the year	(156)
Cash at the beginning of the year	**5,051**
Cash at the end of the year	**$4,895**

Lesson 18.5 Relationship Among Financial Statements

The relationship among the financial statements is imperative to understanding the components of each statement. Our discussion so far has focused on:

1. What elements are reported in each statement
2. How the elements are related by the equation for each statement
3. How the elements are important to the decisions of investors, creditors, and others

We've also seen how the statements are related to each other. We've learned:

1. Net income or net loss from the income statement results in an increase or decrease in ending capital on the statement of owner's equity.
2. Ending capital from the statement of owner's equity is the value of owner's equity on the balance sheet.
3. The change in cash on the statement of cash flows added to the beginning of the year in cash is equal to the end of the year cash on the balance sheet.

Lesson 18.5 Relationship Among Financial Statements (cont'd)

1 Income Statement

Revenue	$37,436
- Expenses	34,136
Net Income	$3,300

2 Statement of Owner's Equity

Beginning Owner's Equity	$6,805
+ Net Income	3,300
- Owner's Drawings	(1,000)
Ending Owner's Equity	$9,105

3 Statement of Cash Flows

+/- Cash Flows from Operating Activities	$1,069
+/- Cash Flows from Investing Activities	(1,625)
+/- Cash Flows from Financing Activities	400
Changes in Cash	(156)
+ Cash at the beginning of the period	5,051
Cash at the end of the period	$4,895

Balance Sheet

Cash	$4,895
Other Assets	20,266
Total Assets	$25,261
Liabilities	$16,156
Owner's Capital	9,105
Total Liabilities and Owner's Equity	$25,261

Look on the income statement above. Net income is $3,300. To complete a statement of owner's equity, you must have the net income. Once the ending owner's equity is determined, that number is used to represent owner's capital on the balance sheet. The cash on the balance sheet is determined from the final cash on hand figure from the statement of cash flows.

Think about financial statements as being one big jigsaw puzzle; if one piece is missing, you don't have a complete project/puzzle.

Lesson 18.5 Relationship Among Financial Statements (cont'd)

Financial Statement	Purpose	Structure	Examples of Content
Balance Sheet (Statement of Financial Position)	Reports the financial position (economic resources and sources of financing) of an accounting entity at a point in time.	Assets = Liabilities + Owner's Equity	Cash, accounts receivable, plant and equipment, notes payable, contributed
Income Statement (Statement of Income, Statement of Earnings, Statement of Operations)	Reports the accountant's primary measure of economic performance during an accounting period.	Revenues -Expenses Net Income	Sales, revenue, cost of goods sold, selling expense, general expenses
Statement of Changes in Owner's Equity	Reports the way that net income and the distribution of dividends affected the financial position of the company during the accounting period.	Beginning Capital + Net Income + Investments -Net Loss -Drawings Ending Capital	Net income is taken from the income statement; balance of drawings account is found on the trial balance. Investments are found on the general ledger for capital.
Statement of Cash Flows (Cash Flows Statement)	Reports inflows (receipts) and outflows (payments) of cash during the accounting period in the categories of operating, investing, and financing.	+/- Cashflow from Operating Activities +/- Cashflow from Investments +/- Cashflow from Financing Change in cash	Cash collected from customers, cash paid to suppliers, cash paid to purchase equipment, cash borrowed from bank

18.5.1 Matching Elements with Financial Statements

Match each element with its financial statement by entering the appropriate letter in the space provided.

Element

_______ (1) Expense
_______ (2) Cash flow from investing activities
_______ (3) Assets
_______ (4) Drawing
_______ (5) Revenues
_______ (6) Cash flow from operating activities
_______ (7) Liabilities
_______ (8) Cash flow from financing activities

Financial Statement

A. Balance Sheet
B. Income Statement
C. Statement of Retained Earnings
D. Statement of Cash Flows

18.5.2 Classifying Accounts

Mark each item in the following list as an asset (A), liability (L), or owner' equity (O/E) that would appear on the balance sheet **OR** as a revenue (R) or expense (E) that would appear on the income statement.

_______ (1) Retained Earnings
_______ (2) Accounts Receivable
_______ (3) Sales Revenue
_______ (4) Property, Plant, Equipment
_______ (5) Rent Expense
_______ (6) Inventories
_______ (7) Interest Expense

18.5.3 Computing Missing Amounts

Review the chapter explanations of the income statement and the balance sheet. Apply this information to compute the missing amounts for each case.

Hint: Organize the listed items as they are presented in the balance sheet and income statement equations, and then compute the missing amounts.

Number	Total Revenues	Total Expenses	Net Income (Loss)	Total Assets	Total Liabilities	Owner's Equity
1	$100,000	$75,000		$150,000	$70,000	
2		80,000	$12,000	112,000		$60,000
3	80,000	85,000		104,000	26,000	
4	50,000		13,000		22,000	77,000
5	81,000	6,000			73,000	28,000

18.5.4 Financial Statement Word Scramble

	Word Clue	Scrambled Answer	Unscrambled Answer
1.	The __________ sheet will report the total amount of a corporation's retained earnings.	NABCALE	
2.	The financial statement that reports the liabilities is sometimes known as the statement of financial ________.	NIPIOOTS	
3.	The balance sheet reports amounts at a _________ in time.	TIPNO	
4.	The amount of working ________can be calculated quickly from a classified balance sheet.	TACLIPA	
5.	The income statement reports amounts for a __________ of time.	ORPIDE	
6.	The amounts earned from a company's main activities are __________.	NEREVSEU	
7.	The costs that are matched with revenues are __________.	SENESEPX	
8.	Sales minus the cost of goods sold equals __________ profit.	SOGSR	
9.	The financial statement that reports the change in cash and cash equivalents is the statement of cash ___________.	WOLFS	
10.	Other comprehensive income is reported in the statement of stockholders'__________.	TUIQYE	
11.	The heading of the statement of cash flows discloses the _________ of time covered.	EIDPRO	
12.	The income statement is often referred to as the _______ and loss statement.	TOPIRF	
13.	Bonds Payable will be reported as a long-term __________.	YBAITIILL	
14.	Financial statements are best prepared under the __________ basis of accounting.	LCAARCU	
15.	Paid-in capital is one section of ________ equity.	TKCSHOROHDSLE	
16.	The amounts to calculate the debt to equity ratio are found on the __________ sheet.	CLAEABN	
17.	The current period's net Income is part of the corporation's __________ earnings reported on the balance sheet.	EINERADT	
18.	The costs expiring during the current accounting period are __________.	NEEPSXSE	
19.	Prepaid expenses are reported as __________.	SATESS	
20.	Customer deposits are reported as __________.	IBALISITEIL	

18.5.5 Statement of Cash Flow Questions

For each of the following questions, circle which part will be affected.

1. Depreciation expense

   Operating **Investing** **Financing**

2. Proceeds from the sale of equipment used in the business

   Operating **Investing** **Financing**

3. The loss on the sale of equipment in previous question

   Operating **Investing** **Financing**

4. Declaration and payment of dividends on company's stock

   Operating **Investing** **Financing**

5. Gain on the sale of automobile formerly used in the business

   Operating **Investing** **Financing**

6. The proceeds from the sale of the automobile in the previous question

   Operating **Investing** **Financing**

7. An increase in the balance in a retailer's merchandise inventory

   Operating **Investing** **Financing**

8. An increase in the balance in accounts payable

   Operating **Investing** **Financing**

9. Retirement of long-term bonds payable

   Operating **Investing** **Financing**

10. Purchase of treasury stock (company's own stock)

    Operating **Investing** **Financing**

11. The purchase of a new delivery truck to be used in the business

    Operating **Investing** **Financing**

12. A decrease in the balance of accounts receivable

    Operating **Investing** **Financing**

13. A increase in bonds payable (a long-term liability)

    Operating **Investing** **Financing**

14. A decrease in the current asset account prepaid insurance

    Operating **Investing** **Financing**

18.5.5 Statement of Cash Flow Questions (cont'd)

15. A decrease in the current liability income taxes payable

Operating **Investing** **Financing**

16. The proceeds from issuing additional common stock

Operating **Investing** **Financing**

17. The amortization of the cost of an intangible asset

Operating **Investing** **Financing**

For items 18 – 29, circle "Positive" or "Negative" based on whether each particular item would have a **positive** or **negative effect on cash**.

A **positive effect** could also be thought of as a source of cash, an increase in cash, or a positive amount on the cash flow statement.

A **negative effect** could also be thought of as a use of cash, a decrease in cash, or a negative amount on the cash flow statement.

18. An **increase** in the balance of **prepaid insurance**	**Positive**	**Negative**
19. A **decrease** in **supplies** on hand	**Positive**	**Negative**
20. The **proceeds** from the sale of equipment formerly used in the business	**Positive**	**Negative**
21. The **loss on the sale of equipment** in the previous question	**Positive**	**Negative**
22. An **increase** in the current liability **income taxes payable**	**Positive**	**Negative**
23. A **decrease** in **accounts payable**	**Positive**	**Negative**
24. An **increase** in **accounts receivable**	**Positive**	**Negative**
25. An **increase** in the current liability **warranty liability**	**Positive**	**Negative**
26. **Dividends** declared and paid	**Positive**	**Negative**
27. Proceeds from the issuance of **preferred stock**	**Positive**	**Negative**
28. The **gain on the sale of equipment** formerly used in the business	**Positive**	**Negative**
29. An **increase** in the long-term asset **investment in another company**	**Positive**	**Negative**

30. For a recent year a corporation's financial statements reported the following:

Net income	$100,000
Depreciation Expense	10,000
Increase in Accounts Receivable	30,000
Decrease in Accounts Payable	15,000

Based on the above information, what amount should the corporation report as cash provided by operating activities on the cash flow statement?

$65,000 **$125,000** **$155,000**

18.5.8 Income Statement & Balance Sheet Web Tutorial

Access the Basic Financial Statements tutorial at http://www.studyfinance.com/lessons/finstmt/. Once there, click on "The Balance Sheet," which will take you to a self-paced overview of the balance sheet, including examples. Read each slide, and on slide 15, complete the practice exercise. Then, read slides 16 to 18 of the tutorial, including the slides on the income statement and other basic financial statements.

Lesson 18.6 Closing Entries

Closing entries are journal entries made at the end of the accounting period. The closing entries accomplish two goals:

1. Closing entries prepare the trial balance for the next accounting period by clearing the revenue, expense, and dividend accounts of their balances. Remember, the income statement reports net income for a single accounting period and shows revenues and expenses for that period only. Therefore, the revenue and expenses need to have zero balances before beginning the accounting cycle again.
2. Closing entries summarize a period's revenues and expenses. You do this by transferring the balances of revenues and expenses into the income summary. The Income Summary account only appears in the closing process and will never appear on the financial statements. The balance of the Income Summary will be transferred to the Retained Earnings account.

The required closing entries include:

1. Closing all credit balances from the income statement accounts to the Income Summary account
2. Closing all the debit balances from the income statement accounts to the Income Summary account
3. Closing the Income Summary account to the Retained Earnings account
4. Closing the Dividends account balance to the Retained Earnings account

After the completion of the closing entries, the entries are posted to the general ledger. To ensure the entries have posted correctly, you should review the adjusted trial balance and verify that the appropriate accounts have zero balances.

18.6.1 Closing Entries Examples

ABC Company
General Ledger Income Statement Accounts
October 31, 20XX

Account Number	Account Name	Debit	Credit
410	ABC Services Revenue		$225,000.00
510	Rent Expense	$10,225.00	
520	Supplies Expense	$1,200.00	
530	Insurance Expense	$1,750.00	
540	Office Expense	$5,200.00	
550	Utilities Expense	$5,540.00	
560	Depreciation Expense, Building	$12,500.00	
		$36,415.00	$225,000.00
	Net Income	**$188,585.00**	
		$225,000.00	$225,000.00

18.6.1 Closing Entries Examples (cont'd)

You should use journal vouchers to prepare the closing entries for the revenue, expense, Income Summary, and Dividends accounts. Here are journal vouchers that the ABC Company would create when preparing its closing entries:

Journal Voucher 0006 – Closing Entry 1

ABC Company

Journal Voucher

NO:0006

Office: 1234 Office　Month: October　Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE6	ABC Services Revenue	410	225,000.00	
	Rent Expense	510		10,225.00
	Supplies Expense	520		1,200.00
	Insurance Expense	530		1,750.00
	Office Expense	540		5,200.00
	Utilities Expense	550		5,540.00
	Depreciation Expense, Building	560		12,500.00
	Income Summary	330		188,585.00
	To close the revenue and expenses to the Income Summary account for accounting period ending October 31, 20YY			
		Column Totals	225,000.00	225,000.00

Prepared by: Anita Job　Date: 10/31/20YY

Authorized by: ABC Owner　Date: 10/31/20YY

18.6.1 Closing Entries Examples (cont'd)

Journal Voucher 0007 – Closing Entry 2

ABC Company
Journal Voucher

NO:0007

Office: 1234 Office Month: October Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE7	Income Summary	330	188,585.00	
	Retained Earnings	310		188,585.00
	To close the Income Summary account for accounting period ending October 31, 20YY. Supporting Documentation JE6 is attached.			
		Column Totals	188,585.00	188,585.00

Prepared by: Anita Job Date: 10/31/20YY

Authorized by: ABC Owner Date: 10/31/20YY

18.6.1 Closing Entries Examples (cont'd)

Journal Voucher 0008 – Closing Entry 3

(Assume that the dividends paid for the year were $500.00.)

ABC Company

Journal Voucher

NO:0008

Office: 1234 Office Month: October Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE8	Retained Earnings	310	500.00	
	Dividends	320		500.00
	To close the Dividends account for accounting period ending October 31, 20YY. Supporting documentation is attached.			
	Column Totals		500.00	500.00

Prepared by: Anita Job Date: 10/31/20YY

Authorized by: ABC Owner Date: 10/31/20YY

Lesson 18.7 Review of the Accounting Cycle: Putting it all Together

Imagine, once again, that you are the accountant for Mrs. King's Interior Design Services. Mrs. King started her business on December 1, 20YY. During the accounting period ending in December 31, 20YY, you completed the following steps of the accounting cycle:

Step 1 of the accounting cycle: You analyzed source documents.

Step 2 of the accounting cycle: You posted the transactions in the general journal using the chart of accounts. Here they are:

King's Interiors **Assets = Liabilities + Stockholder's Equity**

King's Interiors Chart of Accounts

110	Cash
120	Accounts Receivable
130	Supplies
210	Accounts Payable
310	Capital, Mrs. King
320	Owner's Draw, Mrs. King
330	Income Summary Account
410	Revenue, Design Services
420	Revenue, Design Products
510	Rent Expense
520	Utilities Expense

Example 1

12/01/20YY	Mrs. King deposited $30,000.00 to open her business account.
12/05/20YY	Mrs. King bought glass shelves for displays for $2,500.00 on account.
12/07/20YY	Mrs. King bought supplies for $400.00 cash.
12/07/20YY	Mrs. King received payment for designing services $3,000.00.
12/09/20YY	Mrs. King completed a design for Star Bank and agreed to be paid later. $5,000.00.
12/15/20YY	Mrs. King wrote a check for $500.00 to pay for December's rent.
12/20/20YY	Mrs. King sent a check to Displays Inc. for $1,000.00 to pay on her account.
12/21/20YY	Mrs. King withdrew $600.00 to get a makeover.
12/21/20YY	Mrs. King contributed a computer worth $500.00 to the business.
12/21/20YY	Mrs. King paid her December utility bill for $200.00.
12/23/20YY	Mrs. King bought an antique desk for her office for $5,000.00 on account.
12/29/20YY	Mrs. King received a check from Star Bank to pay on their account. $2,500.00.
12/29/20YY	Mrs. King bought a calculator for $250.00.
12/30/20YY	Mrs. King bought some office furniture for $2,000.00 cash.

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Page 1

General Journal

	Date	Account Number	Description of Transaction		Debit	Credit
1	12/01/20YY	110	Cash		$30,000.00	
2		310	Capital, Mrs. King			$30,000.00
3			Deposit to open business account.			
4	12/05/20YY	130	Supplies		$2,500.00	
5		210	Accounts Payable			$2,500.00
6			Bought glass shelves for displays.			
7	12/07/20YY	130	Supplies		$400.00	
8		110	Cash			$400.00
9			Bought supplies with cash.			
10	12/07/20YY	110	Cash		$3,000.00	
11		410	Revenue, Design Services			$3,000.00
12			Received payment for designing services.			
13	12/09/20YY	120	Accounts Receivable		$5,000.00	
14		410	Revenue, Design Services			$5,000.00
15			Received payment on account for designing services.			
16	12/15/20YY	510	Rent Expense		$500.00	
17		110	Cash			$500.00
18			Rent payment for December.			
19	12/20/20YY	210	Accounts Payable		$1,000.00	
20		110	Cash			$1,000.00
21			Payable to Displays Inc. on account.			

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Page 2

General Journal

	Date	Account Number	Description of Transaction		Debit	Credit
22	12/21/20YY	320	Owner's Draw, Mrs. King		$600.00	
23		110	Cash			$600.00
24			Mrs. King withdrew to get a makeover.			
25	12/21/20YY	130	Supplies		$500.00	
26		310	Capital, Mrs. King			$500.00
27			Mrs. King contributed a computer to her business.			
28	12/21/20YY	520	Utilities Expense		$200.00	
29		110	Cash			$200.00
30			Paid utility bill for December.			
31	12/23/20YY	130	Supplies		$5,000.00	
32		210	Accounts Payable			$5,000.00
33			Bought an antique desk for office account.			
34	12/29/20YY	110	Cash		$2,500.00	
35		120	Accounts Receivable			$2,500.00
36			Received payment for designing services from Star Bank.			
37	12/29/20YY	130	Supplies		$250.00	
38		110	Cash			$250.00
39			Purchased a calculator for the office.			
40	12/30/20YY	130	Supplies		$2,000.00	
41		110	Cash			$2,000.00
42			Purchased office furniture with cash.			

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Step 3 of the accounting cycle: You posted the general journal to the general ledger and reviewed the subsidiary ledgers for errors. Here is that general ledger:

General Ledger							
December 20YY						**Beginning Balance**	**$0.00**
	Date	**General Ledger Account**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1	12/31/20YY	110	Cash		$30,550.00		$30,550.00
2	12/31/20YY	120	Accounts Receivable		$2,500.00		$33,050.00
3	12/31/20YY	130	Supplies		$10,650.00		$43,700.00
4	12/31/20YY	210	Accounts Payable			$6,500.00	$37,200.00
5	12/31/20YY	310	Capital, Mrs. King			$30,500.00	$6,700.00
6	12/31/20YY	320	Owner's Draw, Mrs. King		$600.00		$7,300.00
7	12/31/20YY	330	Income Summary Account				$7,300.00
8	12/31/20YY	410	Revenue, Design Services			$8,000.00	-$700.00
9	12/31/20YY	420	Revenue, Design Products				-$700.00
10	12/31/20YY	510	Rent Expense		$500.00		-$200.00
11	12/31/20YY	520	Utilities Expense		$200.00		$00.00

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

And a subsidiary ledger – cash review:

Cash Subsidiary Ledger 110

December 20YY					Beginning Balance		$0.00
	Date	General Ledger	Description of Transaction		Debit	Credit	Balance
1	12/01/20YY	110	Cash		$30,000.00		$30,000.00
2	12/07/20YY	110	Cash			$400.00	$29,600.00
3	12/09/20YY	110	Cash		$3,000.00		$32,600.00
4	12/15/20YY	110	Cash			$500.00	$32,100.00
5	12/20/20YY	110	Cash			$1,000.00	$31,100.00
6	12/21/20YY	110	Cash			$600.00	$30,500.00
7	12/21/20YY	110	Cash			$200.00	$30,300.00
8	12/29/20YY	110	Cash		$2,500.00		$32,800.00
9	12/29/20YY	110	Cash			$250.00	$32,550.00
10	12/30/20YY	110	Cash			$2,000.00	$30,550.00

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Step 4 of the accounting cycle: You posted adjusting entries, including depreciation, correcting entries, etc., and prepared the trial balance.

Mrs. King's Interiors Trial Balance

Period ending – December 31, 20YY						Beginning Balance	$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1	12/31/20YY	110	Cash		$30,550.00		$30,550.00
2	12/31/20YY	120	Accounts Receivable		$2,500.00		$33,050.00
3	12/31/20YY	130	Supplies		$10,650.00		$43,700.00
4	12/31/20YY	131	Less: Accumulated Depreciation			$360.00	$43,340.00
5	12/31/20YY	210	Accounts Payable, Furniture World			$6,500.00	$36,840.00
6	12/31/20YY	310	Capital, Mrs. King			$30,500.00	$6,340.00
7	12/31/20YY	320	Owner's Draw, Mrs. King		$600.00		$6,940.00
8	12/31/20YY	410	Revenue, Design Services			$8,000.00	-$1,060.00
9	12/31/20YY	510	Rent Expense		$500.00		-$560.00
10	12/31/20YY	520	Utility Expense		$200.00		-$360.00
11	12/31/20YY	530	Depreciation Expense		$360.00		$0.00
				Total	**$45,360.00**	**$45,360.00**	$0.00

Lesson 18.7 Review of the Accounting Cycle: Putting it all Together (cont'd)

Step 5 of the accounting cycle: You would prepare the financial statements—the income statement, balance sheet, cash flow statement, and statement of retained earnings. Here are those completed financial statements:

Mrs. King's Interiors
Income Statement
December 31, 20YY

	Debit	Credit
Revenues		
Design Services		$8,000
Expenses		
Rent Expense	$500	
Utility Expense	$200	
Depreciation Expense	$360	
	$1,060	$8,000
Net Income	**$6,940**	
	$8,000	$8,000

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Mrs. King's Interiors
Balance Sheet
December 31, 20YY

	Debit	Credit
Assets		
Cash	$30,550	
Accounts Receivable	$2,500	
Supplies	$10,650	
Less: Accumulated Depreciation		$360
	$43,700	$360
Total Assets	**$43,340**	
Liabilities		
Accounts Payable, Furniture World		$6,500
		$6,500
Total Liabilities		**$6,500**
Stockholder's Equity		
Mrs. King's Capital		$37,440
Owner's Draw	$600	
Retained Earnings		
	$600	$37,440
Total Stockholder's Equity		**$36,840**

Assets – Liabilities = Stockholder's Equity
or
Assets = Liabilities + Stockholder's Equity

Assets $43,340 = Liabilities $6,500 + Equities $36,840
$43,340 = $43,340

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Mrs. King's Interiors
Statement of Retained Earnings
December 31, 20YY

Stockholder's Equity		
Mrs. King's Capital		$37,440
Owner's Draw	$600	
Retained Earnings		
	$600	$37,440
Total Stockholder's Equity		**$36,840**

Mrs. King's Interiors
Statement of Cash Flows
December 31, 20YY

Cash Flow from Operations	
Net Income	$6,940
Adjustments to cash	
Accounts Receivable	$(2,500)
Depreciation	$360
Increase in Accounts Payable	$6,500
Net Cash from Operations	$11,300
Cash Flow from Investing	
Net Cash from Investing	
Cash Flow from Financing	
Owner's Draw	$(600)
Net Cash from Financing	$(600)
Cash Flow for Year Ending December 31, 20YY	$10,700

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Step 6 of the accounting cycle: You would review the financial statements for errors and analyze the information reported in the financial statements. For now, all that you need to remember is that the four most common methods for analyzing financial results are horizontal, vertical, ratio, and industry analyses. We'll take a close look at each of these different financial analysis methods in Unit 11.

Step 7 of the accounting cycle: You would prepare the closing entries. Here are the closing entries that you would create:

Journal Voucher 0009 - Closing Entry 1

Mrs. King's Interiors

Journal Voucher

NO:0009

Office: 1234 Office Month: December Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE9	Design Services	410	8,000.00	
	Rent Expense	510		500.00
	Utilities Expense	520		200.00
	Depreciation Expense	530		360.00
	Income Summary	330		6,940.00
	To close the revenue and expenses to the Income Summary account for accounting period ending December 31, 20YY			
		Column Totals	8,000.00	8,000.00

Prepared by: Anita Job Date: 12/31/20YY

Authorized by: ABC Owner Date: 12/31/20YY

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Journal Voucher 0010 – Closing Entry 2

Mrs. King's Interiors

Journal Voucher

NO:0010

Office: 1234 Office Month: December Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE10	Income Summary Retained Earnings To close the Income Summary account for accounting period ending December 31, 20YY. Supporting Documentation JE9 is attached.	330 310	6,940.00	 6,940.00
	Column Totals		6,940.00	6,940.00

Prepared by: Anita Job Date: 12/31/20YY

Authorized by: ABC Owner Date: 12/31/20YY

Lesson 18.7 Review of the Accounting Cycle: Putting it all Together (cont'd)

Journal Voucher 0011 – Closing Entry 3

Mrs. King's Interiors

Journal Voucher

NO:0011

Office: 1234 Office Month: December Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE11	Retained Earnings	310	600.00	
	Owner's Draw Account	320		600.00
	To close the Owner's Draw account for accounting period ending December 31, 20YY. Supporting documentation is attached.			
		Column Totals	600.00	600.00

Prepared by: Anita Job Date: 12/31/20YY

Authorized by: ABC Owner Date: 12/31/20YY

Lesson 18.7

Review of the Accounting Cycle: Putting it all Together (cont'd)

Step 8 of the accounting cycle: You would post all of the closing entries to the general ledger, as well as prepare and review the final adjusted trial balance to verify that the adjusted trial balance is correct and ready to begin the accounting cycle again.

Mrs. King's Interiors Adjusted Trial Balance

Period ending – December 31, 20YY						Beginning Balance	$0.00
	Date	General Ledger Account	Description of Transaction		Debit	Credit	Balance
1	12/31/20YY	110	Cash		$30,550.00		
2	12/31/20YY	120	Accounts Receivable		$2,500.00		
3	12/31/20YY	130	Supplies		$10,650.00		
4	12/31/20YY	131	Less: Accumulated Depreciation			$360.00	
5	12/31/20YY	210	Accounts Payable, Furniture World			$6,500.00	
6	12/31/20YY	310	Capital, Mrs. King			$30,500.00	
7	12/31/20YY	320	Owner's Draw, Mrs. King		$0.00		
8	12/31/20YY	410	Revenue, Design Services		$0.00		
9	12/31/20YY	510	Rent Expense		$0.00		
10	12/31/20YY	520	Utility Expense		$0.00		
11	12/31/20YY	530	Depreciation Expense		$0.00		
12	12/31/20YY	311	Retained Earnings			$6,340.00	
13							
14							
				Total	**$43,700.00**	**$43,700.00**	$0.00

Lesson 18.8 Culminating Project A&B

Newton Park recently converted to a new accounting system. During the conversion process, an error occurred, and the accounts can only be reported in alphabetical order as listed below:

Account Name	Balance	Account Type	Normal Balance	Financial Statement
Accounts Payable	20,000			
Accounts Receivable	10,000			
Accumulated Depreciation	45,000			
Administrative Expenses	35,000			
Advertising Expense	56,000			
Gift Shop & Concessions Inventory, Jan. 1	17,000			
Buildings	300,000			
Cash	TBD			
Common Stock	350,000			
Concessions & Gift Shop Revenue	175,000			
Cost of Goods Sold, Gift Shop & Concessions	43,000			
Depreciation Expense	52,000			
Gift Shop & Concessions Inventory, Dec. 31	13,000			
Income Tax Expense	8,750			
Insurance Expense	40,000			
Interest Expense	15,000			
Land	100,000			
Mortgage Payable	300,000			
Notes Payable	12,000			
Notes Receivable	8,000			
Office Equipment	50,000			
Prepaid Insurance	4,000			
Purchases	39,000			
Retained Earnings	60,000			
Rides and Equipment	295,000			
Salaries Expense	70,000			
Salaries Payable	8,000			
Theme Park Admissions Revenue	320,000			
Utility Expense	60,000			

Lesson 18.8 Culminating Project A&B (cont'd)

Project Requirements:

The controller of Newton Park has asked you to reconstruct the accounting system. You will need to determine the account classification and normal balance for each account. You will also need to prepare financial statements.

Part A

1. Determine if the account listed is an asset, liability, equity, income, or expense account and if the normal balance is a debit or credit. Balances listed are as of December 31, unless otherwise noted.
2. Determine the financial statement(s) the account should be reported on.
3. Determine the balance of the Cash account.

Part B (Microsoft Excel is recommended.)

1. Prepare the Newton Park balance sheet in the appropriate format.
2. Prepare the Newton Park income statement in the appropriate format.

Skill Standards

Academic:

AB 2 Read and interpret workplace documents

AB 4 Record information accurately and completely

AC 1 Utilize critical-thinking skills to determine best options/outcomes (e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning)

AC 2 Utilize innovation and problem-solving skills to arrive at the best solution for current situation

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AD 4 Use tables, graphs, diagrams, and charts to obtain or convey information

Employability:

EG 4 Locate and verify information

Accounting:

OA 3 Calculate net sales, cost of goods sold, gross profit, operating expenses, and net profit before taxes for the income statement

OA 4 Calculate the gross, operating, and net profit or loss

OE 10 Understand the correlation among financial statements including balance sheet, profit/loss, net worth, statement of cash flow

Scenario

You are the accountant for Ava's Interpreting Services. Ava (the owner) needs you to prepare an income statement and balance sheet for December 31, 20YY. She would also like for you to complete the closing entries to begin the accounting cycle again on January 1, 20YY.

Tasks

Use Ava's trial balance for December 31, 20YY, to prepare the income statement and balance sheet. Use the templates provided to develop the two financial statements.

Tasks (cont'd)

Ava's Interpreting Services Trial Balance

Period ending – December 31, 20YY						**Beginning Balance**	**$0.00**
	Date	**General Ledger Account**	**Description of Transaction**		**Debit**	**Credit**	**Balance**
1	12/31/20YY	110	Cash		$5,850.00		$5,850.00
2	12/31/20YY	120	Accounts Receivable		$2,500.00		$8,350.00
3	12/31/20YY	130	Supplies		$1,350.00		$9,700.00
4	12/31/20YY	140	Building		$250,000.00		$259,700.00
5	12/31/20YY	141	Accumulated Depreciation, Building			$12,500.00	$247,200.00
6	12/31/20YY	210	Accounts Payable			$750.00	$246,450.00
7	12/31/20YY	310	Capital, Ava			$275,000.00	-$28,550.00
8	12/31/20YY	320	Owner's Draw, Ava		$52,775.00		$24,225.00
9	12/31/20YY	410	Interpreting Services, Revenue			$58,000.00	-$33,775.00
10	12/31/20YY	510	Insurance Expense		$975.00		-$32,800.00
11	12/31/20YY	520	Utility Expense		$1,200.00		-$31,600.00
12	12/31/20YY	530	Office Supplies Expense		$750.00		-$30,850.00
13	12/31/20YY	540	Depreciation Expense		$850.00		-$30,000.00
14	12/31/20YY	550	Office Salaries Expense		$15,000.00		-$15,000.00
15	12/31/20YY	560	Interpreter Subcontracted, Expense		$15,000.00		$0.00
				Total	**$346,250.00**	**$346,250.00**	$0.00

Tasks (cont'd)

Ava's Interpreting Services
Income Statement
December 31, 20YY

	Debit	Credit
Revenues		
Interpreting Services, Revenue		
Expenses		
Insurance Expense		
Utility Expense		
Office Supplies Expense		
Depreciation Expense		
Office Salaries Expense		
Interpreter Subcontracted, Expense		
Net Income		
Total Debits & Credits		

Tasks (cont'd)

Ava's Interpreting Services
Balance Sheet
December 31, 20YY

	Debit	Credit
Assets		
Current Assets		
Cash		
Accounts Receivable		
Supplies		
Long-term Assets		
Building		
Less: Accumulated Depreciation, Building		
Total Assets		
Liabilities		
Accounts Payable		
Total Liabilities		
Stockholder's Equity		
Capital, Ava		
Owner's Draw, Ava		
Retained Earnings		
Total Stockholder's Equity		

Assets - Liabilities = Stockholder's Equity
or Assets = Liabilities + Stockholder's Equity

*Hint **Assets = Liabilities + Equities**

Assets =
Liabilities =
Stockholder's Equity =

Tasks (cont'd)

Use the journal vouchers provided below to create closing entries for Ava's business. The Income Summary account is General Ledger account #360.

Ava's Interpreting Services

Journal Voucher

NO:0012

Office: 1234 Office Month: December Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
JE12	To close the revenue and expenses to the Income Summary account for accounting period ending December 31, 20YY.			
	Column Totals			

Prepared by: ______________________ Date: 12/31/20YY

Authorized by: ______________________ Date: 12/31/20YY

Tasks (cont'd)

Ava's Interpreting Services

Journal Voucher

NO:0013

Office: 1234 Office Month: ______________ Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
	Description:			
		Column Totals		

Prepared by: ______________________________ Date: ____________

Authorized by: ______________________________ Date: ____________

Tasks (cont'd)

Ava's Interpreting Services

Journal Voucher

NO:

Office: 1234 Office Month: ________ Year: 20YY

Ref. No.	Description	General Ledger Account	Debit	Credit
	Description:			
	Column Totals			

Prepared by: ____________________ Date: __________

Authorized by: ____________________ Date: __________

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Completes the income statement properly.
- Completes the balance sheet correctly.
- Prepares the journal vouchers for closing entries correctly.
- Totals the debits and credits for the different accounts properly with no mathematical errors.

3

- Completes most or all of the income statement properly.
- Completes most or all of the balance sheet correctly.
- Prepares most of the journal vouchers for closing entries correctly.
- Totals the debits and credits for the different accounts properly with few mathematical errors.

2

- Completes some of the income statement properly.
- Completes some of the balance sheet correctly.
- Prepares some of the journal vouchers for closing entries correctly.
- Totals the debits and credits for the different accounts improperly or with many mathematical errors.

1

- Completes the income statement improperly.
- Completes the balance sheet incorrectly.
- Improperly prepares the journal vouchers for closing entries.
- Totals the debits and credits for the different accounts improperly with numerous mathematical errors.

Unit 8

Payroll

iStockphoto/Thinkstock

Introduction

This unit will cover the taxes both employees and employers are required to pay. For the purpose of this unit, the employee and employer portions of the Social Security tax rate are both 6.2% (12.4% total). Also, assume that the Medicare tax rate for both employees and employers is 1.45% (2.9% total).

Employee Taxes

How many of you have ever received a paycheck? Do you know where that paycheck came from or how the amount of the check was determined? What are taxes, and why is your take-home pay a whole lot less than what you actually make? This unit is going to discuss these items.

Lesson 19.1 Gross Pay

Employees can be paid a variety of ways, but the two most common are **salary** and **hourly**. After determining how an employee will be paid, employers must determine how often they want to pay that employee. If an employee is paid **weekly**, the employee will receive 52 checks a year; if **biweekly** (every other week), the employee will receive 26 checks per year; if **semimonthly** (twice a month, usually on the 1^{st} and 15^{th}), 24 checks a year; and if **monthly**, 12 checks per year.

Gross Pay

The amount you "make" and the amount you bring home are two very different numbers. The amount you make is considered your **gross pay**: the amount before any taxes or other deductions are taken.

If you are a **salaried** employee, you get paid a certain amount of money each pay period, and that amount doesn't change, no matter how much time you work during each pay period.

> For example, if Nathan makes $30,000 a year and is paid biweekly**,** the amount of his **gross pay** is $30,000 ÷ 26 = $1,153.85 per pay period**.**

If you are paid at an **hourly rate**, the amount of money you make correlates directly to the number of hours you work. To calculate gross pay for any hourly employee, you multiply the number of hours worked times the hourly rate.

Gross Pay = Hours Worked x Hourly Rate

> For example, if Joe works 40 hours during a particular week and is paid $7 per hour, the amount of his gross pay is 40 x $7 = $280 for the week.

Many employers keep track of the number of hours that employees work with a **time clock** and **time cards.** Each employee uses his/her own time card (which is typically kept near the time clock) to "clock in" and "clock out" at the beginning and ending of each work day. The time clock keeps an accurate record of the hours that the employee worked. Many companies still use time cards to track the hours an employee works. However, instead of manually calculating the hours worked, some businesses track the time automatically using a computer. The payroll clerk's job is to check each time card for accuracy and total the hours worked (if the time clock or computer hasn't already done so).

The **Federal Labor Standards Act of 1938** set the standard work week for hourly employees at **40** hours. Any amount of time worked over 40 hours is eligible for **overtime pay**, which must be at least 1.5 times the hourly wage **(time and a half).** Earnings that are based on the hourly rate are considered regular pay, and earnings calculated using the overtime rate are considered overtime pay.

Gross Pay for an Hourly Employee = Regular Earnings + Overtime Earnings

To Calculate Overtime and Gross Pay:

As stated earlier, overtime is determined by finding at least 1.5 the regular rate.

> For example, if Wes's hourly rate is $6 an hour and he qualifies for overtime, his overtime rate should be $9 ($6 x 1.5).

Now, let's say Wes works 43 hours in one week and gets paid weekly. What should his **gross pay** be?

- First you need to determine Wes's **regular earnings**. To do this, you multiply 40 hours by his regular rate, which is $6 per hour. Wes's regular earnings are $240 (40 x $6).
- Next, determine Wes's **overtime earnings**. Start by determining how many hours of overtime Wes worked. Since Wes worked 43 hours, he worked three hours of overtime (43 - 40). Now, multiply the overtime hours by the overtime rate, which is $9. Wes's overtime earnings are $27 (3 x $9).
- To figure his **gross pay**, simply add regular earnings and overtime earnings. Wes's gross pay is $267 ($240 + $27).

Commission

Some employees earn commission instead of an hourly or salary rate. Others earn commission in addition to their regular pay. **Commission** is a percentage of the dollar value of sales. To calculate commission:

Commission = Sales x Commission Rate

For example, Jill receives a 6% commission on her monthly sales. During March, her sales were $38,000. Her commission is calculated as $38,000 x 6% = $38,000 x 0.06 = $2,280 commission.

Bonuses

In addition to paying their employees a salary or hourly wage, overtime, and/or commission, some companies also offer **performance-based incentives**, often called **bonuses**, to their workers. These incentives or bonuses may take the form of additional pay, stock options, paid time off, trophies, certificates, lunch with senior leaders, or promotional options. Typically, bonus programs serve a couple of purposes. One, they motivate employees to meet or exceed organizational goals. Secondly, they attract new employees to the organization.

Lesson 19.2 Net Pay

Everyone who has ever worked will tell you there are many **deductions** from your gross pay, including federal, state, local, Social Security, and Medicare taxes. By law, employers are responsible for withholding and paying Social Security, Medicare, and federal and state income taxes for their employees. The amount of an employee's gross pay minus deductions is **net pay**.

One of the largest deductions from an employee's paycheck is income tax. The tax paid to the federal government is called federal tax withholding, while the tax paid to the state government is state income tax. The tax withheld is based on three things: the employee's gross earnings, the employee's filing status, and the number of withholding allowances the person claims. A **withholding allowance**, also called an **exemption**, is a portion of gross earnings that is not subject to tax. Each employee is permitted one withholding allowance for himself/herself, one for a spouse, and one for each dependent (a child or elderly parent).

In order for an employer to know how many exemptions an employee wants to claim, all employees must fill out a federal **W-4 form** when they are hired. Employees indicate their marital status and filing status on this form. To see and/or complete an actual W-4 form, go to http://www.irs.gov/pub/irs-pdf/fw4.pdf.

An employee's completed W-4, along with her/his employer's pay schedule (weekly, semi-monthly, etc.), are used to figure the amount of **federal income taxes** withheld from the employee's pay. The amount of taxes withheld can be found using wage bracket tables provided by the Internal Revenue Service (IRS). All of the IRS's wage bracket tables for income tax withholding are available on pages 38-57 of *Publication 15 (Circular E), Employer's Tax Guide*, found at http://www.irs.gov/pub/irs-pdf/p15.pdf.

Let's continue using Wes as an example. Remember that in a prior example, Wes's gross pay was $267. When he filled out his W-4, he claimed only himself, and he declared himself single (S:1). How do you now determine Wes's **net pay**?

Remember, net pay is an employee's gross pay minus deductions. If Wes's only deduction is federal tax, then to determine his net pay, we just need to determine his federal taxes. And, to determine the federal tax that should be withheld, Wes's employer should use an IRS wage bracket table.

Lesson 19.2 Net Pay (cont'd)

The trick is knowing which table to use, though. To determine which table is the correct one, an employer must know an employee's marital status and the business's pay schedule (weekly, semimonthly, bi-weekly). In Wes's case, we know that he gets paid on a weekly basis and that his filing status is single with one exemption. So, the wage bracket table that Wes's employer should use is the **Single Persons-Weekly Payroll Period**. Simply find the appropriate pay range ($260-270), and follow across to the correct number of allowances for Wes (which is one). The dollar amount that you find at that intersection is the amount of federal tax that Wes's employer should withhold: $15.

SINGLE Persons—**WEEKLY** Payroll Period

(For Wages Paid through December 2012)

And the wages are–		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
		The amount of income tax to be withheld is—										
$ 0	$55	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
55	60	2	0	0	0	0	0	0	0	0	0	0
60	65	2	0	0	0	0	0	0	0	0	0	0
65	70	3	0	0	0	0	0	0	0	0	0	0
70	75	3	0	0	0	0	0	0	0	0	0	0
75	80	4	0	0	0	0	0	0	0	0	0	0
80	85	4	0	0	0	0	0	0	0	0	0	0
85	90	5	0	0	0	0	0	0	0	0	0	0
90	95	5	0	0	0	0	0	0	0	0	0	0
95	100	6	0	0	0	0	0	0	0	0	0	0
100	105	6	0	0	0	0	0	0	0	0	0	0
105	110	7	0	0	0	0	0	0	0	0	0	0
110	115	7	0	0	0	0	0	0	0	0	0	0
115	120	8	0	0	0	0	0	0	0	0	0	0
120	125	8	1	0	0	0	0	0	0	0	0	0
125	130	9	1	0	0	0	0	0	0	0	0	0
130	135	9	2	0	0	0	0	0	0	0	0	0
135	140	10	2	0	0	0	0	0	0	0	0	0
140	145	10	3	0	0	0	0	0	0	0	0	0
145	150	11	3	0	0	0	0	0	0	0	0	0
150	155	11	4	0	0	0	0	0	0	0	0	0
155	160	12	4	0	0	0	0	0	0	0	0	0
160	165	12	5	0	0	0	0	0	0	0	0	0
165	170	13	5	0	0	0	0	0	0	0	0	0
170	175	13	6	0	0	0	0	0	0	0	0	0
175	180	14	6	0	0	0	0	0	0	0	0	0
180	185	14	7	0	0	0	0	0	0	0	0	0
185	190	15	7	0	0	0	0	0	0	0	0	0
190	195	15	8	1	0	0	0	0	0	0	0	0
195	200	16	8	1	0	0	0	0	0	0	0	0
200	210	16	9	2	0	0	0	0	0	0	0	0
210	220	18	10	3	0	0	0	0	0	0	0	0
220	230	19	11	4	0	0	0	0	0	0	0	0
230	240	21	12	5	0	0	0	0	0	0	0	0
240	250	22	13	6	0	0	0	0	0	0	0	0
250	260	24	14	7	0	0	0	0	0	0	0	0
260	270	25	15	8	0	0	0	0	0	0	0	0
270	280	27	16	9	1	0	0	0	0	0	0	0
280	290	28	17	10	2	0	0	0	0	0	0	0
290	300	30	19	11	3	0	0	0	0	0	0	0

From the Internal Revenue Service's *Publication 15 (Circular E), Employer's Tax Guide* (p. 37), found at http://www.irs.gov/pub/irs-pdf/p15.pdf.

Gross Pay - Deductions = Net Pay

So, Wes's net pay for that pay period is $267 – 15 = $252.

Lesson 19.3 Employee Taxes

Two other amounts withheld from an employee's paycheck are the deductions for **Social Security** and **Medicare** taxes. Employees must pay these taxes as a direct result of the **Federal Insurance Contribution Act (FICA),** which was passed by Congress in the 1930s during the Great Depression. Until 1991, funds collected under the Social Security Tax Act were used to fund both Social Security and Medicare benefits. In 1991, the federal government began collecting funds separately for the two programs.

The Social Security tax rate as well as the income subject to Social Security tax change periodically when Congress passes new tax-related legislation. In 2013, the Social Security tax was raised to 6.2% of the first $113,700 in gross earnings. This means that after a person earns $113,700 in gross income in a year, no Social Security tax will be withheld on any additional money s/he earns during that same year. In other words, a person who earns $150,000 a year pays the same Social Security tax as a person who earns $113,700 a year.

The 2013 Medicare tax rate was set at 1.45%. Years ago, there was a maximum income subject to Medicare tax; now, however, **all** wages earned are subject to Medicare tax (unless the employee participates in a flexible benefits plan that is exempt from Medicare tax). Employers also pay a share of Social Security and Medicare tax; employers contribute the same amount as their employees contribute. More discussion of this will come in the following sections.

Example: If Nancy's gross income is $457 and her year-to-date earnings are still less than $113,700, how much Social Security and Medicare tax should be withheld?

Social Security tax on $457 = $457 x 6.2% = $457 x 0.062 = $28.34

Medicare tax on $457 = $457 x 1.45% = $457 x 0.0145 = $6.63

Lesson 19.3 Employee Taxes (cont'd)

If Nancy is married with 2 exemptions (M:2) and paid on a weekly basis, what is her net pay?

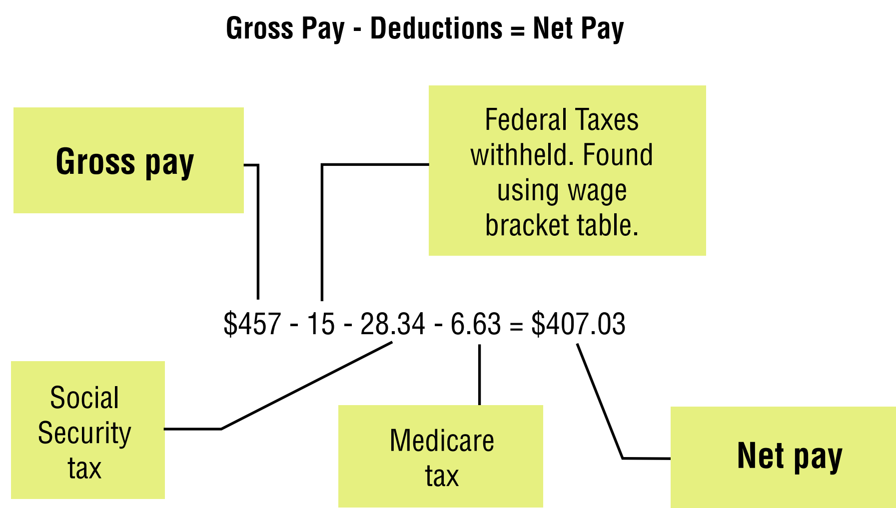
MARRIED Persons—**WEEKLY** Payroll Period

(For Wages Paid through December 2012)

And the wages are–		And the number of withholding allowances claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
		The amount of income tax to be withheld is—										
$ 0	**$160**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
160	**165**	1	0	0	0	0	0	0	0	0	0	0
165	**170**	1	0	0	0	0	0	0	0	0	0	0
170	**175**	2	0	0	0	0	0	0	0	0	0	0
175	**180**	2	0	0	0	0	0	0	0	0	0	0
180	**185**	3	0	0	0	0	0	0	0	0	0	0
185	**190**	3	0	0	0	0	0	0	0	0	0	0
190	**195**	4	0	0	0	0	0	0	0	0	0	0
195	**200**	4	0	0	0	0	0	0	0	0	0	0
200	**210**	5	0	0	0	0	0	0	0	0	0	0
210	**220**	6	0	0	0	0	0	0	0	0	0	0
220	**230**	7	0	0	0	0	0	0	0	0	0	0
230	**240**	8	1	0	0	0	0	0	0	0	0	0
240	**250**	9	2	0	0	0	0	0	0	0	0	0
250	**260**	10	3	0	0	0	0	0	0	0	0	0
260	**270**	11	4	0	0	0	0	0	0	0	0	0
270	**280**	12	5	0	0	0	0	0	0	0	0	0
280	**290**	13	6	0	0	0	0	0	0	0	0	0
290	**300**	14	7	0	0	0	0	0	0	0	0	0
300	**310**	15	8	0	0	0	0	0	0	0	0	0
310	**320**	16	9	1	0	0	0	0	0	0	0	0
320	**330**	17	10	2	0	0	0	0	0	0	0	0
330	**340**	18	11	3	0	0	0	0	0	0	0	0
340	**350**	19	12	4	0	0	0	0	0	0	0	0
350	**360**	20	13	5	0	0	0	0	0	0	0	0
360	**370**	21	14	6	0	0	0	0	0	0	0	0
370	**380**	22	15	7	0	0	0	0	0	0	0	0
380	**390**	23	16	8	1	0	0	0	0	0	0	0
390	**400**	24	17	9	2	0	0	0	0	0	0	0
400	**410**	25	18	10	3	0	0	0	0	0	0	0
410	**420**	26	19	11	4	0	0	0	0	0	0	0
420	**430**	27	20	12	5	0	0	0	0	0	0	0
430	**440**	28	21	13	6	0	0	0	0	0	0	0
440	**450**	29	22	14	7	0	0	0	0	0	0	0
450	**460**	30	23	15	8	1	0	0	0	0	0	0
460	**470**	31	24	16	9	2	0	0	0	0	0	0
470	**480**	32	25	17	10	3	0	0	0	0	0	0
480	**490**	33	26	18	11	4	0	0	0	0	0	0
490	**500**	34	27	19	12	5	0	0	0	0	0	0

From the Internal Revenue Service's *Publication 15 (Circular E), Employer's Tax Guide* (p. 40), found at http://www.irs.gov/pub/irs-pdf/p15.pdf.

Lesson 19.3 Employee Taxes (cont'd)



Lesson 19.4 Analyzing a Paycheck Stub

Regardless of whether you receive your pay in the form of a check or as a direct deposit to your bank account, you should receive a **paycheck stub** each pay period.

Pay that is directly deposited is electronically transmitted from the employer's bank account to the employee's bank account. **Direct deposit** can lower or eliminate the cost of printing physical paychecks and mailing them to employees. Direct deposit also helps businesses to process their payroll more efficiently. Some companies even make having a bank account a condition of employment to ensure that employees can be paid via direct deposit.

Bluehorse, Inc.		Pay:	**Weekly**		Union Number:	**95302**
9871 Ferris Blvd.	A	Pay Beginning Date:	2.10.20YY	B	Check Number:	**34113**
Florence, KY 41022		Pay Ending Date:	2.16.20YY		Check Date:	2.22.20YY

Suzanna Philips		Employee Number:	**256**		Tax Data	Federal		State
246 Boone Ct.		Department:	**Accounting**		Marital Status	**Single**	E	**Single**
Florence, KY 41042	C	Job Title:	**Billing Clerk**	D	Allowances (exemptions)	1		1
		Hourly Rate:	$9.50		Additional Amount WH	0		0
		Overtime Rate:	$14.25					

Description	**Current Rate**	**Current Hours**	**Current Earnings**	**Year-to-Date Hours**	**Year-to-Date Earnings**
Regular Time Worked	9.50	40	380.00	280	2,660.00
Overtime Worked	14.25	2	28.5	14	199.5
Vacation Hours Taken	**9.50**	0	0	0	0
Sick Hours Taken	**9.50**	0	F 0	0	0
Holiday	**9.50**	0	0	0	0
Totals:		42	**408.5**	**294**	2,859.50

Description	**Current**	**Year-to-Date**
Union 95302 Member	6.25	43.75
G		

Description	**Current**	**Year-to-date**
Health Savings Account (before-tax)	0	0
Description	**Current**	**Year-to-date**
Medical Insurance	62	434
H		

Description	**Current**	**Year-to-date**
Federal Withholding	35	245
Social Security	25.33	177.31
Medicare	5.93	41.51
KY State Withholding	8.17	57.19
Florence Local Withholding	I 8.17	57.19
School District Withholding	1.98	13.86

Description	**Current**	**Year-to-date**
Employer's Contribution:		
Medical Insurance	30	210
Life Insurance	1.25	8.75
Social Security	25.33	177.31
Medicare J	5.93	41.51

Paycheck Summary	**Gross Earnings**	**Federal Taxable Gross**		**Total Taxes**	**Total Deductions**	**Net Pay**
Current	408.5	408.5	K	84.58	68.25	255.67
Year-to-date	2,859.50	2,859.50		592.06	477.75	1,789.69

Annual Leave		**Sick Leave**			**Check Number**	**34113**	
Start Balance	**6.00**	Start Balance	**2.00**		Total Electronic Deposit		255.67
+Earned	1	+Earned	1	L	to PNC Bank	M	
-Taken	0	-Taken	0		Bank ending 8722		
Ending Balance	7	Ending Balance	3			**Total Deposit**	255.67

Lesson 19.4 Analyzing a Paycheck Stub (cont'd)

Your **paystub** should indicate, at the very least, your gross pay, your deductions, and your net pay. While the set-up and organization of a paycheck stub can vary greatly from company to company, most paystubs include the following:

A. Employer information, including the company name and address
B. The pay-period beginning and ending dates, the check-issue date, and the check number
C. The employee's name and mailing address. The name appearing on the paystub must match the name shown on the employee's Social Security card. Also, the mailing address must be the same address used for the employee's W-2 forms.
D. The employee's department, job title, hourly wage or salary, employee number and/or Social Security number
E. Tax information, including exemptions elected on the W-4
F. Hours worked, applicable overtime, holiday pay, and other payroll information that would affect gross pay
G. After-tax deductions, such as union dues, parking deductions, and charitable contributions
H. Before-tax deductions, such as contributions to some retirement plans, health savings accounts, and other savings options
I. Taxes, including Social Security, Medicare, federal, state, local, and/or school-district tax withholdings
J. Employer-paid taxes and benefits, including Social Security, Medicare, dental insurance, medical insurance, and/or other fringe benefits that the employer pays for
K. Totals, which summarizes gross pay, taxes and other deductions. These totals are used to determine total net pay.
L. Leave accruals indicating the number of vacation hours, sick hours, holiday hours, etc. that the employee accrued during the pay period. Many companies also include the total leave accruals that the employee has accumulated and/or used year-to-date.
M. Net pay, which should match the total electronic deposit and/or check for the employee

In addition to all of this information, some paystubs also include messages for employees, commission calculations, other employee costs, etc. It's really up to the business's owner(s) and accountant(s) to decide what information should be included on a paycheck stub; however, sections A through M listed above are the most common, regardless of whether the paycheck is processed electronically or manually.

19.4.1 Examining Paystubs

Anita Job is an executive assistant for the ABC Company. Her regular pay is $10 per hour, and her overtime rate is $15 per hour. She is paid weekly. Her timecard indicates that she worked the following hours for the pay period beginning on Sunday, January 20, 20YY, and ending on Saturday, January 26, 20YY. She will be paid the following Friday (February 1, 20YY) for the week's work.

Day	Regular Time Worked	Overtime Worked
Monday	8	
Tuesday	8	1.5
Wednesday	8	
Thursday	8	
Friday	8	2

1. What are Anita's earnings for the 40 hours of regular time that she worked? (Show your work.)

2. What are Anita's overtime earnings for the pay period? (Show your work.)

3. What is Anita's total gross pay for the pay period? (Show your work.)

Anita does not claim any exemptions on her W-4 and has the full amount of federal and state tax withheld from her gross wages. She has elected not to contribute to the ABC Company's health savings account. Anita also has the following deducted from her gross pay:

- State tax at 2%
- Local tax at 2%
- School tax at 0.5%
- Medical insurance premium at $57.25 per pay
- Union dues at $7.25 per pay

The ABC Company contributes $25 per pay period toward Anita's medical insurance and $1.25 per pay period toward Anita's life insurance policy.

Anita earns two hours of annual leave and two hours of sick leave every pay period.

19.4.1 Examining Paystubs (cont'd)

Based on the information provided, complete Anita's paycheck stub below.

ABC Company			Pay:	**Weekly**		Union Number:	**99999**	
1234 Making Money Blvd			Pay Beginning Date:			Check Number:	**70001**	
St. Paul, MN 55555			Pay Ending Date:			Check Date:		
Anita Job			Employee Number:	**568**		Tax Data	Federal	State
127 Sparkle Avenue			Department:	**Logistics**		Marital Status	**Single**	**Single**
St. Paul, MN 55555			Job Title:			Allowances (exemptions)		
			Hourly Rate:			Additional Amount WH	0	0
			Overtime Rate:					
		Current		**Year-to-Date**				
Description	**Rate**	**Hours**	**Earnings**	**Hours**	**Earnings**	**Description**	**Current**	**Year-to-Date**
Regular Time Worked						Union 9999 Member		
Overtime Worked								
Vacation Hours Taken	**10.00**							
Sick Hours Taken	**10.00**							
Holiday	**10.00**	**0.00**	**0.00**	**0.00**	**0.00**			
	Totals:							
Description	**Current**	**Year-to-date**	**Description**	**Current**	**Year-to-date**	**Description**	**Current**	**Year-to-date**
Health Savings Account			Federal Withholding			**Employer's Contribution:**		
(before-tax)			Social Security			Medical Insurance		
Description	**Current**	**Year-to-date**	Medicare			Life Insurance		
Medical Insurance			MN State Withholding			Social Security		
			St. Paul Local Withholding			Medicare		
			School District Withholding					
Paycheck Summary	**Gross Earnings**	**Federal Taxable Gross**		**Total Taxes**	**Total Deductions**	**Net Pay**		
Current								
Year-to-date								
Annual Leave			**Sick Leave**			**Check Number**	**70001**	
Start Balance	**0.00**		Start Balance	**0.00**		Total Electronic Deposit		
+Earned			+Earned			to JP Morgan Chase		
-Taken			-Taken			Bank ending 2222		
Ending Balance			Ending Balance				**Total Deposit**	

Lesson 20.1

Employer's Tax Withholding, Social Security, and Medicare Deposits

Each employer must pay all of the income tax withheld from its employees' earnings, as well as both the employee's and employer's Social Security and Medicare taxes, to an authorized financial institution or Federal Reserve Bank.

When does each business have to make this deposit, though? It varies based on the circumstances, but in general, each business's deposit schedule depends on the amount of tax liability and other criteria. For example, if the employer's accumulated tax is less than $500, this payment may be made with the business's tax return.

In an earlier lesson, we said that employers must match their employees' Social Security and Medicare payments dollar for dollar. That means that when an employer pays its employees' tax withholdings and Social Security and Medicare taxes to the government, the payment must include the employer's share of the Social Security and Medicare taxes as well. Let's take a look at how an employer calculates how much to pay to the government for its employees.

Example

Given the information provided in the table, what is the employer's total deposit including tax withholdings, Social Security taxes, and Medicare taxes?

Employee	Gross Earnings	Tax Withholding	Social Security	Medicare	Net Earnings
Plumlee, C	1,050	141	65.10	15.23	828.67
Powell, M	2,085	379	129.27	30.23	1,546.50
Randle, M	1,995	318	123.69	28.93	1,524.38
Robins, J	2,089	413	129.52	30.29	1,516.19

Total Tax Withholdings = $141 + 379 + 318 + 413 = $1,251

Total Social Security Tax Paid by Employees =
$65.10 + 129.27 + 123.69 + 129.52 = $447.58

Total Medicare Tax Paid by Employees =
$15.23 + 30.23 + 28.93 + 30.29 = $104.68

Total Social Security and Medicare Tax Paid by Employees x 2 =
($447.58 + 104.68) x 2 = $552.26 x 2 = $1,104.52

Employer's Deposit = $1,251 + $1,104.52 = $2,355.52

Lesson 20.2 Employer's SUTA and FUTA Taxes

In addition to Social Security and Medicare tax, employers are also responsible for federal and state unemployment taxes. These two unemployment taxes do not affect employees' paychecks. Instead, they are paid entirely by the employer. Under the Federal Unemployment Tax Act (FUTA) most employers are required to pay a federal unemployment tax. This tax, along with state unemployment tax (SUTA), provides for payment of unemployment compensation to workers who have lost their jobs.

The maximum earnings subject to FUTA tax, along with the tax rate itself, can be changed by Congress. The current FUTA rate is 6.0% applied to the first $7,000 paid to each employee each year, but employers are allowed a credit of up to 5.4% for participation in state unemployment programs.

Gross FUTA rate	6.0%
Credit for state unemployment taxes	- 5.4%
Net FUTA rate	0.6%

Example

During the first quarter of this year, Melanie McFarren earned well over $7,000. If the state unemployment (SUTA) tax is 5.4% applied the first $7,000 earned in a year, how much SUTA tax must Melanie's employer pay on her behalf? Also, how much FUTA must be paid?

SUTA = SUTA Tax Rate x Taxable Wages
SUTA = 5.4% x $7,000 = 0.054 x $7,000 = $378

FUTA = Net FUTA Tax Rate x Taxable Wages
FUTA = 0.6% x $7,000 = 0.006 x $7,000 = $42

Lesson 20.3 Key Terms

Salary: stated amount of earnings; does not change from pay period to pay period

Wages: amount of pay based on hours, days, or weeks worked

Pay Period: period in which amount of time worked is calculated; usually weekly, biweekly, semi monthly, or monthly

Payroll: business's record of amount earned by all employees

Regular Rate: amount paid to employee for one hour worked

Overtime: amount paid to employees when hours worked per week exceed 40 hours; regulated by the Federal Wage Standards Act; calculated by multiplying the regular rate times 1.5 (time and a half)

Commission: amount of pay based on a percentage of sales

Total Earnings: amount of regular and overtime earnings (before deductions)

Gross Pay: amount of total earnings before deductions

Net Pay: amount of paycheck after deductions are taken

Payroll Taxes: taxes calculated using earned income; withheld from employees' paychecks

Employee Income Taxes: federal taxes that must be withheld from all employees' total earnings

Withholding Allowance: the number of legal dependents (including the employee himself/herself) that can be claimed as deductions from total earnings

W-4 Form: required tax document used to determine the number of withholding allowances per employee

FICA: Federal Insurance Contribution Act; provides for a federal system of old-age, survivors', disability, and hospital insurance; includes Social Security (old-age, survivors', and disability insurance) and Medicare (hospital insurance)

20.4.1 Calculating Gross Pay

Calculate the gross pay for each employee.

Employee	Hours Worked	Hourly Wage	Gross Pay
1	40	$7.00	
2	36	$8.00	
3	33	$6.75	
4	38	$6.50	
5	40	$7.15	

20.4.2 Computing Overtime Rate

Calculate the overtime rate for each employee.

Employee	Regular Rate	Overtime Rate
6	$7.00	
7	$6.50	
8	$9.75	
9	$11.25	
10	$12.00	

20.4.3 Computing Commission

Compute the monthly commission for each employee.

Employee	Monthly Sales	Commission Rate	Commission Amount
1	$5,000	3%	
2	$14,000	6.5%	
3	$7,800	8%	
4	$22,000	4.25%	
5	$75,000	5%	

20.4.4 Gross Pay with Regular & Overtime Pay

Use the chart to determine the amount of regular hours, regular pay, overtime hours, overtime pay, and gross pay each employee earned.

	Hours Worked											
Employee	M	T	W	R	F	S	Hourly Wage	Reg Hrs	Reg Pay	OT Hrs	OT Pay	Gross Pay
Allen, M	8	5	8	9	10	4	$9.75					
Porter, J	8	8	5	8	5	8	$10.00					
Collins, I	9	7	7	7	9	7	$8.45					
Thom, S	4	8	4	4	4	4	$11.12					
Nate, W	8	5	8	9	8	9	$7.80					

20.4.5 More Gross and Overtime Pay

For each employee, calculate the overtime rate based on the regular pay rate. Then, calculate the regular and overtime earnings and total gross earnings.

Employee	Hours Worked		Regular	OT	Earnings		Total Gross
Number	Regular	OT	Rate	Rate	Regular	Overtime	Earnings
1	40	5	$9.00				
2	30	0	$7.50				
3	40	3	$6.70				
4	40	7	$8.20				
5	36	0	$9.10				
6	40	2	$7.00				
7	35	0	$8.00				
8	40	1	$8.30				

20.4.6 Federal Taxes

Use the wage bracket tables for income tax withholding available on pages 38-57 of the guide at http://www.irs.gov/pub/irs-pdf/p15.pdf to determine the federal withholding tax for each employee based on the individual's allowances, marital status, and gross wages. Assume that the employees are all paid weekly.

Time Card Number	Number of Allowances	Marital Status	Wages	Federal Withholding Tax
1	3	M	$311.00	
2	2	M	$421.00	
3	5	S	$288.00	
4	4	M	$530.00	
5	1	S	$462.00	
6	0	S	$444.00	
7	5	M	$528.00	
8	2	S	$490.00	
9	4	S	$445.00	
10	0	M	$444.00	

20.4.7 Regular and Overtime Pay

1. If Joey's regular pay rate is $10.60 an hour, how much would he make per hour in overtime if his overtime pay rate is time and a half?

2. Dee worked 7 hours at an overtime rate (time and a half). His regular rate is $15.47 an hour. How much is Dee's overtime pay?

3. What would Alan's total pay be if he worked 44 hours and is paid a regular rate of $12.50?

4. Chase's regular pay rate is $17.89 an hour. In a week in which he worked 46.5 hours, how much did he make?

5. Scott worked 43.25 hours in one week. If Scott's regular pay rate is $22.60 an hour, how much did he make?

20.4.8 Gross Pay Deductions

The form below shows the total wages, marital status, and withholding allowances for ten employees. Use the wage bracket tables for income tax withholding available on pages 38-57 of the guide at http://www.irs.gov/pub/irs-pdf/p15.pdf to determine the amount of federal taxes withheld. Use a Social Security tax rate of 6.2% and a Medicare tax rate of 1.45% to determine proper withholdings.

Time Card Number	Number of Allowances	Marital Status	Wages	Federal Withholding Tax	Social Security	Medicare
1	3	S	$491.00			
2	4	M	$500.00			
3	1	M	$312.00			
4	2	M	$496.00			
5	5	S	$385.00			
6	4	S	$467.00			
7	0	S	$398.00			
8	2	S	$252.00			
9	1	M	$278.00			
10	0	S	$444.00			

20.4.9 Computing Gross and Net Pay

Compute the gross pay and the net pay for each employee.

Computing Gross & Net Pay						
EMPLOYEE NUMBER	EMPLOYEE NAME	HOURLY RATE	HOURS WORKED	GROSS PAY	TAXES WITHHELD	NET PAY
2376	FORD	$7.89	35		$98.03	
971	SMITH	$8.00	40		$99.00	
1549	BELL	$6.50	36		$56.00	
1025	CARTER	$9.00	35		$101.02	
1001	JONES	$5.57	30		$32.30	
940	HARGROVE	$6.30	20		$40.00	
1115	AARON	$7.10	20		$65.20	
845	EDWARDS	$5.60	25		$34.00	
386	BENNETT	$11.25	15.5		$153.10	
1350	DAVIS	$10.00	38.5		$133.00	
2980	BIGGS	$9.20	38		$127.80	
1670	DUNCAN	$6.75	39		$58.10	
560	EVANS	$9.90	40		$100.25	
1333	ADAMS	$10.10	40		$105.00	
1001	WORTH	$7.70	40		$69.90	
896	FUTRELL	$8.85	36.5		$97.50	
546	SAMS	$9.50	34.5		$125.00	
1186	LANELY	$7.50	32.5		$70.00	
544	SIMMONS	$8.40	30		$101.50	

20.4.10 Word Problems

Complete each problem below in the space provided. Show your work.

Steve makes $57,800 annually. What is his monthly salary?	Julie receives a salary of $400 plus a 3% commission on sales. Julie's total sales were $5,000. What is her gross pay?
Mack makes $8 per hour. He worked 40 hours this week. What is his gross pay?	Amy makes $45,000. What is her weekly pay?
Robert makes $7.50 per hour. What is his overtime rate?	John's gross pay is $890. His taxes and deductions are $332. What is his net pay?
Bobby makes $8.50 per hour. He worked 48 hours this week. What is his total gross pay?	Jake's gross pay is $675. How much Social Security Tax will be deducted from his pay? How much Medicare Tax will be deducted from his pay?

Lesson 20.6 Subcontracted Workers

According to the IRS, if a company hires employees, the company is responsible for withholding and paying the employment-related taxes. However, if the company hires a subcontractor, the subcontractor is responsible for keeping his/her own records and paying his/her own income and self-employment taxes.

To determine if you are an employee or a subcontractor, consider the following:

- Behavioral control – Do you have the right to direct and control how the work is done?
- Financial control – Do you have the right to direct and control the financial aspects of the work?
- Relationship of the parties – Do you have a written contract and/or employee benefits?

These questions help determine whether you are a subcontractor or an employee, but no single factor provides the answer.

So, let's look at behavioral control. If you are provided detailed instructions by the company on how the work is to be done or you are trained by the company to perform the tasks in a certain way, you may be considered an employee. A subcontractor does not need or receive detailed instructions on how the work should be done. The IRS gives a few examples of instructions the might be given to an employee:

- How, when, or where you do the work
- What tools or equipment you are required to use
- What assistants you may hire to help with the work
- Where you may purchase materials and services

Now let's look at category two – financial control. The simple way to view this question is to ask yourself, "Does my work require me to spend money out of pocket for supplies and expenses?" If your employer does not reimburse you for these expenses, then you may be considered a subcontractor.

Let's look at the remaining category – relationship of parties. First, determine if the company provides you benefits such as paid vacation, sick days, health insurance, or a pension. If they are providing you full benefits, you may be considered an employee.

The IRS states that a contract may designate you as a subcontractor; however, if you and the company are not acting in the terms of the contract, this may not be evidence for determining your status as a subcontractor.

If the company and you both form an agreement that you are a subcontracted worker by reviewing the three categories together, you will be required to complete a W-9 form. The W-9 form provides the company with the information to send you a 1099 – Miscellaneous Form at the end of the year.

Form 1099 - Miscellaneous is sent to individuals at the end of year for any payments received as a subcontractor of $600 or more. The payments include fees, commissions, and/or monies received for services performed as a nonemployee.

As a subcontracted employee, you would be required to pay the required federal tax, Social Security tax, and Medicare tax, along with any applicable state, local, and/or other tax requirements.

Skill Standards

Academic:

AB 1 Locate and interpret written information

AB 2 Read and interpret workplace documents

AB 4 Record information accurately and completely

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

Employability:

EG 4 Locate and verify information

Accounting:

OA 2 Compute personal federal and state income taxes

OF 2 Calculate gross and net pay

OF 5 Complete federal tax forms (e.g., W2, W4, 1040EZ)

Scenario

You were recently hired as a credit analyst for Bank Plus. On your first day of work, Bank Plus required you to complete a W-4 form. Bank Plus pays you weekly, and your hourly rate is $26.72. You just finished your first week of work.

Tasks

A. Access a blank W-4 form at http://www.irs.gov/pub/irs-pdf/fw4.pdf. Then, complete the form using the following data:
   - You are single.
   - Your social security number is 999-99-999.
   - Your address is 1234 Making Money Lane, Columbus, KY, 99999.
   - You will claim one allowance.

Tasks (cont'd)

B. Use this timesheet, which indicates the number of hours that you worked during your first week, to calculate your regular earnings, overtime earnings, and gross pay for the pay period. (Show your work.)

Day	Regular Time Worked	Overtime Worked
Monday	8	3.25
Tuesday	8	1.5
Wednesday	8	0
Thursday	8	0
Friday	8	2

Regular earnings =

Overtime earnings =

Gross pay =

C. Based on your gross pay, what are your Social Security and Medicare taxes? (Assume that your Social Security tax rate is 6.2% and your Medicare tax rate is 1.45%, and show your work.)

Social Security tax =

Medicare tax =

D. The following items are also deducted from your gross pay:

- Federal taxes of $206
- State tax at 2%
- Local tax at 2%
- School tax at 0.5%
- Medical insurance premium of $57.25
- Union dues of $7.25

Use the information provided to calculate your total deductions and net pay. (Be sure to include Social Security and Medicare taxes, and show your work.)

Total deductions =

Net pay =

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Completes the W-4 form correctly.
- Uses appropriate mathematical processes at all times.
- Calculates answers with no mathematical errors.
- Shows all work done to calculate answers.

3

- Completes most or all of the W-4 form correctly.
- Uses appropriate mathematical processes most or all of the time.
- Calculates answers with few mathematical errors.
- Shows most of the work done to calculate answers.

2

- Completes some of the W-4 form correctly.
- Occasionally uses appropriate mathematical processes.
- Calculates answers with some mathematical errors.
- Shows some work done to calculate answers.

1

- Completes the W-4 form incorrectly.
- Does not use appropriate mathematical processes.
- Calculates answers with numerous mathematical errors.
- Does not show work done to calculate answers.

Unit 9

Taxes

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Kentucky Accounting and Finance Foundations Curriculum Guide

Lesson 21.1 Reading Tax Documents

Employers deduct money for federal income taxes from each worker's pay. This deduction is called a **withholding tax**. The amount withheld is an estimate of the taxes due to the federal government at the end of the year. The government tracks these tax payments through the employee's social security number.

In Chapter 19, you learned about W-4 forms. Each new employee must fill out a W–4 to determine her/his filing status and the amount of federal tax to withhold. Once these new employees begin getting paid, the amount of taxes deducted from their paychecks is tracked. At the end of the year, the employee receives a statement detailing the amount of taxes withheld throughout the year and the total amount of gross earnings. This statement is called a **W–2**.

To determine if you are due a refund or if you owe more in taxes, you must take your W-2 (and other tax documents, in some instances), and complete a tax return.

There are three basic federal tax forms:

1) 1040
2) 1040A
3) 1040EZ

Most young people qualify to use the simplest of the three, which is the 1040EZ. The qualifications for using the 1040EZ are:

- You are single or married filing jointly.
- You don't have any dependents (people you support financially).
- You are under age 65.
- You are not blind.
- You earned less than $100,000.
- You earned $1,500 or less in interest.
- Your income came from wages, salaries, interest, tips, scholarships, fellowship grants, and/or unemployment compensation.

If you do not qualify to use a 1040EZ, your next step should be the 1040A. Your taxable income must still be less than $100,000, but that income can come from more different sources than for the 1040EZ. People of all ages can use the 1040A, even if they have dependents. And, you can earn more than $1,500 in interest and still use the 1040A. However, you are limited in terms of the types of deductions and/or credits that you take.

If neither the 1040EZ nor 1040A will work for you, you'll need to use the 1040 form. The 1040 is used when you earn more than $100,000 and/or want to itemize (individually list) all of your many deductions (expenses that you are permitted to subtract from income). In short, the 1040 is a good choice if your financial life is more complicated.

Some major sections of every 1040 tax form are gross income, adjusted gross income, taxable income, deductions, and exemptions.

Gross Income: The total income in a year, including income from wages, salaries, commissions, tips, and interest

Adjusted Gross Income (AGI): You may be eligible to subtract certain adjustments from your gross income. These adjustments can include business losses, retirement plan contributions, alimony payments, and certain penalties.

Tax Base: Maximum level of earnings on which a tax is calculated

Taxable Income: You subtract the deductions and exemptions for which you qualify from your adjusted gross income. The amount that remains is the amount on which your taxes are calculated.

Deductions: Expenses that reduce the amount of your taxable income; examples include interest paid on a home mortgage, dental expenses, property taxes, and state and local income tax. Taxpayers have the option of claiming a fixed amount called a **standard deduction** (in 2013, $6,100 for individual taxpayers and $12,200 for married taxpayers filing jointly). A taxpayer only claims a standard deduction if the amount of itemized deductions is less than the standard amount. The standard deduction tends to change every year.

Exemption: Amount of income, per person, free from tax. You may claim one exemption for yourself, unless someone else claims you as a dependent on his/her tax return. You can claim an exemption for a spouse and any dependents who qualify (in 2013, $3,900 per exemption).

Examples

1. Heather is single and has a gross income of $33,200. She pays $2,100 into an approved retirement plan and has deductions totaling $6,800. She has one exemption. What is her taxable income?
2. Caitlyn and her husband Michael have a gross income of $34,000. They file one tax return. They pay $3,500 into a retirement plan. Their itemized deductions are $2,000. They claim two exemptions. What is their taxable income?

Solution

	1. Heather	2. Caitlyn and Michael
Gross Income	$33,200	$34,000
Adjustment to Gross Income	- 2,100	- 3,500
Adjusted Gross Income	31,100	30,500
Deductions	- 6,800	- 12,200
	24,300	18,300
Exemptions	- 3,900	- 7,800
Taxable Income	$20,400	$10,500

Lesson 21.2 Using Tax Tables to Complete 1040EZ

The money withheld from an employee's paycheck during the year is an estimate of how much tax the employee will owe at the end of the year. If the total amount of tax withheld from the employee's pay is less than what s/he owes, then s/he will need to pay additional tax to the government at the end of the year. If the amount withheld from the employee's pay is more than what s/he owes, s/he is due a refund from the government at the end of the year.

As we discussed earlier, you must complete a tax return to determine if you owe additional money or if the government owes you a tax refund. If your taxable income is less than $100,000, you can use a tax table to find the tax. You can find each year's tax table in the IRS's official instructions for preparing different types of tax returns. For instance, this year's instructions for filing a 1040EZ tax return (http://www.irs.gov/pub/irs-pdf/i1040ez.pdf) include the most current tax table (pages 31-39).

To read a tax table, find your taxable income in the "At least" and "But less than" columns. Then, read across that line to the column that shows your filing status. The amount listed where the line and column meet is your tax. Let's use the following excerpts from a recent tax table to determine the refund due to each taxpayer in the examples below.

Examples

1. Marty is single and had a taxable income of $13,210 last year. Use the tax table provided to determine Marty's total income tax due. If his employer withheld $2,350 in federal income taxes last year, is Marty due a refund, or does he owe more taxes?
2. Vicki and her husband are filing jointly. Their total taxable income last year was $23,658. Use the tax table provided to determine their total income tax due. If their employers deducted $4,560 in taxes from their pay during the year, are Vicki and her husband due a refund, or do they owe more taxes?

Tax Tables

If Form 1040EZ, line 6, is–		And you are–	
At least	But less than	Single	Married filing jointly
		Your tax is–	
11,000			
11,000	11,050	1,219	1,103
11,050	11,100	1,226	1,108
11,100	11,150	1,234	1,113
11,150	11,200	1,241	1,118
11,200	11,250	1,249	1,123
11,250	11,300	1,256	1,128
11,300	11,350	1,264	1,133
11,350	11,400	1,271	1,138
11,400	11,450	1,279	1,143
11,450	11,500	1,286	1,148
11,500	11,550	1,294	1,153
11,550	11,600	1,301	1,158
11,600	11,650	1,309	1,163
11,650	11,700	1,316	1,168
11,700	11,750	1,324	1,173
11,750	11,800	1,331	1,178
11,800	11,850	1,339	1,183
11,850	11,900	1,346	1,188
11,900	11,950	1,354	1,193
11,950	12,000	1,361	1,198
12,000			
12,000	12,050	1,369	1,203
12,050	12,100	1,376	1,208
12,100	12,150	1,384	1,213
12,150	12,200	1,391	1,218
12,200	12,250	1,399	1,223
12,250	12,300	1,406	1,228
12,300	12,350	1,414	1,233
12,350	12,400	1,421	1,238
12,400	12,450	1,429	1,243
12,450	12,500	1,436	1,248
12,500	12,550	1,444	1,253
12,550	12,600	1,451	1,258
12,600	12,650	1,459	1,263
12,650	12,700	1,466	1,268
12,700	12,750	1,474	1,273
12,750	12,800	1,481	1,278
12,800	12,850	1,489	1,283
12,850	12,900	1,496	1,288
12,900	12,950	1,504	1,293
12,950	13,000	1,511	1,298
13,000			
13,000	13,050	1,519	1,303
13,050	13,100	1,526	1,308
13,100	13,150	1,534	1,313
13,150	13,200	1,541	1,318
13,200	13,250	1,549	1,323
13,250	13,300	1,556	1,328
13,300	13,350	1,564	1,333
13,350	13,400	1,571	1,338
13,400	13,450	1,579	1,343
13,450	13,500	1,586	1,348
13,500	13,550	1,594	1,353
13,550	13,600	1,601	1,358
13,600	13,650	1,609	1,363
13,650	13,700	1,616	1,368
13,700	13,750	1,624	1,373
13,750	13,800	1,631	1,378
13,800	13,850	1,639	1,383
13,850	13,900	1,646	1,388
13,900	13,950	1,654	1,393
13,950	14,000	1,661	1,398

If Form 1040EZ, line 6, is–		And you are–	
At least	But less than	Single	Married filing jointly
		Your tax is–	
14,000			
14,000	14,050	1,669	1,403
14,050	14,100	1,676	1,408
14,100	14,150	1,684	1,413
14,150	14,200	1,691	1,418
14,200	14,250	1,699	1,423
14,250	14,300	1,706	1,428
14,300	14,350	1,714	1,433
14,350	14,400	1,721	1,438
14,400	14,450	1,729	1,443
14,450	14,500	1,736	1,448
14,500	14,550	1,744	1,453
14,550	14,600	1,751	1,458
14,600	14,650	1,759	1,463
14,650	14,700	1,766	1,468
14,700	14,750	1,774	1,473
14,750	14,800	1,781	1,478
14,800	14,850	1,789	1,483
14,850	14,900	1,796	1,488
14,900	14,950	1,804	1,493
14,950	15,000	1,811	1,498
15,000			
15,000	15,050	1,819	1,503
15,050	15,100	1,826	1,508
15,100	15,150	1,834	1,513
15,150	15,200	1,841	1,518
15,200	15,250	1,849	1,523
15,250	15,300	1,856	1,528
15,300	15,350	1,864	1,533
15,350	15,400	1,871	1,538
15,400	15,450	1,879	1,543
15,450	15,500	1,886	1,548
15,500	15,550	1,894	1,553
15,550	15,600	1,901	1,558
15,600	15,650	1,909	1,563
15,650	15,700	1,916	1,568
15,700	15,750	1,924	1,573
15,750	15,800	1,931	1,578
15,800	15,850	1,939	1,583
15,850	15,900	1,946	1,588
15,900	15,950	1,954	1,593
15,950	16,000	1,961	1,598
16,000			
16,000	16,050	1,969	1,603
16,050	16,100	1,976	1,608
16,100	16,150	1,984	1,613
16,150	16,200	1,991	1,618
16,200	16,250	1,999	1,623
16,250	16,300	2,006	1,628
16,300	16,350	2,014	1,633
16,350	16,400	2,021	1,638
16,400	16,450	2,029	1,643
16,450	16,500	2,036	1,648
16,500	16,550	2,044	1,653
16,550	16,600	2,051	1,658
16,600	16,650	2,059	1,663
16,650	16,700	2,066	1,668
16,700	16,750	2,074	1,673
16,750	16,800	2,081	1,678
16,800	16,850	2,089	1,683
16,850	16,900	2,096	1,688
16,900	16,950	2,104	1,693
16,950	17,000	2,111	1,698

If Form 1040EZ, line 6, is–		And you are–	
At least	But less than	Single	Married filing jointly
		Your tax is–	
23,000			
23,000	23,050	3,019	2,584
23,050	23,100	3,026	2,591
23,100	23,150	3,034	2,599
23,150	23,200	3,041	2,606
23,200	23,250	3,049	2,614
23,250	23,300	3,056	2,621
23,300	23,350	3,064	2,629
23,350	23,400	3,071	2,636
23,400	23,450	3,079	2,644
23,450	23,500	3,086	2,651
23,500	23,550	3,094	2,659
23,550	23,600	3,101	2,666
23,600	23,650	3,109	2,674
23,650	23,700	3,116	2,681
23,700	23,750	3,124	2,689
23,750	23,800	3,131	2,696
23,800	23,850	3,139	2,704
23,850	23,900	3,146	2,711
23,900	23,950	3,154	2,719
23,950	24,000	3,161	2,726
24,000			
24,000	24,050	3,169	2,734
24,050	24,100	3,176	2,741
24,100	24,150	3,184	2,749
24,150	24,200	3,191	2,756
24,200	24,250	3,199	2,764
24,250	24,300	3,206	2,771
24,300	24,350	3,214	2,779
24,350	24,400	3,221	2,786
24,400	24,450	3,229	2,794
24,450	24,500	3,236	2,801
24,500	24,550	3,244	2,809
24,550	24,600	3,251	2,816
24,600	24,650	3,259	2,824
24,650	24,700	3,266	2,831
24,700	24,750	3,274	2,839
24,750	24,800	3,281	2,846
24,800	24,850	3,289	2,854
24,850	24,900	3,296	2,861
24,900	24,950	3,304	2,869
24,950	25,000	3,311	2,876
25,000			
25,000	25,050	3,319	2,884
25,050	25,100	3,326	2,891
25,100	25,150	3,334	2,899
25,150	25,200	3,341	2,906
25,200	25,250	3,349	2,914
25,250	25,300	3,356	2,921
25,300	25,350	3,364	2,929
25,350	25,400	3,371	2,936
25,400	25,450	3,379	2,944
25,450	25,500	3,386	2,951
25,500	25,550	3,394	2,959
25,550	25,600	3,401	2,966
25,600	25,650	3,409	2,974
25,650	25,700	3,416	2,981
25,700	25,750	3,424	2,989
25,750	25,800	3,431	2,996
25,800	25,850	3,439	3,004
25,850	25,900	3,446	3,011
25,900	25,950	3,454	3,019
25,950	26,000	3,461	3,026

If Form 1040EZ, line 6, is–		And you are–	
At least	But less than	Single	Married filing jointly
		Your tax is–	
26,000			
26,000	26,050	3,469	3,034
26,050	26,100	3,476	3,041
26,100	26,150	3,484	3,049
26,150	26,200	3,491	3,056
26,200	26,250	3,499	3,064
26,250	26,300	3,506	3,071
26,300	26,350	3,514	3,079
26,350	26,400	3,521	3,086
26,400	26,450	3,529	3,094
26,450	26,500	3,536	3,101
26,500	26,550	3,544	3,109
26,550	26,600	3,551	3,116
26,600	26,650	3,559	3,124
26,650	26,700	3,566	3,131
26,700	26,750	3,574	3,139
26,750	26,800	3,581	3,146
26,800	26,850	3,589	3,154
26,850	26,900	3,596	3,161
26,900	26,950	3,604	3,169
26,950	27,000	3,611	3,176
27,000			
27,000	27,050	3,619	3,184
27,050	27,100	3,626	3,191
27,100	27,150	3,634	3,199
27,150	27,200	3,641	3,206
27,200	27,250	3,649	3,214
27,250	27,300	3,656	3,221
27,300	27,350	3,664	3,229
27,350	27,400	3,671	3,236
27,400	27,450	3,679	3,244
27,450	27,500	3,686	3,251
27,500	27,550	3,694	3,259
27,550	27,600	3,701	3,266
27,600	27,650	3,709	3,274
27,650	27,700	3,716	3,281
27,700	27,750	3,724	3,289
27,750	27,800	3,731	3,296
27,800	27,850	3,739	3,304
27,850	27,900	3,746	3,311
27,900	27,950	3,754	3,319
27,950	28,000	3,761	3,326
28,000			
28,000	28,050	3,769	3,334
28,050	28,100	3,776	3,341
28,100	28,150	3,784	3,349
28,150	28,200	3,791	3,356
28,200	28,250	3,799	3,364
28,250	28,300	3,806	3,371
28,300	28,350	3,814	3,379
28,350	28,400	3,821	3,386
28,400	28,450	3,829	3,394
28,450	28,500	3,836	3,401
28,500	28,550	3,844	3,409
28,550	28,600	3,851	3,416
28,600	28,650	3,859	3,424
28,650	28,700	3,866	3,431
28,700	28,750	3,874	3,439
28,750	28,800	3,881	3,446
28,800	28,850	3,889	3,454
28,850	28,900	3,896	3,461
28,900	28,950	3,904	3,469
28,950	29,000	3,911	3,476

Using Tax Tables to Complete 1040EZ (cont'd)

Solutions

	Marty	*Vicki and Her Husband*
Total Income Tax Due (From Tax Table)	$1,549	$2,681
Amount Withheld During the Year	$2,350	$4,560
Refund Due	$801	$1,879

Lesson 21.3 Income Taxes for Single Dependents

Because students are typically single and still in school, many of them are listed as dependents on other individuals' (i.e., parents' or guardians') tax returns. Nevertheless, many of these same students are also employed and earn their own income. As a result, they are also obligated to pay income tax, although the federal tax withheld is generally a small amount.

To claim a refund on taxes paid, you must file an income-tax return. However, the rules for dependents filing returns are different than for people who cannot be claimed as dependents by anyone else.

A dependent's income is grouped into two categories: **earned and unearned**. **Earned income** is the result of the dependent's own labor and includes wages, salaries, and tips. **Unearned income**, on the other hand, includes money from interest or dividends that you did not physically earn.

For the 2012 tax year, someone who is claimed as a dependent on someone else's tax return but still files his/her own return can claim a standard deduction equal to the greater of the following two amounts:

a. $950

b. The person's **earned** income plus $300
(but no higher than the regular standard deduction amount)

For the most current guidelines regarding the standard deduction for dependents, go to http://www.irs.gov/publications/p17/ch20.html#d0e67735.

Example

Hunter Scott is a senior at Lexington High School. Because he is single and a student, his parents still claim him as a dependent on their tax return. Hunter worked part-time last summer and earned $3,395. His employer withheld $330 in taxes from his pay. Hunter also earned $400 in interest from his savings account, and he had no adjustments to his income. If Hunter claimed a standard deduction based on his earned income plus $300, determine the following: the amount of that deduction; Hunter's adjusted gross income; his taxable income; his total tax due; and the amount of his tax refund.

Income Taxes for Single Dependents (cont'd)

Solution:

Standard Deduction Based on Hunter's Earned Income = Earned Income + $300

$3,395 + $300 = $3,695

Adjusted Gross Income (AGI) = Earned Income + Unearned Income – Adjustments

$3,395 + $400 – $0 = $3,795

Taxable Income = AGI – Deduction

$3,795 – $3,695 = $100

Total Tax Due (To find, go to page 31 of the 1040EZ instructions at

http://www.irs.gov/publications/p17/ch20.html#d0e67735.**)** = $11

Refund Due = Tax Withheld – Tax Due

$330 – $11 = $319

Lesson 21.4 Key Terms

Payroll Taxes: taxes calculated using earned income; withheld from employees' paychecks; major source of revenue for the federal government

Employee Income Taxes: taxes that must be withheld from all employees' total earnings; amount is based on each taxpayer's financial and family situation

FICA: Federal Insurance Contributions Act; provides for a federal system of old-age, survivors', disability, and hospital insurance; includes Social Security (old-age, survivors', and disability insurance) and Medicare (hospital insurance)

Property Taxes: taxes paid on privately owned property; usually paid semiannually; amount is based on local tax rates and assessed property value

Sales Taxes: taxes levied on certain products when they are purchased; collected by the seller

Gross Income: amount of total earnings before deductions; also referred to as gross pay

Net Income: amount of paycheck after deductions are taken; also referred to as net pay

W–4 Form: required tax document used to determine the number of withholding allowances per employee; available at http://www.irs.gov/pub/irs-pdf/fw4.pdf

Withholding Allowance: the number of legal dependents (including the employee himself/herself) that can be claimed as deductions from total earnings

Internal Revenue Service (IRS): federal agency that collects income taxes

Tax Return: a set of forms that taxpayers use to calculate their tax obligation; must be completed and mailed or electronically sent by April 15

W–2 Form: summary of earnings and withholdings for the year; blank W–2 available at http://www.irs.gov/pub/irs-pdf/fw2.pdf

THE PURPOSE OF TAXATION
"Tax and the Facts"

#11

Takin' Care of Business

CPA... imagine the possibilities!

AICPA

#11 THE PURPOSE OF TAXATION "Tax and the Facts"

Overview

The concept and implementation of a tax system can be traced back to the founding of America in 1776. It was not until 1913, however, that the United States introduced an income tax with the 16th Amendment to the Constitution. Contrary to popular opinion, the purpose of the United States income tax is not solely founded as a means to raise revenue. In addition to setting economic policy, income taxes are also used to set social policy. That is, income taxes serve to accomplish two goals—economic and social.

The **economic goals of an income tax** include raising revenue to operate the government, expanding investment, reducing unemployment and controlling inflation. The purpose of an economic goal is to maintain, and when necessary, improve the overall health of the national economy. **Income tax laws with social goals**, however, are aimed at improving individual financial welfare and in turn, the overall well-being of society as a whole. Examples of tax laws with social goals include child-care credits, charitable contribution deductions, the Education and Roth IRAs (Individual Retirement Account), and employer-sponsored, tax-deferred savings plans (i.e., 401(k) and 403(b) plans).

As a democratic government, elected representatives debate tax laws in Congress. As a result, arguments concerning who pays and who benefits from taxation are usually answered by a compromise whereby the average citizen pays taxes *and* receives benefits from the government's spending of tax dollars.

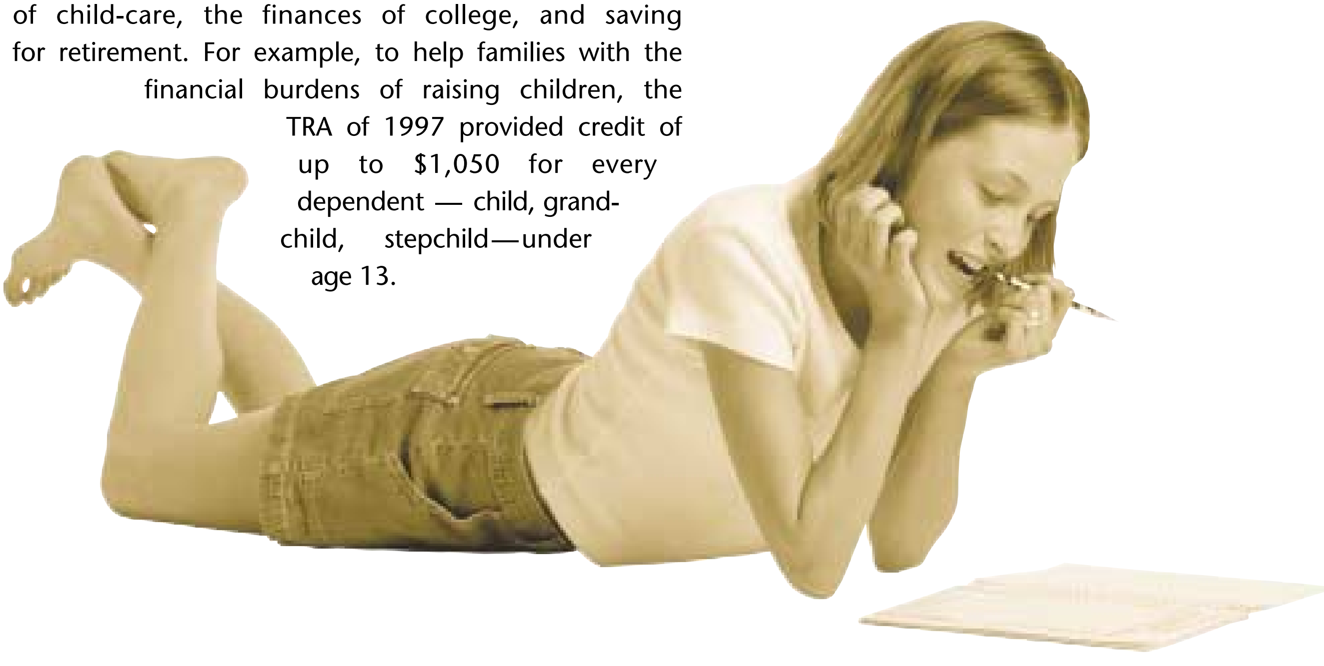
In 1997, Congress passed a Tax Relief Act (TRA of 1997) aimed at improving the financial position of the average person and assisting individuals with the expenses of child-care, the finances of college, and saving for retirement. For example, to help families with the financial burdens of raising children, the TRA of 1997 provided credit of up to $1,050 for every dependent — child, grandchild, stepchild—under age 13.

To provide various forms of college tuition relief, the TRA of 1997 makes available the Hope Scholarship Credit, worth up to $1,500 a year, and the Lifetime Learning Credit, which is worth up to $2,000.

In addition, those individuals paying for their college education or their dependent's can deduct up to $3,000 from their income. Congress has also made available the Education IRA that allows any individual to contribute $500 per year to an IRA as a means to fund the rising costs of college tuition. The advantage of the Education IRA, as opposed to other savings vehicles, is that the contributions to the IRA and the earnings it generates may be withdrawn **tax-free** if they are used to pay for college tuition.

To assist with funding for retirement, Congress provided the Roth IRA, named after Delaware Senator William Roth. Under the TRA of 1997, taxpayers can contribute up to $3,000 a year for themselves and $3,000 a year for their spouse to a "Roth IRA" and **never pay taxes** on the contributions and earnings upon withdrawal. A Roth IRA, to which contributions are made, can consist of stocks, bonds, mutual funds, money market accounts, and certificates of deposit, as well as other investments, or a combination of the aforementioned.

The purpose of taxes continues to be an important topic of discussion. In 2001, Congress passed a heavily debated law that cut taxes by $1.35 ***trillion***. In addition to increasing the child-care and education credit amounts and the amount that can be contributed to tax-deferred savings plans and IRAs, the law also reduced individual income tax rates and provided rebate checks of up to $600 for taxpayers.



Activities

PART-1:

FIRST, identify each of the following "tax facts" as having a social goal, an economic goal, or both. For each correct answer, you will receive ***10 points***.

THEN, *IF* you correctly identify the goal, you will have the opportunity to state the purpose of the tax law and, if correct, receive an additional **10 points.**

For example:

TAX FACT: Individuals are allowed to lower their taxable income by deducting $3,050 from income for every dependent, such as children.

GOAL: Social

PURPOSE: Grant parents and other taxpayers financial relief from the cost of supporting children and other dependents.

Tax Facts

1. Taxes paid on cigarettes cannot be deducted in arriving at taxable income.
2. Alimony payments may be deducted in arriving at the payer's taxable income.
3. Interest paid on a home mortgage may be deducted when calculating taxable income.
4. Income from rental property is taxable income, and expenses associated with the property can be deducted from that income.
5. Expenses incurred in moving from one residence to another can be deducted from income if certain conditions are met.
6. Interest of up to $2,500 a year on student loans for college tuition can be deducted from income when calculating taxable income.
7. Child support payments are not taxable income to the recipient.
8. Money or gifts contributed to a charity may be deducted from income when arriving at taxable income.
9. Individuals paying for college can lower their taxable income by deducting up to $3,000 per year from income.
10. Individuals are allowed to subtract from income the greater of allowed expenses (itemized deductions) or a "standard deduction" when calculating taxable income.
11. If you are a professional gambler, gambling winnings greater than $600 are taxable income and gambling losses up to the amount of winnings can be deducted in arriving at taxable income.
12. Interest paid on credit cards may not be deducted from income when calculating taxable income.

CPA-GRADING-SCALE:

Points	Grade	Rating
210 or more	A	A guru of a CPA!
180 or more, but less than 210	B	Ready for the CPA exam
150 or more, but less than 180	C	Should take more Accounting courses
120 or more, but less than 150	D	Better start studying!
less than 120	F	Go back to Accounting 101!

Tax Fact	Goal	Points	Purpose	Points	Total Points
#1					
#2					
#3					
#4					
#5					
#6					
#7					
#8					
#9					
#10					
#11					
#12					
			Total Points		

PART-2:

Contrary to popular belief, the Internal Revenue Service does not create tax laws. Congress, as the law-making body of our democracy, enacts and passes tax laws and is therefore responsible for the structure of our tax system. The Internal Revenue Service is the agency that enforces the tax laws, similar to the way the courts enforce other laws passed by Congress.

Evaluate each presentation that supports or challenges a "tax fact" based on the following categories. For each category, assign a score between 0 and 10, with 10 being an excellent score and 0 being a poor score.

Emotional Appeal : Did the presentation interest you?

Use of Evidence : Did the presentation include empirical evidence, as opposed to unsubstantiated hearsay or personal opinion?

Overall Quality: Did the presentation include anecdotes and personal experiences, as opposed to abstract or theoretical examples?

Organization: Did the presentation build a logical flow from assumptions and premises to conclusions?

Debate Scorecard

Evaluation Criteria	Team "FOR" Tax Fact	Team "AGAINST" Tax Fact
Emotional Appeal		
Use of Evidence		
Overall Quality		
Organization		
Total Points		

Lesson 21.8 Income Tax Student Assignments

Use Lessons 21.1, 21.2, and 21.3 as guides to complete the following exercises.

21.8.1 Income Tax

1. Find the adjusted gross income if adjustments to Tony's income totaled $4,863.65 and his income last year was:
   - Net income from business = $35,838.67
   - Dividends = $2,313.00
   - Interest = $3,516.50
   - Rental income = $2,398.75
2. Aaron, who is single, had an adjusted gross income of $14,670 and itemized deductions of $5,452 last year. If he claimed himself as an exemption ($3,900 per exemption), what was Aaron's taxable income?
3. Bebe is married, claims 3 exemptions ($3,900 per exemption), and takes the standard deduction of $12,200 for married taxpayers filing jointly. If her and her spouse's adjusted gross income is $45,600, what is their taxable income?

For numbers 4-6, use the tax tables on pages 79-90 of the 1040 instructions found at http://www.irs.gov/pub/irs-pdf/i1040.pdf to determine the federal tax due.

4. Bob is married and files jointly. He and his spouse's taxable income is $23,678.
5. David is single. His gross income is $23,450, and his taxable income is $13,875.
6. Elisa files as head of household and has a taxable income of $13,200.

21.8.3 Income Taxes—Twenty Questions

Table A:

Income Groups According to AGI Levels, 2009

Top 1%	More than $343,927
Top 5%	More than $154,643
Top 10%	More than $112,124
Top 25%	More than $66,193
Top 50%	More than $32,396
Bottom 50%	Less than $32,396

Table B:

Federal Income Tax Burden by Income Group, 2009

Income Group	Number of returns	AGI ($ millions)	Income taxes paid ($ millions)	Group's share of total AGI (%)	Group's share of Income taxes (%)	Average tax rate (%)
All taxpayers	137,982,203	7,825,389	865,863	100	100	11.06
Top 1%	1,379,822	1,324,571	318,043	16.93	36.73	24.01
Top 5%	6,899,110	2,482,489	507,907	31.72	58.66	20.46
Top 10%	13,798,220	3,379,730	610,156	43.19	70.47	18.05
Top 25%	34,495,551	5,149,871	755,901	65.81	87.30	14.68
Top 50%	68,991,102	6,770,174	846,352	86.52	97.75	12.50
Bottom 50%	68,991,102	1,055,215	19,511	13.48	2.25	1.85

Source: Internal Revenue Service. (n.d). *Individual Income Tax Returns with Positive Adjusted Gross Income (AGI)* (Tables 5–6). Retrieved February 5, 2013, from http://www.irs.gov/uac/SOI-Tax-Stats-Individual-Statistical-Tables-by-Tax-Rate-and-Income-Percentile#_grp2

Income Taxes—Twenty Questions (cont'd)

Directions: Refer to tables A and B to answer the following questions.

1. How many individual income tax returns were filed in 2009?
2. What was the average tax rate paid by all individuals in 2009?
3. What percent of income (AGI) is in the top 50 percent income group?
4. What percent of taxes paid were from the top 50 percent income group?
5. What percent of the income (AGI) came from the bottom 50 percent?
6. What percent of taxes did the bottom 50 percent group pay?
7. What was the average tax rate for the top 50 percent group?
8. What was the average tax rate for the bottom 50 percent group?
9. What percent of income (AGI) was in the top 25 percent group?
10. What percent of taxes did the top 25 percent income group pay?
11. What was the tax rate for the top 25 percent income group?
12. What percent of income (AGI) was in the top 10 percent income group?
13. What percent of taxes did the top 10 percent income group pay?
14. What was the tax rate for the top 10 percent income group?
15. What percent of income (AGI) was in the top 5 percent income group?
16. What percent of taxes did the top 5 percent income group pay?
17. What was the tax rate for the top 5 percent income group?
18. What percent of income (AGI) was in the top 1 percent income group?
19. What percent of taxes did the top 1 percent income group pay?
20. What was the tax rate for the top 1 percent income group?

21.8.5 "*What If*" Worksheet

Calculate the adjusted gross income (AGI) for the following "*what if*" income descriptions.

What if:

A. You earned $9.50 an hour in wages. You worked 40 hours a week and were paid for 52 weeks.

B. You worked all year for a monthly salary of $8,000. You also had $275 in interest income.

C. You earned $14.00 an hour in wages and worked 40 hours a week for 50 weeks.

D. You worked for a monthly salary of $5,000 and had $1,600 in interest income.

E. You had a part-time job that paid $6.75 an hour. You worked 20 hours a week for 25 weeks. Your spouse worked all year at a full-time job that paid $4,000 a month.

F. Your yearly salary was $42,000. Your spouse earned $11.50 an hour and worked 40 hours a week for 52 weeks.

G. Your monthly salary was $4,000, and you were paid for 12 months. Your spouse earned a salary of $3,000 a month for 12 months.

H. For the year, you had $2,450 in taxable interest. You worked for a salary of $8,000 a month for the entire year. Your spouse earned a salary of $4,500 a month for 12 months.

I. You worked at a full-time job that paid $12.95 an hour. You worked 40 hours a week and were paid for 52 weeks. Your spouse worked 25 hours a week for 52 weeks at a part-time job that paid $9.50 an hour.

J. For the year, you had $5,875 in taxable interest, and you earned $7,500 in salary each month of the year.

Lesson 21.9 Filing Electronically

Until late in the 20th Century, the only way for taxpayers to prepare their tax returns was with pen and paper, and the only way for them to send their tax returns to the Internal Revenue Service was via the U.S. postal system. Fortunately, technology has advanced significantly in the last couple of decades. As a result, we have a number of more advanced options for preparing and sending our returns, including computer software, Internet web sites, and even the telephone.

During the 2011 tax-filing season, the IRS received more than 143 million individual income tax returns. Of those 143 million, 39,957,992 tax returns were filed electronically.

There are many benefits to filing your return electronically. Using tax-preparation software to complete and file your taxes, for instance, can increase data accuracy and security dramatically. In fact, the error rate for an electronically prepared return is just half of a percent, while the error rate for a paper return is a whopping 21%.

Also, submitting your return to the IRS electronically is virtually paperless, and you're likely to receive your refund much more quickly than in the past—especially if you request that your refund be directly deposited into your bank account. Another perk associated with preparing and transmitting your tax return electronically is that it is usually less expensive. Plus, you often have the option of transmitting your federal and state returns at the same time.

You have several options for preparing and filing your tax return electronically:

- Commercial tax software such as Turbo Tax
- Online tax-preparation sites
- The IRS's web-based freefile
- Authorized IRS e-file providers
- Volunteer income-tax-assistance web sites
- Paid tax preparers

Skill Standards

Academic:

AB 1 Locate and interpret written information

AB 2 Read and interpret workplace documents

AB 4 Record information accurately and completely

AB 6 Demonstrate the ability to write clearly and concisely using industry specific technology

AC 1 Utilize critical-thinking skills to determine best options/outcomes (e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning)

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

Employability:

EG 4 Locate and verify information

Accounting:

OA 2 Compute personal federal and state income taxes

OF 2 Calculate gross and net pay

OF 5 Complete federal tax forms (e.g., W2, W4, 1040EZ)

Scenario

You are a professional tax preparer, and Mr. Maury R. Gaston has just hired you to prepare his Form 1040EZ for him. He has provided his W–2 form to you, along with the following information:

- He is single.
- He is a clerk for the W.B. Aquitaine Company.
- He claims one exemption.
- He had no other income last year.
- He does not have any adjustments to his gross income.
- His birthday is 01/01/1980.
- He is not blind.
- His daytime phone number is 555-555-5555.
- He does not want to donate to the presidential campaign this year.
- He wants to discuss his return with the IRS (he does not want to designate a third party or you to speak on his behalf).

Scenario (cont'd)

	a Employee's social security number 999-99-9999	OMB No. 1545-0008	Safe, accurate, FAST! Use IRS e-file. Visit the IRS website at www.irs.gov/efile
b Employer identification number (EIN)		1 Wages, tips, other compensation 24758.00	2 Federal income tax withheld 2100.00
c Employer's name, address, and ZIP code WB AQUITAINE COMPANY 987 MAIN ST FRANKFORT KY 40604		3 Social security wages 24758.00	4 Social security tax withheld 1535.00
		5 Medicare wages and tips 24758.00	6 Medicare tax withheld 358.99
		7 Social security tips	8 Allocated tips
d Control number 00001		9	10 Dependent care benefits
e Employee's first name and initial / Last name / Suff. MAURICE R GASTON 1000 CENTRAL AVE FRANKFORT KY 40604 f Employee's address and ZIP code		11 Nonqualified plans	12a See instructions for box 12 (Code)
		13 Statutory employee / Retirement plan / Third-party sick pay	12b (Code)
		14 Other	12c (Code)
			12d (Code)

15 State	Employer's state ID number	16 State wages, tips, etc.	17 State income tax	18 Local wages, tips, etc.	19 Local income tax	20 Locality name
KY	55-55555	24758.00	495.16	24758.00	247.58	FRFT

Form **W-2** **Wage and Tax Statement**

Department of the Treasury—Internal Revenue Service

Copy B—To Be Filed With Employee's FEDERAL Tax Return.
This information is being furnished to the Internal Revenue Service.

Tasks

A. Go to http://www.irs.gov/pub/irs-pdf/f1040ez.pdf to access an interactive version of Form 1040EZ. Complete the tax form for Mr. Gaston, and then print and/or save a copy of it for your records. (IRS tax tables are available at http://www.irs.gov/pub/irs-pdf/i1040ez.pdf.)

B. Mr. Gaston is interested in preparing his own taxes in the coming years. So, after preparing his tax return, write a memo to him in which you explain the steps that you followed to complete his 1040EZ form. In your memo, also be sure to discuss the significance of the different line items on his tax return.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Completes the 1040EZ form correctly.
- Makes no mathematical errors.
- Thoroughly explains processes used to complete the Form 1040EZ.
- Thoroughly explains significance of line items on the 1040EZ.

3

- Completes most or all of the 1040EZ form correctly.
- Makes few mathematical errors.
- Adequately explains processes used to complete the Form 1040EZ.
- Adequately explains significance of line items on the 1040EZ.

2

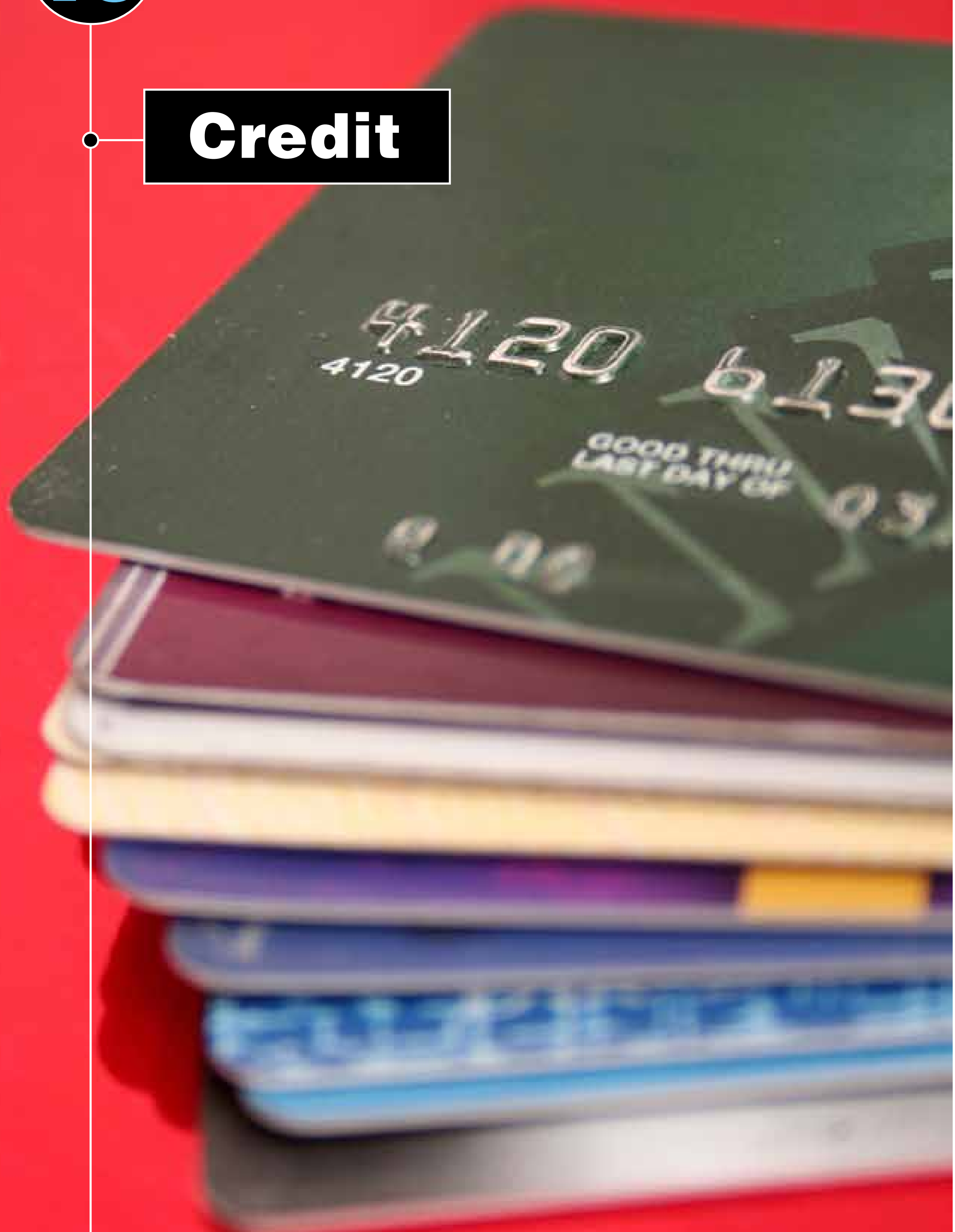
- Completes some of the 1040EZ form correctly.
- Makes some mathematical errors.
- Provides limited explanation of processes used to complete the Form 1040EZ.
- Provides limited explanation of significance of line items on the 1040EZ.

1

- Completes the 1040EZ form incorrectly.
- Makes numerous mathematical errors.
- Provides little or no explanation of processes used to complete the Form 1040EZ.
- Provides little or no explanation of significance of line items on the 1040EZ.

Unit 10

Credit



iStockphoto/Thinkstock

Kentucky Accounting and Finance Foundations
Curriculum Guide

Lesson 22.1 Fundamentals of Credit

Credit is a promise to pay back money borrowed. Credit allows a person, business, or organization to make a purchase and delay payment until a future date. This type of transaction is considered a privilege and is bound by specific laws.

Credit can be used to obtain loans, make purchases, and even to get a job. The credit transaction creates a debtor and a creditor. The person or firm borrowing the money is referred to as the **debtor**, and the person or firm loaning the money or selling on credit is referred to as the **creditor**. Credit comes with a fee. The fee charged for borrowing money is called **interest**. The amount of interest charged is based on several factors, including interest rates, the length of loan, and the amount of the loan.

The two categories of credit are **consumer** credit and **commercial** credit. People use consumer credit for personal reasons. (Examples include buying a home or car, tuition, and vacation purchases.) Commercial credit is used by businesses. Businesses may borrow money for a number of reasons, including paying salaries and buying supplies, materials, or machinery.

Within the two categories of credit, there are three main types of credit: **loan credit**, **trade credit**, and **sales credit**. **Loan credit** is used when money is borrowed for a specific purpose. Financial institutions such as banks and credit unions are the primary issuers of loan credit. Loan credit involves a written contract between the debtor and the creditor. Generally, the debtor agrees to make payments (called **installments**) at specified times to pay down the loan balance and any interest charged.

Individuals, businesses, and organizations use also **sales credit** to make purchases. Sales credit is most often issued by retail businesses. Have you ever gone to American Eagle Outfitters (AEO) and been asked, "Would you like to save 10% on today's purchase by opening an AEO card?" An AEO card is an example of sales credit. General credit cards are also examples of sales credit.

Businesses use **trade credit** to purchase products from vendors, suppliers, wholesalers, and other businesses. A manufacturer, for instance, might use trade credit to receive materials from a supplier today and pay for the items next week. Trade-credit transactions often involve discounts such as "2/10, n/30." (Read as 2 10, net 30). This means the borrower will receive a 2% discount if it pays the bill within 10 days of the statement date. If the bill is not paid within the first 10 days, the full amount owed is due within 30 days.

To become a debtor and receive credit, one must prove to be trustworthy and capable of paying back the money owed. When creditors decide whether or not to grant credit, they take into consideration the "**three C's of credit**," which are **capital**, **character**, and **capacity**.

Capital is the value of a borrower's possessions. Capital helps assure the creditor that the borrower will pay back the money borrowed. In some instances, if the borrower becomes delinquent, creditors can seize the borrower's property.

Character refers to the debtor's honesty and willingness to pay back a loan. If the debtor has a reputation of not paying back loans on time, it is unlikely that creditor will issue credit for that individual or business. If the debtor has always paid bills early or on time, chances for being granted credit increase dramatically.

Lesson 22.1 Fundamentals of Credit (cont'd)

Capacity is the debtor's ability to pay back a loan. If the debtor is an individual who has a job that pays less than $20,000 a year and already has other financial commitments, s/he probably doesn't have the capacity to pay back a $60,000 car loan (think of a fast-food restaurant employee looking to purchase a Cadillac Escalade). Factors that creditors consider when determining a person's capacity include how long s/he has been at her/his current job, his/her current income, and the level of debt already issued to the debtor.

As with anything, there are both advantages and disadvantages of credit. Some **advantages** of credit include convenience, immediate possession, savings, credit ratings, and emergency use.

Convenience: Having a credit card can make buying what you want or need easier. If you have a credit card, you can make purchases regardless of how much money you have in your wallet or checking account. Remember, though, that credit is a promise to pay at a later date, and individuals and businesses should not borrow more than they can afford to pay back.

Immediate possession: Have you ever run across something in a store that you really, really wanted to buy, but you didn't have enough money to buy it? Having a credit card can solve that problem—even if you don't have the cash, you can get your hands on the product immediately.

Savings: Combined with convenience and immediate possession, you can sometimes save money by making a purchase using credit. If you see something on sale at a steep discount, you can make the purchase on credit, even if you don't have the cash at the moment. Assuming that you pay your entire credit card balance off each month, you can take advantage of savings opportunities.

Credit rating: The more you use credit wisely, the higher your credit rating. Your credit rating is a numerical "score" based on your dependability and ability to pay your bills. Creditors examine your credit rating when determining if you are eligible for loans or other forms of credit. It's very important for you to maintain a good credit rating so that you can obtain credit to buy your first car or home or to start your own business. Unfortunately, if you have a poor credit rating, then you're unlikely to be approved for a loan or credit card account. And, if you are, you face the possibility of higher interest rates.

Emergency use: If you have a credit card, you have a back-up plan in case of an emergency. Imagine this: It is two days until payday. You have $5.00 in your wallet (and not much more in your checking account). You are driving down the road, and you get a flat tire! If you have a credit card, you can pay to have the tire fixed without waiting until payday.

Lesson 22.1 Fundamentals of Credit (cont'd)

While there are several advantages of having credit, there are also some **disadvantages**. If credit is used unwisely, the consequences can affect a consumer or business for years. Disadvantages include (but are not limited to) overbuying, careless buying, and higher prices.

Overbuying: One of the most common problems involving credit is overbuying. An individual may spend more money than s/he can actually afford when using a credit card. For instance, Ken can only afford to purchase a $400 PC tablet. But because he has a credit card, he convinces himself that it's okay to spend $600 on a tablet *plus* purchase a $50 cover for it. After all, he knows that he doesn't have to pay everything off at once. As a result, he spends $200 more than he can actually afford for the tablet, and he makes a pricey impulse purchase—$50 for the cover. Instead of asking, "Do I really need this cover?" Ken buys it without giving it much thought because he is using a credit card.

Careless buying: Smart businesses and consumers typically comparison shop before making big and/or expensive purchases. They conduct research, check different sellers' prices, and figure out which stores' or vendors' products are the best value before determining where to purchase the things that they need. Unfortunately, if you rely on a credit card, you run the risk of becoming a lazy shopper and not checking ads or other businesses' prices before making a purchase. Instead, you're more likely to buy a product when it's convenient to do so, regardless of value or price.

Higher prices: Did you know that sometimes the cost of a product is more if purchased with a credit card versus paying with cash? Some stores and vendors offer a discount for cash purchases. The reason? Most businesses are charged each time they run a credit transaction. The credit card company charges the business, not the cardholder, when the card is swiped. To offset that charge, businesses will pass that fee on to customers in the form of higher prices. Also, if you do not pay your credit card bill within the grace period, you have to pay interest charges. Hence, Ken's $600 tablet may cost much more by the time that he pays it off.

Questions

1. Why is trust so important in a credit transaction?

2. What are the major advantages and disadvantages of credit?

Lesson 22.2 Credit Regulations

Credit is protected by many laws that affect both creditors and debtors. Creditors want to make sure the person or business wanting credit is willing and able to pay back the loan. Debtors want to know that they can trust their identity and credit with creditors. One form of protection is the **credit report**. In addition to indicating the individual's or business's credit score or rating, this report also shows the individual's or business's debt, how often credit is used, and whether or not bills are paid on time. As a consumer, you have access to your credit report through three major credit reporting agencies: **Equifax**, **Experian**, and **Trans Union**.

When applying to receive credit from creditors, they may ask for your permission to contact Equifax, Experian, and Trans Union to access your credit report. Potential lenders then examine the report and use it as a tool to decide whether or not to grant credit. In addition to learning a lot about your character and capacity, creditors can use your credit report to find public records associated with your name. **Public records** include information reported by the local, state, and federal government about legal matters associated with your name. These legal matters might include bankruptcies, tax liens, court records, and/or monetary judgments.

Filing bankruptcy has a long-term impact on your credit. Depending on the type of bankruptcy that you file, the bankruptcy could appear on your credit report for anywhere from seven to 10 years.

Keep in mind that whenever a potential lender requests your credit report, it is making a **hard inquiry** into your credit. Even if you initiated the credit application process with the lender, its hard inquiry has a negative impact on your credit score. Each time that lenders, employers, landlords, financial institutions, or other businesses (even phone and cable companies) make a hard inquiry into your credit, your score is likely to drop about five points. In some cases, such as when you are applying for an auto, home, or business loan that you really need, losing points is worth it if it results in being approved for the loan. But, you should be cautious about how often you apply for credit, since doing so can hurt your credit score. (On the other hand, **soft inquiries**, such as your own inquiry into your credit, do not hurt or change your score.)

Lesson 22.2 Credit Regulations (cont'd)

Along with the credit report, creditors also ask potential debtors to complete a **credit application**. The questions asked on the form provide the lender with information needed to make decisions about granting credit. Two major portions of the application are the credit references and the applicant's signature line. You should list businesses or individuals who can provide information about your credit worthiness in the **credit reference** section. The signature section grants permission to the lender to contact your credit references and obtain a copy of your credit report. If you do not fill out the credit application completely, you are not likely to be issued any credit.

Creditors must verify the information provided on the application. They typically require pay stubs or financial statements to verify your income, and they may contact your bank to inquire about your different accounts. They may also contact other creditors that can report on your payment history. If you list a personal reference on your application, they may ask that individual to comment on how well you conduct your private affairs.

Because not everyone is trustworthy, federal and state agencies have created specific laws to protect debtors. The Truth-in-Lending Act of 1968 launched a series of laws that deal with various aspects of credit practices.

The **Truth-in-Lending Act (TILA)** requires creditors to disclose the total costs of credit to debtors in writing prior to extending credit. TILA also requires that all finance charges, interest rates, and credit terms be stated up front before any contract is signed.

In addition, TILA protects you if your credit cards are lost and stolen. It limits your liability for unauthorized use of your card to $50.

The **Equal Credit Opportunity Act (ECOA)** prohibits creditors from discriminating against any applicant on the basis of race, sex, age, or marital status. This act helps to protect all individuals and businesses applying for credit. If an applicant is denied credit, that individual or business can request reasons for the denial in writing.

The **Fair Credit Billing Act (FCBA)** requires prompt correction of any billing mistakes. If a debtor notices a mistake on a bill, s/he must notify the creditor of the error in writing within 60 days. While waiting for a reply from the creditor, the debtor is not required to pay the amount in question. The creditor must acknowledge the complaint within 30 days, and during the investigation, the customer should not incur finance charges on the amount in question. If the creditor determines that it made a mistake, it must notify the debtor in writing, credit or debit the account as necessary, and waive finance charges and late fees on the amount in question. Finally, if no error is found, the creditor must issue a new bill. At that time, the debtor may be charged any finance charges and missed minimum payments that have accumulated.

Lesson 22.2 Credit Regulations (cont'd)

The **Fair Credit Reporting Act (FCRA)** gives consumers the right to know what information credit bureaus are providing to potential creditors, employers, and insurers. Under this law, if credit is denied, the applicant must be given the name and contact information of the credit bureau(s) that was consulted, and the applicant is due a free copy of his/her credit report.

The **Credit Card Accountability, Responsibility, and Disclosure (CARD) Act of 2009** is a more recent effort to protect American credit card holders. It eliminates unfair interest rate increases, prohibits excessive and unnecessary fees, and requires credit card companies to disclose their terms and costs of credit in writing—and in plain language that consumers can understand. The CARD Act also makes credit card companies as well as their regulators more accountable for their actions and increases the penalties for violating credit regulations.

Lastly, the CARD Act includes several provisions designed specifically to protect students and young adults. It requires creditors extending credit to individuals under 21 years of age to either obtain the signature of a parent, guardian, or other adult who can be held responsible for the young person's debt *or* obtain written proof that the applicant has his/her own means to repay what s/he owes. In addition, it protects young adults from aggressive, excessive credit card marketing and requires universities to disclose any agreements that they have made with credit card companies offering credit to their students.

Questions

1. Nathan Jacobs operates a bookstore. One day a customer named Ann walks into his store and asks to make a large purchase on credit. Ann explains her financial situation to Mr. Jacobs and states she doesn't have much cash but has a good job and will be able to pay $30 a month.
   a. What additional information (if any) should Mr. Jacobs request?

   b. What sources of information could Mr. Jacobs request?

   c. Would you give Ann credit? Why or why not?

Lesson 22.3 Identity Theft

According to the Federal Trade Commission, about nine million Americans have their identities stolen each year. **Identity theft** is the act of using someone else's personal information (for example, his/her name, account number, driver's license number, health insurance, or Social Security number) without that person's knowledge. Identity theft can happen to anyone—young, old, poor, or rich.

It may take months to correct the problems associated with identity theft. Many times, you do not find out about the theft until you have been denied credit or housing because of the negative information in your credit report.

Identity thieves may obtain your information in a number of different ways:

- Dumpster diving: rummaging through your trash for financial papers with your information on them
- Skimming: using a special storage device when processing your credit card
- Phishing: using e-mails and pop-ups to get you to send them your financial data
- Changing your address: completing a change of address form for your credit card company
- Stealing: taking your wallet, purse, bank statements, etc.
- Pretexting: using false pretenses to obtain information from you or your financial institution. For example, an identity thief could call you, pretend to be from your bank, and get your basic information. Then, that person could call your bank, use the personal information that you provided to pretend to be you, and get your bank account numbers, balances, etc.

Identity thieves may use your information in many ways. They include:

- Open new credit card account in your name
- Add a new wireless phone to your account and run up charges
- Create counterfeit checks to access your bank account
- Clone your ATM card and drain your bank account
- Take out a loan in your name
- Collect your social security
- Get a job with your name and social security number
- Rent a house in your name
- Give the police your name during an arrest! If they don't show up for the court date, a warrant for your arrest is issued in your name!

According to the Federal Trade Commission's Identity Theft Clearinghouse, the most typical types of identity theft include credit card fraud, bank fraud, and communications services fraud.

Lesson 22.3 Identity Theft (cont'd)

Although it's impossible to completely eliminate the risk of having your identity stolen, you can take some basic precautions to protect yourself from being the target of a thief. Simple steps that you can take to protect yourself include:

- Protect your Social Security number. Memorize it, and leave your Social Security card in a safe place at home.
- Never give out your personal information when someone calls or e-mails you. Only share the information with employers, individuals, and businesses that you know and trust.
- Minimize the number of identification cards you carry in your wallet.
- Sign all new cards when you receive them.
- Don't leave checks out for anyone to see or use.
- Shred financial documents before placing them in the trash.
- Keep track of your receipts.
- Buy only from secure Internet sites, and protect your computer from viruses.
- Follow up with your creditors if you do not receive a bill on time.
- Monitor your credit regularly. You have the right to one free credit report each year, but you can also pay a small fee to pull your credit reports and scores quarterly or monthly.

If you suspect that your identity has been stolen, you should take action immediately. File a police report. Call all three of the major credit reporting agencies, notify them that you have fallen victim to identify theft, and request that they put a fraud alert on your name. Also, call your bank, creditors, and the Federal Trade Commission, and close all fraudulent accounts.

Equifax 1-800-525-6285

Experian 1-888-397-3742

Trans Union 1-800-680-7289

Federal Trade Commission 1-877-IDTHEFT (1-877-438-4338)

Lesson 22.4 Impact of Credit on Financial Decisions

So far, the sections in this unit have dealt primarily with credit decisions affecting consumers. Beginning with this section, you are going to evaluate the effect of credit when making financial decisions.

Businesses use a variety of methods to motivate customers to buy products and make payments for their purchases. The principal methods include: (1) allowing consumers to use credit cards to pay for their purchases; (2) extending direct credit and discounts for early payment to business customers; and (3) allowing returns from all customers under certain stated circumstances. These methods, in turn, affect the way we compute net sales revenue.

Businesses may decide to accept **credit cards** for a variety of reasons:

- To increase customer traffic
- To avoid the cost of providing credit directly to consumers, including recordkeeping and bad debts
- To lower losses due to bad checks
- To receive money faster

Remember, earlier you learned that credit card companies charge a fee for the service they provide. For example, let's say you have a lumber company, Deals. For each dollar of lumber that Deals sell to customers using credit cards, the company only gets $0.97 of the dollar. The other $0.03 goes to the credit card company. That's because the credit card company charges a three percent fee **(credit card discount)** for its service. As a business owner, you must understand the effect of this fee on your net sales.

Example:

Deals' daily credit card sales were $3,000. If the credit card company charges a 3% fee, what are the net sales?

Solution:

Sales	$3,000
Less: Credit Card Discount (3,000 X 3%)	- 90
Net Sales (reported on the income statement)	$2,910

Individuals, businesses, and organizations aren't the only debtors in this country. Even governments borrow funds on credit. In fact, the federal government's total debt is currently around $16 trillion! Who or what are the government's creditors? Social Security and Medicare trust funds, the Federal Reserve, other nations (including China, Japan, Russia, Mexico, and Canada), and even smaller trust funds such as the Harry S. Truman Scholarship Foundation and the Cheyenne River Sioux Tribe's habitat restoration fund. And, just like individuals, businesses, and organizations, the United States has a credit rating. If the federal government continues to borrow at the same pace it has in recent years, its credit rating may suffer. What impact do you think a reduced U.S. credit rating would have on you?

Lesson 22.4 Impact of Credit on Financial Decisions (cont'd)

In Lesson 22.1, you learned about trade discounts. When Deals sells to someone on credit, the terms of the sale are printed on the sales document and invoice that is sent to the customer. The record of the sale is kept in an **accounts receivable ledger**. In some cases, a **sales discount** or a cash discount is offered to encourage prompt payment. Deals offers standard credit terms of 2/10, n/30. If cash payment is not received within that 10-day discount period, the full sales price is due within 30 days.

Companies commonly record sales discounts given to customers by subtracting the discounts from sales if payments are made during the discount period.

Example:

A credit sale of $1,000 is recorded with terms 2/10, n/30. What is the discount's effect on the net sales?

Solution:

Sales	$1,000
Less: Sales Discount (1,000 X 2%)	- 20
Net Sales (reported on the income statement)	$980

Retailers and consumers alike have the right to return unsatisfactory or damaged merchandise and receive a refund or an adjustment to the bill. Such returns are tracked in a separate account called **Sales Returns and Allowances** and must be deducted from gross sales when determining net sales. This account helps managers and business owners track customer service and the amount of returns.

Example:

Assume Deals sells 40 pairs of shutters at $50 per pair to a customer on account for $2,000. When the customer received the shutters, 10 pairs were damaged and had to be returned to Deals. Compute net sales.

Solution:

Sales	$2,000
Less: Sales Returns And Allowances (10 pairs x $50)	- 500
Net Sales (reported on the income statement)	$1,500

(On the income statement, cost of goods sold, as it relates to the 10 pairs of shutters, would also be reduced.)

Did you know that the only time in U.S. history when the national debt was completely paid off was in 1835, while Andrew Jackson was president? America didn't remain debt-free for long, though. Just three years later, in 1838, the debt ballooned to $3.3 million, and it has not been paid off in full since.

Lesson 22.4 Impact of Credit on Financial Decisions (cont'd)

Question

Assume that a business sold $30,000 worth of goods to various retailers with terms 1/10, n/30. Half of the total amount was paid within the discount period. What is the amount of discount recorded?

Solution:

$30,000 x 1/2 = $15,000

$15,000 x 1% = $150 discount

To figure the discount date, you must know how many days are in each month. It's especially important for credit customers to know the final day of the discount period to send payment in time to receive the discount. There are several methods for remembering the number of days in each month. A familiar rhyme to help develop calendar skills is:

Thirty days hath September,
April, June, and November;
All the rest have thirty-one,
Excepting February alone,
And it has twenty-eight days time,
But in Leap Years,
February has twenty-nine.

Fill in the chart with the missing information.

Invoice Date	Invoice Amount	Terms	Discount Due Date	Discount Amount
July 20	$650	2/10, n/30		
May 28	$1,200	3/10, n/60		
November 20	$869	2/20, n/30		
January 30	$444	5/10, n/30		

Solution:

Invoice Date	Invoice Amount	Terms	Discount Due Date	Discount Amount
July 20	$650	2/10, n/30	July 30	$13.00
May 28	$1,200	3/10, n/60	June 7	$36.00
November 20	$869	2/20, n/30	December 10	$17.38
January 30	$444	5/10, n/30	February 9	$22.20

Lesson 22.5 Credit Cards—Choosing the Right One

Chances are that during your years of post-secondary study you will get your first credit card. There are numerous offers that enable students to qualify for credit without having to meet the standard criteria. Some of the balancing factors are higher than average interest rates and lower credit-line amounts.

How does one begin to choose the right card? You may want to begin by finding out what student credit cards are offered by the bank with which you already do business. This situation can offer the convenience of being able to transfer funds directly from your checking or savings account to the credit card, either in-branch or online, making payments simple.

However, it may be worth shopping around to compare the terms and conditions of different charge accounts. Pay attention to the interest rates, annual fees, and minimum finance charges associated with different credit cards. You may also want to examine credit card perks, such as special bonus programs, that are available. Depending on the card that you select, you may have the opportunity to earn points per dollar spent that can be redeemed for merchandise, frequent flyer miles, hotel stays, and more.

Different credit cards may also include a variety of introductory offers, such as reduced interest rates for a limited time. If you plan to use the card immediately to pay for a large expense right away and then pay off the purchase over several months, a low introductory rate may serve you well. Compare offers to get the best deal as the savings can be significant over time.

If you are employed prior to or during your studies, you may be able to qualify for a regular credit card and thus save on interest. All the major credit card companies offer low interest cards, and many of these are combined with point programs, so compare your options. From airline miles to helping you save towards buying a vehicle, there are numerous advantages to using different cards according to your individual needs.

If you find, for whatever reason, that you do not qualify for any of the standard or student credit cards, there are still options available. Today, preloaded cards are offered by most major credit card companies to give you the advantages of a credit card without the risk. You simply preload the card as you would a gift card and then use it as a normal credit card. The advantages include helping you establish a credit rating, having a credit card when you need one (such as for identification purposes or rentals) and having the ability to shop online.

Lesson 22.5 Credit Cards—Choosing the Right One (cont'd)

As you can see, there are many possibilities in credit cards today. Choose carefully, and use your card responsibly to avoid heavy interest charges that can both cost you a lot and damage your credit rating if you are unable to keep up with payments.

Even if you don't plan on using a credit card right away, it is still a good idea to apply for one while you have the advantage of student pre-approval. If you wait until after finishing school, you may not qualify and will have missed the chance to start building a credit history earlier. Remember, even if you receive a credit card, you do not have to use it. As long as there is no annual fee, it will not cost you anything and may come in useful in case of an emergency. Just remember to use your card responsibly, protect it from getting lost or stolen, and beware of interest rates and hidden costs.

Exercise

Go online and compare the student credit cards available from different banks. Also, do a quick comparison of the interest rates associated with each, along with those of standard low-interest cards. Be sure to read the fine print of the offers. What bonus programs are the most appealing to you? Remember to make sure there is no annual fee associated with the card.

Next, do a little math. If you pay your credit card off each month, it does not cost you anything. If you carry a balance, the costs can be considerable. If you put $1,000 on your card for school expenses and pay it off over the next four months, how much would you end up paying on the different cards? Remember to factor in any interest-free periods.

FINANCIAL PLANNING

"Tax Laws Can Make you Rich"

Takin' Care of Business

#9

CPA... Imagine the possibilities!

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#9 FINANCIAL PLANNING "Tax Laws Can Make you Rich"

Overview

In general, **income tax laws** serve two main purposes: **economic** and **social**. The **economic goals** of an income tax include raising revenue to operate the government, expanding investment, reducing unemployment and controlling inflation. The **social goals** of an income tax are aimed at improving both individual financial well-being and that of our society as a whole. Examples of **tax laws** aimed at improving an individual's financial position and our society as a whole include child care credits, education credits, charitable contribution deductions, and IRAs (Individual Retirement Accounts). Another income tax law that assists individuals in improving their financial position is Section 401(k) of the Internal Revenue Code (IRC). Section 401(k) of the IRC allows employers to sponsor "tax-deferred" savings plans for their employees. A tax-deferred savings plan, more commonly referred to as a **401(k) plan**, allows working individuals to simultaneously save for retirement ***and*** reduce their income taxes.

The advantages of a 401(k) plan are therefore twofold. First, the amount that is contributed to the plan is deducted from a taxpayer's income prior to determining the amount of earnings subject to income tax. Therefore, the more you contribute to the plan, the lower the amount of earnings subject to tax, and the lower the tax on one's income. (Note, however, there is a maximum amount one may contribute to a 401(k) plan. The 2005 maximum contribution is $14,000.) The second advantage of a 401(k) plan is that the amount contributed to the plan and the earnings it accumulates grow tax-free until the funds are withdrawn. Thus the term "tax-deferred" savings because taxes are not assessed on your contributions and earnings until the funds are withdrawn upon retirement at age 59 1/2. If the funds are withdrawn before age 59 1/2, the IRS will assess a financial penalty.

The ability of a working individual to simultaneously lower his or her income taxes and save for retirement tax-free is a considerable benefit provided by the U.S. tax system—a benefit that is "compounded" by the power of compound interest. Compound interest is the interest that is earned not only on the contributions made to a savings or investment account, but also to the interest that was earned on previous contributions. Therefore, the power of compound interest increases when contributions are made on a consistent basis.

In their role as financial planners, **Certified Public Accountants (CPAs)** help individuals and businesses plan their opportunities and responsibilities with respect to savings, investments and taxes. For instance, the United States employs a progressive tax system, which means a 'progressively' higher rate of tax is applied to your earnings as your earnings increase. Hence, the more you earn, the higher the tax rate applied to your earnings. In addition, individuals and businesses must be aware of the ever-changing tax laws at the state, local and federal levels of government.

Shown below is the 2005 Tax Rate Table for individual taxpayers and some basic tax guidelines:

2005 Tax Rate Table

Taxable Income is over	But not over	Tax Rate
0	$7,300	10%
$7,300	$29,700	15%
$29,700	$71,950	25%
$71,950	$150,150	28%
$150,150	$326,450	33%
$326,450	. . . . .	35%

- **Gross income** is calculated by adding salary, interest income, dividends, and other income and earnings.
- **Taxable income** is calculated by subtracting personal exemptions, the greater of itemized deductions or the standard deduction, and contributions to a tax-deferred savings plan from gross income.
- The amount deducted for **personal exemptions** for a single taxpayer is $3,200 for every dependent the taxpayer claims. (In general, a dependent is a relative or other person that lives with you that you financially support.)
- The **standard deduction** for a single taxpayer is $5,000.

(Note that the exemption and standard deduction amounts are for the tax year 2005 only. The personal exemption amount and the standard deduction change each year based on tax laws passed by Congress and vary depending on your tax filing status—single, married filing jointly, married filing separately, and head of household.)

Romeo and Juliet 401(k): A Tragic Tale of 'Poor' Tax Planning

ACT-1. Juliet, a single taxpayer, will earn a salary of $100,000 a year for the next ten years. She also receives $5,000 a year in interest income from investments, and contributes 10% of her salary *before taxes* each year to an employer-sponsored 401(k) plan. Romeo, a single taxpayer, will earn a salary of $100,000 a year for the next ten years as well but chooses not to contribute to a 401(k) plan. Instead, Romeo saves 10% of his salary *after-taxes* in a conventional savings account at his local bank. Romeo also receives $5,000 a year in dividend income from his investment in entertainment stocks. Both Romeo and Juliet claim one exemption ($3,200) and use the standard deduction ($5,000).

Use Romeo & Juliet's information to complete the "Yearly Tax Information" table.

Yearly Tax Information

Figure	Calculation	Juliet	Romeo
Gross Income	Salary, plus interest, plus dividends, plus other income	$	$
Pre-Tax Contribution to Tax-deferred Savings Plan		$	$
Taxable Income	Gross income less personal exemptions, less deductions (standard OR itemized), less contributions to tax-deferred savings plans	$	$
Federal Taxes	Apply taxable income to tax rate table	$	$
"Take-Home" Income	Taxable income less federal taxes, plus exemptions, plus deductions	$	$
After-tax Savings		$	$
Net "Take-Home" Income	Take-home income less after-tax savings	$	$

ACT-2. Ten years later, Romeo and Juliet meet by chance at a Shakespeare Festival. Romeo is interested in pursuing a relationship with Juliet, but Juliet is concerned with Romeo's financial planning acumen. Before making any tragic mistakes, Juliet hires you, the town's CPA, to compare her and Romeo's financial planning methods. Begin your assessment by calculating the following:

CPA's Financial Assessment

Calculation	Juliet	Romeo
The yearly tax savings as a result of contributing to the 401(k) plan.	$	$
The total taxes paid over 10 years.	$	$
The cumulative tax savings as a result of contributing to the 401(k) plan for 10 years.	$	$

As part of your assessment, calculate the value of Juliet's and Romeo's savings at the end of 10 years. Since taxpayers can contribute to a variety of investments in a 401(k) plan, the return is generally 8% to 12% per year. Contributions to a conventional savings account, however, generally return only 2% to 3%. Therefore, assume Juliet's contributions earn 12% per year and Romeo's earn 3% per year, and that both make their total 10% yearly contribution on an equal basis over 12 months.

Calculation	Juliet	Romeo
Monthly rate of return	%	%
Number of payments over 10 years		
Monthly contribution	$	$
Value of savings at the end of 10 years	$	$

Based on your assessment, what would you tell Juliet about Romeo's financial planning acumen?

Off Broadway...

Ralph and Ed, both single taxpayers, just moved into the same apartment complex and are discussing their individual financial positions.

Ralph will earn a salary of $110,000 a year for the next ten years as a transportation specialist and $15,000 from other income sources. Ralph is considering whether to contribute 10% of his salary to his employer sponsored 401(k) plan.

Ed will earn a salary of $114,000 a year for the next ten years as an environmental waste disposal specialist. His employer does not provide a 401(k) plan.

Ralph does not think he needs to invest in a 401(k) plan because his combined income is more than Ed's. Ed, as Ralph's friend, however, has encouraged Ralph — unsuccessfully thus far — to contribute to his employer's tax-deferred savings plan. Ed has asked you, a CPA, to prepare an analysis of his and Ralph's financial situation in order to convince Ralph of the advantages of a 401(k) plan.

To perform the analysis, complete the table below assuming that Ralph will contribute 10% of his salary to a 401(k) plan and that both Ralph and Ed claim one exemption ($3,200) and use the standard deduction ($5,000).

Yearly Tax Information

Figure	Calculation	Ralph	Ed
Gross Income	Salary, plus interest, plus dividends, plus other income	$	$
Pre-Tax Contribution to Tax-deferred Savings Plan		$	$
Taxable Income	Gross income less personal exemptions, less deductions (standard OR itemized), less contributions to tax-deferred savings plans	$	$
Federal Taxes	Apply taxable income to tax rate table	$	$
"Take-Home" Income	Taxable income less federal taxes, plus exemptions, plus deductions	$	$

Based on your assessment, explain to Ralph why he should contribute to his employer's 401 (k) plan.

Lesson 22.9

Calculating Interest and the Time Value of Money

You've already learned that all finance charges and interest rates must be clearly stated when entering into a credit contract. To determine the amount you have to pay, you must understand four things:

Interest: the fee that lenders charge borrowers for the use of credit

Interest Rate: the percentage figure used in calculating interest charges; also known simply as "rate"

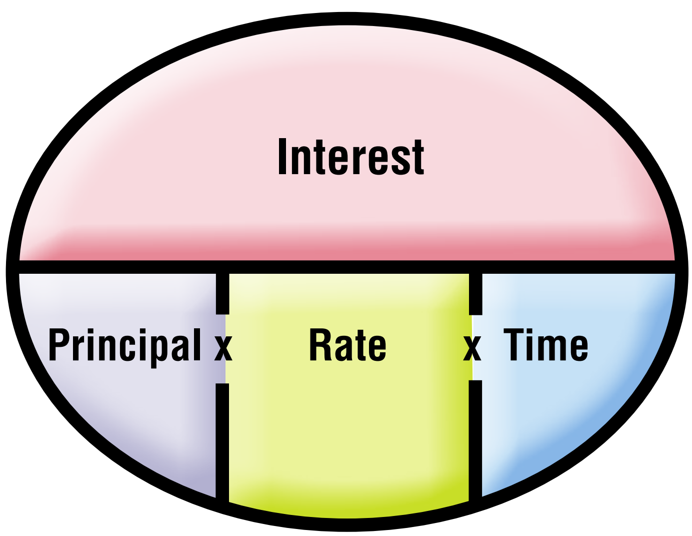
Principal: the amount of money borrowed

Time: the length of time for which interest will be charged

Interest, the interest rate, the principal, and the time are all related. The following formulas show that relationship:

Interest = Principal x Rate x Time
Principal = Interest / (Rate x Time)
Rate = Interest / (Principal x Time)
Time = Interest / (Principal x Rate)

The easiest way to remember the formula for calculating interest is below:



Depending on what you are solving for—interest, principal, rate or time—the circle can help you remember the proper formulas.

Lesson 22.9

Calculating Interest and the Time Value of Money (cont'd)

Examples

1. Find the interest paid on a loan of $2,400 for one year with an interest rate of 11%.
2. Find the interest rate on a loan if the amount borrowed is $850; total interest is $120; and the length of the loan is 2 years.
3. Find the time or length of the loan if the principal is $470; the interest rate is 12%; and the total interest is $135.

Solutions

1. Find the interest paid on a loan of $2,400 for one year with an interest rate of 11%.

   I = P x R x T
   I = $2,400 x 0.11 x 1
   I = $264

2. Find the interest rate on a loan if the amount borrowed is $850; total interest is $120; and the length of the loan is 2 years.

   R = I / (P x T)
   R = $120 / ($850 x 2)
   R = $120 / $1,700
   R = 7.05%

3. Find the time or length of the loan if the principal is $470; the interest rate is 12%; and the total interest is $135.

   T = I / (P x R)
   T = $135 / ($470 x 0.12)
   T = $135 / $56.40
   T = 2.39 years

22.9.1 Credit Assignment

Using the formulas learned in this lesson, calculate the missing items in the charts below.

	Principal	Rate	Time	Interest
1	$550	10%	2 years	
2	$1,100	9.5%	6 years	
3	$3,578	21%	3 years	
4	$2,975	4%	1 year	
5	$25,000	12%	5 years	

	Principal	Interest	Time	Rate
6	$800	$124	2 years	
7	$1,650	$95	4 years	
8	$2,000	$370	2 years	
9	$40,000	$24,000	12 years	
10	$423	$256	4 years	

	Principal	Rate	Interest	Time
11	$450	10%	$135	
12	$7,100	18%	$252	
13	$1,500	16.5%	$485	
14	$2,000	4.5%	$85	
15	$3,549	9.5%	$345	

Lesson 22.10 Credit Assignment

You need a new vehicle to make deliveries for your small business. Find three good used cars that cost less than $15,000 each and are within 30 miles of home. Fill out the chart below. (Autotrader.com is a good source of information about autos for sale in your area.)

Year	Make	Model	Price	Mileage	Owner's/Dealer's Name	City

What web site did you use?

Using Bankrate.com, determine which three banks in your area have the lowest interest rates for a 48-month used auto loan, and fill out the chart below.

Name of Institution	48-Month Auto Loan Rate

Choose one of the three automobiles in the first chart and one of the banks in the second chart. Assume that you have $1,000 available for a down payment. While still at Bankrate.com, go to the Calculators tab, and use the auto loan calculator to fill out the following information:

Number of Payments/ Months	Auto Loan Interest Rate	Payoff Date	Total Amount Paid
36			
48			
60			

Assume that you chose a 48-month loan. Now, go to the "extra payments" section of the calculator, and add $10 to your monthly auto loan payment.

a. What will your new payoff date be?

b. What will be your total amount paid?

Lesson 22.10 Credit Assignment (cont'd)

Add an extra yearly loan payment every May. You will have to type in the amount of the payment and the month in which you plan to pay it.

a. What will your new payoff date be?

b. What will be your total amount paid?

What will your insurance be per month? Get an insurance quote at Geico.com, Progressive.com, or another insurance company's web site.

Find out how much money you will need to pay each month to drive this vehicle. Assume that you expect to drive 100 miles each week delivering products. Use 52 weeks per year to find your monthly mileage. Gas is currently $3.90 per gallon, and this auto gets 27 miles per gallon. Budget $30 per month for vehicle upkeep.

Monthly Auto Payment (48 months)	________________
Monthly Insurance	________________
Gas	________________
Upkeep (average)	________________
Projected Monthly Automobile Expense	________________

Total Miles Driven in a Year = 100 Miles Per Week in Deliveries X 52 Weeks =

Total Miles Driven in a Month = Total Miles Driven in a Year / 12 Months =

If your vehicle gets 27 miles to the gallon, how many gallons of gas will you have to buy?

If gas costs $3.90 per gallon, how much will a month's worth of gas cost?

Experts say that your auto expenses should be no more than 15% of your net monthly income. If your business has monthly net revenue of $24,500, expenses of $14,300, and a corporate tax rate of 15%, what is your net monthly income after taxes?

What percentage of your net monthly income after taxes would need to go toward your monthly auto expenses?

According to budget experts, can you afford this new company vehicle?

Lesson 22.11 Credit Open-Response Question

Read the scenario provided. Use a separate sheet of paper to record your response.

Last year, Jilann started a new small business. Since that time, she has received several credit card offers. She would like to use a credit card for her accounts payables, and she's also interested in using a credit card to earn free frequent flyer miles. Give Jilann advice on using credit cards. Explain three Do's and three Don'ts, and be sure to use the vocabulary we have learned pertaining to credit.

TIME VALUE OF MONEY

"Timing is Everything"

Takin' Care of Business

#10

CPA... Imagine the possibilities!

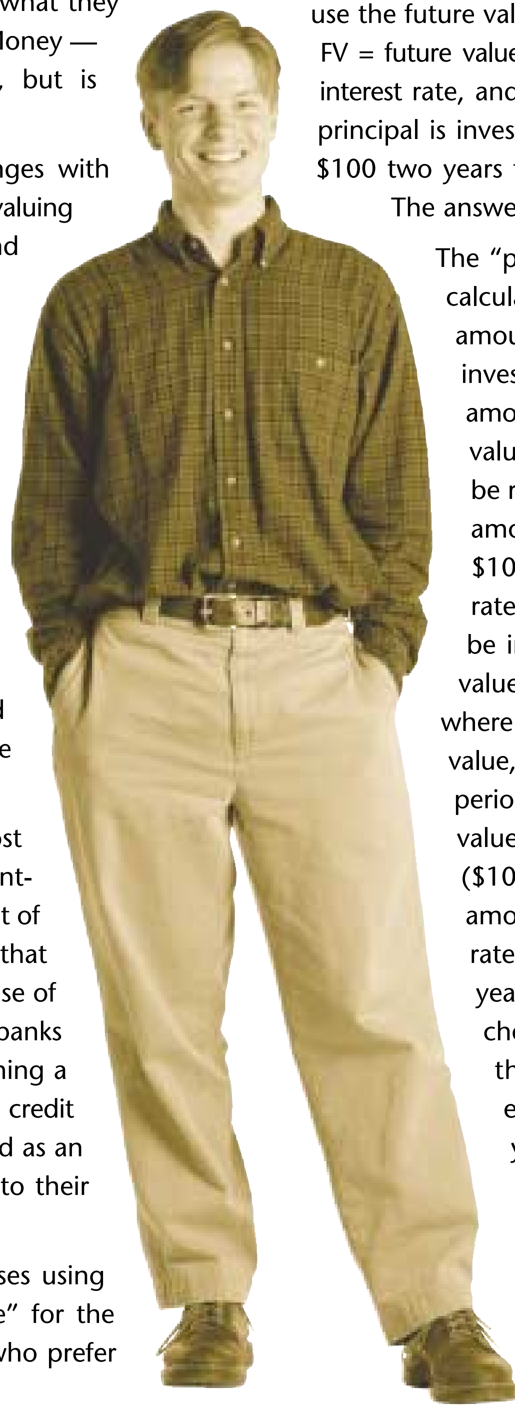
AICPA

#10 TIME VALUE OF MONEY "Timing is Everything"

Overview

Money is valuable, but how is it valued? The value of money is measured in time, thus we use the phrase "time value of money" to assess how valuable money is.

Money by itself, without a measure with which to gauge its value, is worth little more than the paper it is printed on. In fact, "money" — the paper — is only a symbol. "Money" has no intrinsic value beyond its paper value. For instance, imagine if paper clips were "money." Would "paper clips" be worth more now? Yes, they would, despite the fact that they would be made no differently. Paper clips would be worth more to us because of what they represent, not what they are. The same is true with money. Money — the paper — by itself has no value, but is valued because of what it represents.



The value of money, however, changes with time. The most basic "time" frame for valuing the dollar is one year. To understand time as it relates to money, consider a brand name piece of clothing that sells for \$75. Is \$75 expensive? The answer depends on your "time value of money." If you have a job that pays \$7.50 per hour, you will need to work at least 10 hours (remember to deduct taxes!) to purchase that item. In comparison, if you earn \$25 per hour, you need only work 3 hours to purchase the item. Therefore, the "value" of an item and the "expensiveness" of an item can be measured in terms of time.

Time value of money, however, is most commonly expressed using a percentage, or interest rate. Interest is the cost of money, expressed as a percentage that the lender charges the borrower for use of his or her money. For instance, banks charge customers a "price" for obtaining a loan and for making purchases using a credit card. The "price" charged is expressed as an interest rate. Banks also pay interest to their depositors for the use of their funds.

People obtain loans or make purchases using credit because of a "time preference" for the item they wish to purchase. People who prefer to make purchases now, rather than later, and borrow money to do so, incur a cost. The cost is expressed as a percentage or interest rate, and represents the interest that must be paid in addition to the amount borrowed.

Money, therefore, has more value the earlier it is received. For example, if you had the option of receiving a dollar today or a dollar next year, your preference is to receive it today so that you can invest it and earn interest.

To determine the future value of a sum of money, we need to know the interest (rate) it will earn and the length of time (years) it will be invested. For example, use the future value formula: $FV = p \bullet (1 + i)^n$, where FV = future value, p = principal amount invested, i = interest rate, and n = number of periods (years) the principal is invested, to calculate the future value of \$100 two years from now using a 6% interest rate. The answer is \$112.36 (\$100 x 1.1236).

The "present value" of money can also be calculated. Present value refers to the amount of money that, if received or invested today, will equal a stated future amount. For example, what is the present value — the value today — of \$100 to be received in three years? That is, what amount must you invest today to have \$100 in three years? Assume an interest rate of 8% (the rate at which money can be invested today) and use the present value formula: $PV = FV \bullet 1/(1 + i)^n$, where PV = present value, FV = future value, i = interest rate, and n = number of periods (years), to calculate the present value of \$100. The answer is \$79.38 (\$100 x .79383), which means that this amount, invested today at an interest rate of 8%, will yield \$100 in three years. (Use the future value formula to check the calculation.) This also means that receiving \$100 today is the equivalent of receiving \$79.38 three years from now. Therefore, the present value of \$100 received three years hence, discounted at an 8% interest rate, is \$79.83.

Activities

You Just Inherited $500 million! What are You Going to do Now?!

Your great, great, great-aunt has left you with her life savings of $500 million. Half a ***BILLION*** dollars! According to your aunt, you have the option to receive your $500 million in periodic, equal installments over the next 10 years, or the "present value equivalent" of $500 million now.

If you choose to accept your inheritance over the next 10 years, you will receive $50 million a year for the next 10 years.

Use the chart below to determine the amount you could receive today that is the equivalent of receiving $50 million a year for the next 10 years. (Use an interest rate of 7% for your calculation.)

Based on your calculation, would you elect to receive a lump-sum payment today or 10 annual payments?

Year & Amount	Factor (7%)	Present Value
1 $50,000,000	0.935	$46,750,000
2 $50,000,000		$
3 $50,000,000		$
4 $50,000,000		$
5 $50,000,000		$
6 $50,000,000		$
7 $50,000,000		$
8 $50,000,000		$
9 $50,000,000		$
10 $50,000,000		$
Total		$

CPA and Financial Consultant

Derek Singletary and Alex Doubleday, two highly successful baseball players, have signed 10-year contracts with the teams they play for. Derek signed for $200 million over 10 years and Alex signed for $225 million over ten years. The national and local media have assumed that Alex has signed the "bigger" contract, which includes a payment of $50 million in the final year of the contract.

You, as a CPA, however, have been asked to determine the "real" value of each player's contract.

As part of your analysis, you have determined that a 6% interest rate is appropriate to use in the calculation of the time value of each player's yearly payments. You have also obtained the yearly payments of each player, which are stated in the table below.

Calculate the present value factors and complete the chart below to determine who has the bigger contract.

		Derek Singletary		Alex Doubleday	
Year	Factor	Payment (millions)	Present Value	Payment (Millions)	Present Value
1	0.943	$ 25.00	$	$ 5.00	$
2		$ 25.00	$	$ 10.00	$
3		$ 25.00	$	$ 10.00	$
4		$ 22.50	$	$ 20.00	$
5		$ 22.50	$	$ 20.00	$
6		$ 20.00	$	$ 20.00	$
7		$ 15.00	$	$ 25.00	$
8		$ 15.00	$	$ 30.00	$
9		$ 15.00	$	$ 35.00	$
10		$ 15.00	$	$ 50.00	$
		$ 200.00	**$**	**$ 225.00**	**$**

Based on your calculations, did Alex really get the "bigger" contract? Why? ________________

____

____

Use the present value of the players' payments in year 6—the present values are the same in year 6!—to answer the following:

1. If each player plays 162 games in one season, how much do they earn per game? ________________
2. Based on playing 162 games and 9 innings per game, how much does each player earn per inning? ________________

The Bill Gates Watch...

As of September 2003, Bill Gates owned 1.164 ***billion*** shares of Microsoft Corporation. Visit the Microsoft Investor Relations page at **www.microsoft.com** to locate the company's Proxy Statement, which will report Bill's most current stock holdings. Use this information and the most current stock quote for one share of common stock of Microsoft Corporation to answer the following questions:

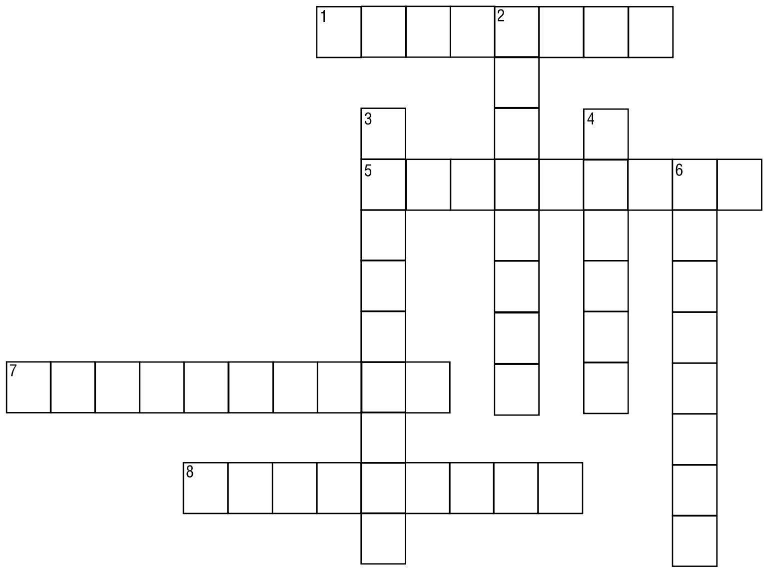
1. How much is Bill Gates worth based on the number of shares of Microsoft that he currently holds and the most current market price of a share of common stock of Microsoft? ________________
2. Based on Bill Gates worth (Question #1), if Bill wanted to build a $50 million house, how many could he build? ________________

   If he wanted to build an equal number of $50 million houses in each of the 50 United States, how many could he build in each state? ________________
3. Suppose Bill was paid his net worth as calculated in Question #1 in equal installments over 50 weeks, how much would he receive each week? ________________

   If Bill works 5 days a week, how much is he receiving per day? ________________

   If he works 8 hours per day, how much is he receiving per hour? ________________

Lesson 22.16 Credit Crossword



Across

1. The person loaning the money
5. Individual willing to provide information about credit worthiness
7. Money borrowed for specific purpose
8. Willingness to pay back loan

Down

2. Fee for borrowing money
3. Amount of money borrowed
4. The person borrowing the money
6. Ability to pay back loan

Lesson 22.17 Culminating Project A

Newton Park, your employer, has hired two new financial analysts. You have been asked to train them in Microsoft Excel so that they can help with investment decisions.

Upon the completion of your training class, you want to make sure the new analysts can explain the following key formulas and concepts:

The Microsoft Excel Help Feature can be used to help with your training class.

1. What is the Microsoft Excel formula used to calculate the payment for a loan based on constant payments and a constant interest rate?

2. What is the Microsoft Excel formula used to calculate the present value of a future amount?

3. What is the Microsoft Excel formula used to calculate the number of periods in a time value of money calculation?

4. What is the Microsoft Excel formula used to calculate the interest rate per period for an annuity?

5. Based on the questions above, what do the following variables refer to?

   Type:

   Nper:

   Guess:

Lesson 22.18 Culminating Project B

Calculate the applicable answer for each of the following independent situations for Newton Park using time value of money concepts. *Microsoft Excel may be used if desired.*

1. Newton Park would like to purchase a Dippin' Spots ice cream cart in three years. A Dippin' Spots cart is expected to cost $8,500. Newton Park has $7,000 currently available in a special savings account which is earning five percent interest annually. Will Newton Park have enough cash to buy a Dippin' Spots cart in three years?

2. The employees of Newton Park contribute $135,000 at the beginning of each year to a company savings plan. The savings plan guarantees a return of four percent each year. What will be the value of the company savings plan at the end of five years?

3. Newton Park estimates that its rides and equipment repair expense will be $30,000 per year for the next six years. The market interest rate is four percent annually. How much cash does Newton Park need to have today to pay these future repair expenses?

4. Newton Park expects to have $25,000 in four years to purchase a caricature cart. Assuming an annual interest rate of three percent, how much does Newton Park have available today to purchase a caricature cart in the future?

5. Newton Park is investing $500,000 today in an investment which earns six percent annually. Is the park investing enough to fund a $750,000 3-D ride in six years? If so, how much will it have in the investment account? If not, how long does it need to invest the funds to have enough for the ride?

Skill Standards

Academic:

AB 6 Demonstrate the ability to write clearly and concisely using industry specific technology

AC 3 Implement effective decision-making skills

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AE 1 Locate, evaluate, and apply personal financial information

AE 4 Use financial services effectively

Employability:

EG 4 Locate and verify information

Accounting:

OA 8 Analyze credit transactions and laws governing these functions

Financial Services:

OB 1 Define credit and credit terms

OB 3 Possess general knowledge of the following: checking, savings, loans, certificates of deposit, investments, IRAs, customer services, trust services, ATMs, credit/debit card

Scenario

Joey Smith, who is 21 years old and a junior at Kentucky State University, wants to open his first credit-card account. He has $11,221 in his savings account, and his annual income as a waiter is $23,250. Although his parents pay his college tuition and room and board, he would prefer not to use either of them (or anyone else) as a cosigner on the credit-card account.

Tasks

A. Write a letter to Joey explaining what steps he should take to open a credit-card account. Identify information that the bank or credit-card company is likely to need. Finally, explain the three C's of credit to Joey, and identify how they relate to him personally.

B. Assume that Joey has been approved for a credit line of $2,500. His plan is to purchase $100 in groceries on credit every month—and pay the $100 back in full each month. One day, Joey sees a pair of athletic shoes at the mall that are on sale for 25% off the retail price of $210. Joey has wanted these shoes for a long time. In fact, his parents have promised to purchase them for Joey as a graduation gift next year. However, Joey is very tempted to use his credit card to buy the shoes today, while they are on sale. Explain (in writing) the advantages and disadvantages of purchasing the shoes today. Also, indicate what you would do if you were Joey.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this assessment.

Scoring Rubric

4

- Thoroughly describes the steps required to open a credit-card account
- Clearly identifies information needed by a creditor
- Explains the three C's of credit correctly
- Thoroughly explains advantages and disadvantages of making a purchase on credit

3

- Adequately describes the steps required to open a credit-card account
- Identifies information needed by a creditor in a reasonably clear manner
- Explains most or all of the three C's of credit correctly
- Adequately explains advantages and disadvantages of making a purchase on credit

2

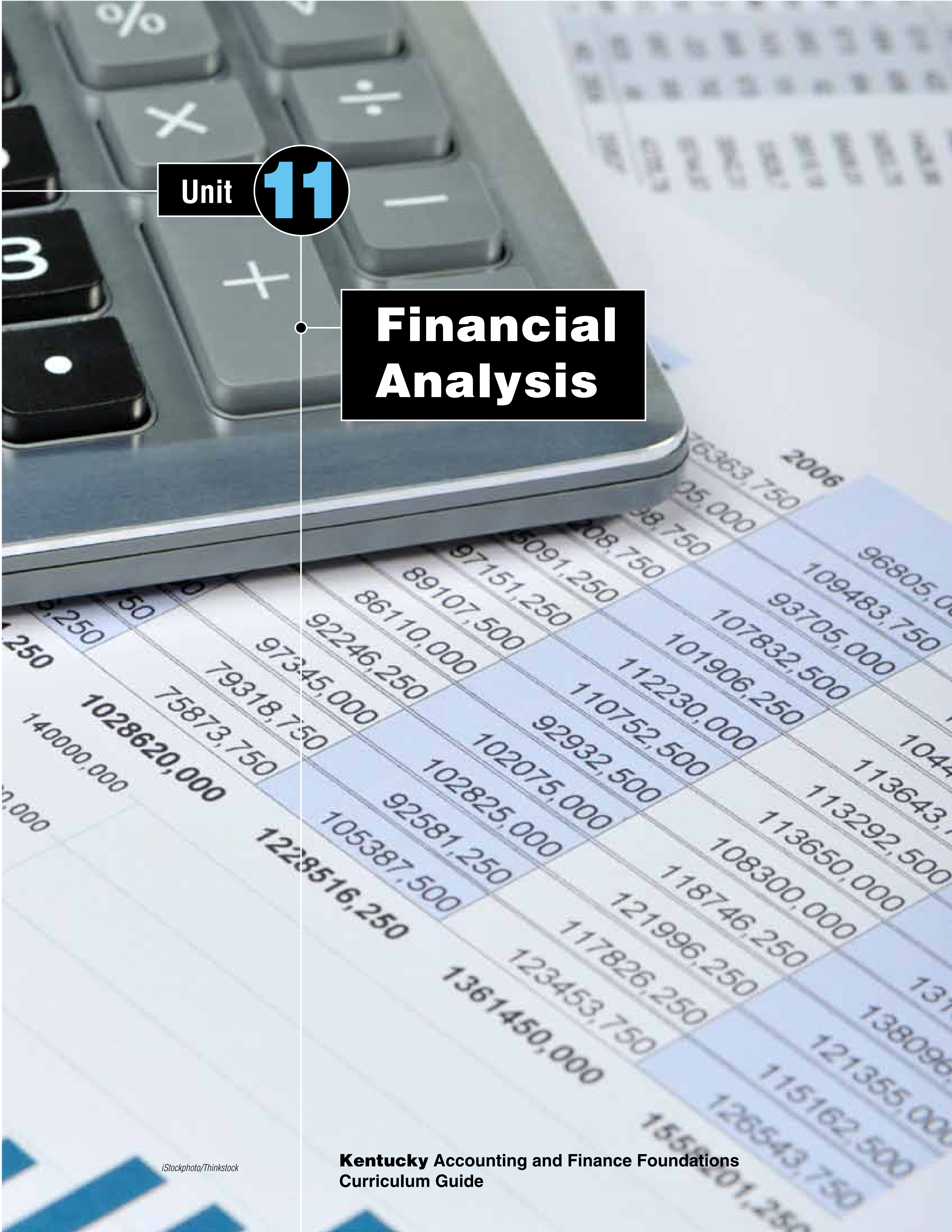
- Provides limited explanation of the steps required to open a credit-card account
- Provides limited explanation of information needed by a creditor
- Explains some the three C's of credit correctly
- Provides limited explanation of advantages and disadvantages of making a purchase on credit

1

- Provides little or no explanation of the steps required to open a credit-card account
- Provides little or no explanation of information needed by a creditor
- Explains the three C's of credit incorrectly
- Provides little or no explanation of advantages and disadvantages of making a purchase on credit

Unit 11

Financial Analysis



iStockphoto/Thinkstock

Financial statement analysis involves more than "crunching numbers." Before you can start looking at numbers, you have to know what you are looking for. While financial statements report on transactions, each of those transactions is the result of a company's operating decisions as it implements its business strategy.

Business Strategy → **Operating Decisions** → **Transactions** → **Financial Statements**

The best place to start financial analysis is with a solid understanding of a company's business strategy. To evaluate how well a company is doing, you must know the manager's and owner's objectives to have a basis for comparison. For example, would you be impressed with a company that earned $1 million last year? You are probably thinking, "It depends." A $1 million profit might be very good for a company that lost money the year before but not good for a company that made $500 million the preceding year. Likewise, that amount of profit might be good for a small company but not for a large company.

Financial results cannot be evaluated in isolation. To properly analyze the information reported in financial statements, you must develop appropriate comparisons. There are four methods for making financial comparisons: horizontal, vertical, ratio, and industry analyses.

Lesson 23.1 Horizontal Analysis

Horizontal analysis: The percentage analysis of increases and decreases in related items in comparative financial statements. The amount of each item on the most recent statement is compared with the related item on one or more earlier statements. The amount of increase or decrease in the item is listed, along with the percent of increase or decrease.

ABC Company
Comparative Balance Sheet
December 31, 2006 and 2005

	2006	2005	Increase (Decrease) Amount	Percent
Assets				
Current assets	$550,000	$533,000	$17,000	3.20%
Long-term investment	95,000	177,500	(82,500)	(46.50%)
Property, plant, and equipment	444,500	470,000	(32,500)	(5.40%)
Intangible assets	50,000	50,000		
Total assets	$1,139,500	$1,230,500	($91,000)	(7.40%)
Liabilities				
Current liabilities	210,000	243,000	(33,000)	(13.60%)
Long-term liabilities	100,000	200,000	(100,000)	(50%)
Total liabilities	$310,000	$443,000	($133,000)	(30%)
Owner's equity				
Preferred stock	150,000	150,000		
Common stock	500,000	500,000		
Retained earnings	179,500	137,500	42,000	30.50%
Total owner's equity	829,500	787,500	42,000	5.3%
Total liabilities and owner's equity	$1,139,500	$1,230,500	($91,000)	(7.40%)

ABC Company
Comparative Income Statement
For the Years Ended, December 31, 2006 and 2005

	2006	2005	Increase (Decrease) Amount	Percent
Sales	$ 1,530,500	$1,234,000	$296,500	24.00%
Sales returns and allowances	32,500	34,000	-1,500	(4.40%)
Net sales	$1,498,000	$1,200,000	$298,000	24.80%
Cost of goods sold	1,043,000	820,000	223,000	27.20%
Gross profit	$455,000	$380,000	$75,000	19.70%
Selling expenses	$191,000	$147,000	$44,000	29.90%
Administrative expenses	104,000	97,400	6,600	6.80%
Total operating expenses	$295,000	$244,400	$50,600	20.70%
Income from operations	$160,000	$135,600	$24,400	18%
Other income	$8,500	$11,000	($2,500)	(23%)
	$168,500	$146,600	$21,900	14.90%
Other expenses	6,000	12,000	-6,000	(50.00%)
Income before income tax	$162,500	$134,600	$27,900	20.70%
Income tax expense	71,500	58,100	13,400	23.10%
Net income	$91,000	$76,500	$14,500	19.00%

Lesson 23.2 Vertical Analysis

Vertical analysis: A percentage analysis may also be used to show the relationship of each component to the total within a single statement. The most common approach to vertical analysis is within a financial statement for a single period of time. However, vertical analysis can also be used for timeline analysis, which involves examining relative changes in certain accounts over time.

ABC Company
Balance Sheet
December 31,20XX

Assets	**Amount**	**Percent**
Current assets	$550,000	48.30%
Long-term investment	95,000	8.3%
Property, plant, and equipment	444,500	39.0%
Intangible assets	50,000	4.4%
Total assets	1,139,500	100%
Liabilities		
Current liabilities	210,000	18.40%
Long-term liabilities	100,000	8.8%
Total liabilities	310,000	27.20%
Owner's Equity		
Preferred stock	150,000	13.20%
Common stock	500,000	43.9%
Retained earnings	179,500	15.7%
Total owner's equity	829,500	72.8%
Total liabilities and owner's equity	1,139,500	100%

For example, to determine current assets as a percentage of total assets:

Current Assets / Total Assets =

$550,000 / $1,139,500 = 48.3%

This figure means that 48.3% of the company's assets were current.

ABC Company
Income Statement
For the Year Ended December 31, 20XX

	Amount	Percent
Sales	$1,530,500	102.2%
Sales Returns and Allowances	32,500	2.2%
Net Sales	$1,498,000	100.0%
Cost of Goods Sold	1,043,000	69.6%
Gross Profit	$455,000	30.4%
Selling Expenses	191,000	12.8%
Administrative Expenses	104,000	6.9%
Total Operating Expenses	$295,000	19.7%
Income from Operations	$160,000	10.7%
Other Income	8,500	0.6%
	$168,500	11.3%
Other Expenses	6,000	0.4%
Income Before Tax	$162,500	10.9%
Income Tax Expense	71,500	4.8%
Net Income	$91,000	6.1%

Lesson 23.3 Key Performance Indicators & Industry Comparison

A **ratio analysis** shows the proportionate relationship between two different amounts, allowing for easy comparisons. Ratios may be computed using values in one statement, such as the income statement, or in two different statements, such as the income statement and the balance sheet. Some of the most commonly analyzed ratios, referred to as **key performance indicators**, include **profit margin, debt ratio, current ratio, return on assets, inventory turnover, earnings per share,** and **price-earnings ratio.**

Profit margin is the net income or profit expressed as a percentage of sales. For example, if a company has a profit margin of 10% for every dollar of sales, 10% of those sales dollars represent profit. Profit margin is used to measure a company's profitability.

Profit Margin (%) = Net Income / Sales

The **debt ratio** is the degree (%) to which assets are purchased through debt (liabilities). Most companies finance their assets in one of two ways: either through debt or through stock. The debt ratio is a primary measure used to gauge the extent to which a company is leveraged or financed through debt.

Debt Ratio (%) = Total Debt / Total Assets

Lesson 23.3 Key Performance Indicators & Industry Comparison (cont'd)

The **current ratio**, which is the ratio of current assets to current liabilities, represents the number of times a company can pay current debts through current assets such as cash. It focuses on a business's **solvency**—the ability to pay back debt. As such, it is a measure of a company's liquidity (the ability to turn non-cash assets into assets) and ability to meet future obligations (pay future debts). A current ratio of less than one is an indication that the company may default or not pay on its debt obligations, while a current ratio of more than two can indicate that the company has too much cash or unused inventory on hand.

Current Ratio (#) = Current Assets / Current Liabilities

The **return on assets (ROA)** can be found by expressing the net income or profit as a percentage of total assets. For example, if a company has an ROA of 10%, the company generates a net income equivalent to 10% of its assets. Another way to look at the return on assets is as a measure of net income produced by a company's assets. ROA is a measure of an asset's or a company's efficiency and profitability.

Return on Assets (ROA) (%) = Net Income / Total Assets

The **inventory turnover** is the number of times a company sells its inventory in a year. It is the primary measure of a company's ability to sell or "move" inventory. A low inventory ratio can be an indication of slow sales and excess inventory, while a high inventory level can also be a sign of trouble—because rapid inventory turnover can result in sales losses due to inventory shortages. Companies typically compare their inventory turnover ratio with other companies within their industry.

Inventory Turnover = Cost of Goods Sold / Average Inventory

or

Inventory Turnover = Sales / Inventory

The **earnings per share (EPS)** is a measure of how much profit is allocated to each outstanding share of common stock. In other words, EPS is an indicator of a company's profitability. It can be calculated in a couple of different ways: either by dividing net earnings by the number of outstanding shares of common stock or by dividing the difference between net income and the dividends on preferred stock by the average number of outstanding shares. Over time, an increasing EPS implies that the company is well run.

Earnings Per Share ($) = Net Earnings / # of Shares Outstanding

or

Earnings Per Share ($) = (Net Income – Dividends on Preferred Stock) / Average Outstanding Shares

The **price-earnings ratio (PE)** is a valuation of a company's current share price compared to its earnings per share. Many investors and analysts pay close attention to the PE ratio because it gives an indication of whether a stock is overvalued or undervalued. A PE ratio that is higher than the industry average means that investors expect the company to grow and be quite profitable. However, a PE ratio that is lower than the industry average means that investors have low expectations for performance.

Price-Earnings Ratio (PE) = Stock Price / Earnings Per Share

Lesson 23.3

Key Performance Indicators & Industry Comparison (cont'd)

Industry Comparison

Comparing your company's results with industry standards or averages is a good way to determine how well a particular company is actually performing. In this analysis, certain ratios from the income statement (including the gross margin ratio, total expenses, and net income—all expressed as percentages) are compared to the average ratios for other companies that are in the same business or industry.

These average ratios, often referred to as industry standards, are available from many business-statistic reporting resources. This type of comparison can help managers determine whether their business is performing above or below the average for the industry.

A common ratio used to compare your company to others in the industry is the gross margin ratio. An indication of profitability, the **gross margin ratio** is the ratio of gross profit to revenue. A high gross margin ratio signals that a good proportion of sales are being converted into gross profit.

Gross Margin (%) = Gross Profit / Revenue

Industry Standard Comparison

Component	Industry Standard Percentage	My Business Actual Percentage	Acceptable Result Yes	Acceptable Result No	Recommended Action *If Needed*
Cost of Merchandise Sold	No more than 50%	55.3%		X	Reduce Purchases $
Gross Profit on Sales	No less than 50%	44.7%		X	Increase Sales and/or Reduce Purchases $
Total Operating Expenses	No more than 35 %	31.3%	X		
Net Income	No less than 15 %	13.4%		X	Increase Sales, Reduce CGS or Reduce Expenses

23.3.1 Analyzing Income Statements and Balance Sheets

1. The summaries of two income statements follow. Express each item on the two statements as a percentage of net sales.

Income Statement A / **Income Statement B**

Major Items	Amount	Percent	Major Items	Amount	Percent
Net Sales	$300,000	**a.**	Net Sales	$64,000	**f.**
Cost of Goods Sold	180,000	**b.**	Cost of Goods Sold	28,800	**g.**
Gross Profit on Sales	120,000	**c.**	Gross Profit on Sales	35,200	**h.**
Operating Expenses	90,000	**d.**	Operating Expenses	30,080	**i.**
Net Income	30,000	**e.**	Net Income	5,120	**j.**

2. During the month of June, a coffee shop had net sales of $27,000. The gross profit was $12,150, and the operating expenses were $10,800. What was the profit margin as a percent of net sales? What was the net income for June?

3. If a store has $219,110 in current liabilities and $338,920 in current assets, what would the current ratio be?

4. The balance sheet of the Maggie Ribbon Company shows $567,320 in current liabilities and $798,538 in current assets. What is the current ratio?

5. Find the current ratio based on the following: Cash, $4,180; Accounts Receivable, $3,820; Merchandise Inventory, $158,110; Store Supplies, $7,170; Store Equipment, $21,100; and Delivery Equipment, $45,700. It has the following liabilities: Accounts Payable, $74,160; and a Notes Payable of $7,600.

23.3.3 Vertical, Horizontal, Ratio, & Industry Analyses

1. Clark Corporation - Calculate the various analysis ratios and indicators requested for each financial statement provided.

Vertical Analysis – Express each item as a percentage of sales (%).

Clark Corporation
Income Statement
For the Year Ended December 31, 20XX

	Amount	Percentage of Sales
Revenue:		
Net Sales	$406,500	
Cost of Merchandise Sold:		
Merchandise Inventory, Jan. 1	100,800	
+ Net Purchases	316,600	
= Merchandise Available for Sale	417,400	
- Merchandise Inventory, Dec. 31	148,700	
= Cost of Merchandise Sold	268,700	
Gross Profit on Sales	137,800	
Operating Expenses:		
Selling Expenses	89,750	
Administrative Expenses	21,050	
Total Operating Expenses	110,800	
Operating Income	27,000	
Federal Corporate Income Tax Expense	7,100	
Net Income	19,900	

Vertical Analysis - Express each item as a percentage (%).

Clark Corporation
Balance Sheet
For the Year Ended December 31, 20XX

			Percentage
ASSETS			
Current Assets			
Cash in Bank	$ 26,000		
Accounts Receivable	75,900		
Merchandise Inventory	148,700		
Office Supplies	5,400		
Total Current Assets		$ 256,000	
Property, Plant, & Equipment			
Office Equipment	23,500		
Building	68,000		
Land	12,500		
Total Property, Plant, & Equipment		104,000	
TOTAL ASSETS		$ 360,000	
LIABILITIES			
Current Liabilities			
Notes Payable	$ 25,200		
Accounts Payable	44,300		
Salaries Payable	15,500		
Other Current Liabilities	54,000		
Total Current Liabilities		139,000	
Long-Term Liabilities			
Mortgage Payable	26,000		
Total Long-Term Liabilities		26,000	
TOTAL LIABILITIES		165,000	
STOCKHOLDER'S EQUITY			
Common Stock, $100 par, 1,200 shares issued	120,000		
Retained Earnings	75,000		
TOTAL STOCKHOLDER'S EQUITY		195,000	
TOTAL LIABILITIES & SHAREHOLDER'S EQUITY		$ 360,000	

23.3.3 Vertical, Horizontal, Ratio, & Industry Analyses (cont'd)

Clark Corporation (cont'd)

Horizontal Analysis – Calculate the increase or decrease for each item. Then, express each increase/decrease as a percentage. After determining each increase/decrease, determine whether each change is favorable (F), unfavorable (U), or neutral (N)—but only for the five shaded lines.

Clark Corporation
Comparative Income Statement
For the Years Ended December 31, 20XX and 20YY

	20XX	20YY	Increase (Decrease) (from 20YY to 20XX) Amount	Percentage		Favorable (F) / Unfavorable (U) / Neutral (N)
Revenue:						
Net Sales	406,500	346,800				
Cost of Merchandise Sold:						
Merchandise Inventory, Jan. 1	100,800	95,700				
+ Net Purchases	316,600	250,300				
= Merchandise Available for Sale	417,400	346,000				
- Merchandise Inventory, Dec. 31	148,700	100,800				
= Cost of Merchandise Sold	268,700	245,200				
Gross Profit on Sales	137,800	101,600				
Operating Expenses:						
Selling Expenses	89,750	75,000				
Administrative Expenses	21,050	10,200				
Total Operating Expenses	110,800	85,200				
Operating Income	27,000	16,400				
Federal Corporate Income Tax Expense	7,100	2,500				
Net Income	19,900	13,900				

23.3.3 Vertical, Horizontal, Ratio, & Industry Analyses (cont'd)

Clark Corporation (cont'd)

Industry Standard Comparison - Complete the chart for each item.					
	Industry Standard Percentage	**Clark Co. Actual Percentage**	**Acceptable Result**		
Component			**Yes**	**No**	**Recommended Action *(If Needed)***
Cost of Merchandise Sold	No more than 60%				
Gross Profit on Sales	No less than 40%				
Total Operating Expenses	No more than 30 %				
Net Income	No less than 10 %				
RATIO ANALYSIS - KEY PERFORMANCE INDICATORS - Calculate the following performance ratios for Clark Corporation.					
1. Current Ratio					
2. Debt Ratio					
3. Profit Margin					
4. Inventory Turnover					
5. Return on Assets					

23.3.5 Analyzing Financial Statements—Review Questions

Answer the following discussion questions using your handouts and practice problems from Chapter 23.

1. a. List three analysis techniques we have studied.
   b. For each technique, thoroughly describe the method and how one determines whether the results are good or bad. Write this in paragraph form.
2. Preparing a comparative income statement allows a financial-statement user to see what three things?
3. Explain the benefits of comparing a company's percentages with industry standards.
4. In vertical analysis, amounts are compared to a base amount. What is the base amount used for vertical analysis of:
   a. Items on the income statement?
   b. Asset amounts on the balance sheet?
   c. Liability or equity amounts on the balance sheet?
5. Ratio analysis is used to evaluate a company's liquidity, profitability, and financial strength. Explain what is meant by a) liquidity; b) profitability; and c) financial strength.
6. Label the following ratios as a measure of either liquidity (L); profitability (P); or financial strength (F).
   a. Current Ratio
   b. Debt Ratio
   c. Inventory Turnover
   d. Profit Margin
   e. Return on Assets
   f. Earnings Per Share
   g. Price-Earnings Ratio

FINANCIAL STATEMENT ANALYSIS

"Reading Between the Bottom Lines"

#1

Takin' Care of Business

CPA... Imagine the possibilities!

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#1 FINANCIAL STATEMENT ANALYSIS
"Reading Between the Bottom Lines"

Overview

Public companies, those companies whose stock is traded in public markets such as the New York Stock Exchange, are required by the Securities and Exchange Commission (SEC) to provide audited financial statements to investors and the general public at the end of every year. **Certified Public Accountants (CPAs)** use mathematics and financial analysis to evaluate financial statements and assess the financial condition of a company. Such analysis is frequently a factor in forecasting the likely future financial performance of a company and thus is useful for investment purposes.

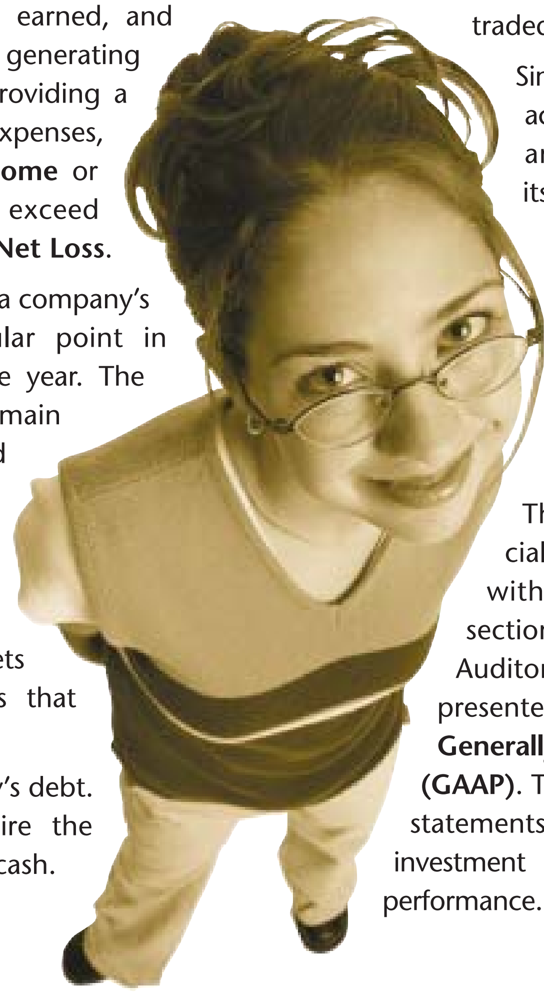
Financial Statements are contained in the company's **Annual Report** and include an **Income Statement** (Statement of Earnings), **Balance Sheet** (Statement of Financial Position), and **Statement of Stockholder's Equity**.

The **Income Statement** is a report of a company's operating performance, in financial terms, over a period of time, which is usually one year. The income statement contains two main sections: **Revenue**, such as sales, that the company has earned, and **Expenses**, the costs incurred in generating sales, producing a product or providing a service. When revenue exceeds expenses, the company realizes a **Net Income** or **Profit**, and when expenses exceed revenue, the company realizes a **Net Loss**.

The **Balance Sheet** is a picture of a company's financial position at a particular point in time, usually the last day of the year. The balance sheet contains three main sections: **Assets, Liabilities,** and **Stockholder's Equity**.

Assets are items of value such as buildings, machinery, and equipment that are used to generate revenue or sales. Assets also consist of cash and items that can be turned into cash.

Liabilities represent the company's debt. Liabilities, such as loans, require the future sacrifice of assets, such as cash.



Stockholder's Equity, the third section of the balance sheet, represents the value or "worth" of the company in accounting terms. If a company were to extinguish its liabilities or debt with its assets, such as cash, the remaining assets are the property of the stockholders and represent the company's "worth" or equity, thus the term "Stockholder's Equity."

The **basic accounting equation** is:

Assets = Liabilities + Stockholder's Equity

The **equity concept** is best illustrated as:

Assets - Liabilities = Stockholder's Equity

This equation is also a way to represent a company's net worth.

CPAs provide a variety of services that improve and assure the quality of information used to make business decisions. The **auditing** of financial statements and Web sites are examples of **assurance services** provided by CPAs. CPAs are the only business people permitted by the Securities and Exchange Commission to audit financial statements of publicly traded companies.

Since the **Annual Report** and the accompanying **Financial Statements** are prepared by the company itself, an exam by an independent third-party ensures by way of professional auditing procedures that the financial statements are indeed "presented fairly" so that stockholders, investors and the general public can rely on those statements.

The CPA's **"opinion"** of the financial statements, which is contained within the Annual Report in the section entitled "Report of Independent Auditors," is assurance that the figures presented have been derived using **Generally Accepted Accounting Principles (GAAP)**. The auditor's opinion of the financial statements, however, does not convey investment advice or predict future financial performance.

Can You Predict Whether the Price of a Stock Will Go Up or Down?

Shown below are the Balance Sheet and Income Statement of a hypothetical publicly-traded company, Metro One Sportswear, Inc. Use the data provided to assess the financial health of the company by calculating the following ratios:

Balance Sheet

Assets	Current Year	Prior Year
Current assets	$8,950,000	$7,210,000
Inventory	760,000	640,000
Property, plant & equipment	13,730,000	12,670,000
Total Assets	**$23,440,000**	**$20,520,000**
Liabilities		
Current liabilities	$2,480,000	$2,070,000
Long term liabilities	10,970,000	9,560,000
Total Liabilities	**$13,450,000**	**$11,630,000**
Stockholder's Equity		
Retained earnings	$7,990,000	$6,890,000
Common stock (20,000 shares)	2,000,000	2,000,000
Total Stockholder's Equity	**$9,990,000**	**$8,890,000**
Total Liabilities & Stockholder's Equity	**$23,440,000**	**$20,520,000**

Income Statement

		Current Year
Revenue (Sales)		**$11,500,000**
Expenses		
Cost of goods sold	8,100,000	
Salary expense	1,230,000	
Rent expense	780,000	
Interest expense	290,000	
Total Expenses		**$10,400,000**
Net Income		**$1,100,000**

Profit Margin: ________________________(%)

Definition: *Net Income, or profit, expressed as a percentage of sales. For example, if a company has a profit margin of 10%, for every dollar of sales, 10% of those dollar sales represents profit.*

Assessment: Profit Margin is a primary measure of a company's profitability.

Formula: Net Income / Sales = Profit Margin (%)

Debt Ratio: ________________________(%)

Definition: *The degree (%) to which assets are purchased through debt (liabilities). (Note: Most companies finance their assets in one of two ways: debt or stock).*

Assessment: The Debt Ratio is a primary measure with which to gauge the degree a company is leveraged or financed through debt.

Formula: Total Debt / Total Assets = Debt Ratio (%)

Current Ratio: ________________________ (#)

Definition: *The ratio of current assets to current liabilities represents the number of times a company can pay current debts through current assets such as cash.*

Assessment: The Current Ratio is a measure of a company's liquidity (how quickly a company can turn noncash assets into cash), and of a company's ability to meet future obligations (i.e., pay future debts).

Formula: Current Assets / Current Liabilities = Current Ratio (#)

Return on Assets: ________________________(%)

Definition: *Net Income, or profit, expressed as a percentage of total assets. For example, if a company has an "ROA" of 10%, the company will generate a net income equivalent to 10% of its assets. In other words, as a percentage, what is the net income produced by a company's assets.*

Assessment: "ROA" is a measure of an asset's or a company's efficiency and profitability.

Formula: Net Income / Average Total Assets* = ROA (%)

Inventory Turnover: ________________________ (#)

Definition: *The number of times a company sells its inventory in a year.*

Assessment: Inventory Turnover is the primary measure of a company's ability to sell or "move" inventory.

Formula: Cost of Goods Sold / Average Inventory**

* Average Total Assets = (Current Year Total Assets + Prior Year Total Assets) / 2

**Average Inventory = (Current Year Inventory + Prior Year Inventory) /2

PART-1: Scoring Table

Based on the results of your calculations on the first page, circle the corresponding points:

Ratio	If Result is	Points
Profit Margin		
	20% or greater	10
	15% to 19.99%	8
	10% to 14.99%	6
	5% to 9.99%	4
	1% to 4.99%	2
	less than 1%	0
Debt Ratio		
	29.99% or less	10
	30% to 39.99%	8
	40% to 49.99%	6
	50% to 59.99%	4
	60% to 69.99%	2
	70% and greater	0
Current Ratio		
	5.0 or greater	10
	4.0 to 4.99	8
	3.0 to 3.99	6
	2.0 to 2.99	4
	1.0 to 1.99	2
	less than 1.0	0
Return on Total Assets		
	20% or greater	10
	15% to 19.99%	8
	10% to 14.99%	6
	5% to 9.99%	4
	1% to 4.99%	2
	less than 1%	0
Inventory Turnover		
	25 or greater	10
	20 to 24.99	8
	15 to 19.99	6
	10 to 14.99	4
	5 to 9.99	2
	0 - 4.99	0

PART-2:

Add up your points and circle your investment recommendation based on the financial condition of the company.

If Your Company Point Total Is ____________

(enter total points scored from the five ratios)

Then the Diagnosis Is:

(Circle one response using the table)

45 or greater	Your company looks awesome! Invest now.
35 to 44.99	Your company looks very good. Consider investing.
25 to 34.99	Your company looks OK. Don't rush to invest.
15 to 24.99	Your company needs to improve… quickly!
5 to 14.99	Your company looks terrible.
4.99 or less	Call 911!

Lesson 23.7 Analyzing Financial Statements in Excel

Financial statements can be easily misinterpreted. Although you can use a number of different analysis tools to make sense of balance sheets and income statements, you must understand all of the elements of the different financial statements and analysis tools to make sound judgments about a company's performance. In the same sense, you would need to be knowledgeable about the game of baseball to make a judgment about a player's ability. For example, if I told you that a player's batting average is 0.400 and you know nothing about the game, you might think that it is a poor average. However, baseball fans know that batting 0.400 overall is terrific. To make good judgments about either baseball or financial statements, you must collect and analyze all key information before making a decision.

Many businesses put their financial statements in a presentation or in writing for their board of directors or investors. Using charts and graphs helps businesses to create a visual representation of the numbers.

Use the information from the writing prompt below to compare net income (or net loss), net worth, profit margin, and debt ratio. Enter the amounts for each company into an Excel spreadsheet, and create a chart/graph for each comparison.

Writing Prompt:

As an accountant, you have been asked to make financial inferences about different companies. Compare the financial ratios of two similar companies (Lowe's and Home Depot or Gap and American Eagle), and explain their financial positions—using ratios to support your claims.

Certified public accountants (CPAs) provide insight into business performance through other types of analysis in addition to financial-statement analysis. The following lesson will look at break-even point, cost, and productivity analyses.

Lesson 24.1 Break-Even Analysis

When planning their operations, firms must decide:

- How many units they expect to sell
- How many units they expect to produce (or purchase from suppliers)
- How much they need to spend to produce/purchase and sell these units
- The price at which they should sell the units to make the profit they want

To make these decisions, firms must calculate their **break-even point**. The break-even point is the point at which income from sales equals the total cost of producing/purchasing and selling products. When a company breaks even, its **revenue** equals its **expenses**. In other words, at the break-even point, its profit is equal to zero. For a company to make any money at all, its sales must be greater than the break-even point.

To calculate the break-even point, you must first know:

- The **fixed expenses** for making the product
- The **variable expenses** for making or purchasing each unit of the product
- The expected **selling price** of each unit of the product

The **fixed expenses** are costs that a business incurs, such as rent and insurance, that do not change based on the number of units produced or purchased from suppliers. These costs remain the same regardless of how much a company produces. It's sort of like your car payment: No matter how much you drive your car—one mile or 10,000 miles—your car payment is the same every month.

A **variable expense** changes based on the number of units produced or purchased from suppliers. Examples of variable expenses include labor and materials. The more units produced or purchased, the higher the variable cost. Think of your car as an example again. The gasoline you put in your car is a variable expense. The more you drive your car, the more gas you use—resulting in a higher variable cost.

The basic formula used to calculate the break-even point is:

Revenue – Variable Costs – Fixed Costs = $0

In this formula, the zero represents the break-point—the point at which revenue or sales is equal to expenses.

Lesson 24.1 Break-Even Analysis (cont'd)

We need to go a couple of steps further to determine exactly how many products we would need to sell to make our sales exactly equal to our expenses, though. First, remember that total revenue is equal to the total number of products sold times the sales price per product (variable "x"). Also, total variable expenses are the total number of products produced and sold multiplied by the variable cost per product (variable "x"). So, our formula becomes:

(Sales Price Per Product * x) – (Variable Costs Per Product * x) – Total Fixed Costs = 0

Then, all we need to do is get the x to one side of the equation. So, the formula for finding the break-even point (x) reads:

x = Total Fixed Costs / (Sales Price Per Product – Variable Costs Per Product)

Example: Joe, who is opening an ice-cream shop, wants to know how many ice cream cones he must sell to break even. Joe incurs a monthly rent expense of $500 and a note payment of $300. It costs Joe $0.04 for each cone, $0.12 for a scoop of ice cream, and $0.03 for sprinkles. If Joe sells an ice cream cone for $1.15, how many must he sell to break even?

Solution: **Fixed costs** stay the same from period to period. In this example, fixed costs are the rent expense and the note payment. So, to determine the break-even point, you must first determine the total fixed costs by adding Joe's monthly rent expense and note payment together.

Total Fixed Costs = $500 + $300 = $800

Variable costs change based on use, so in our example, the more ice cream cones Joe sells, the more cones, ice cream, and sprinkles he will have to buy. Therefore, your next step needs to be calculating the total variable costs per ice cream cone by adding together the cost of one cone, one scoop of ice cream, and one serving of sprinkles.

Total Variable Costs Per Ice Cream Cone = $0.04 + $0.12 + $0.03 = $0.19

Next, plug the selling price of an ice cream cone (given to you in the example), the total fixed costs, and the total variable costs per ice cream cone into the formula for break-even point.

x = $800 / ($1.15 – $0.19)
= $800 / $0.96
= 833.33 cones

So, to break even, Joe must sell 834 ice cream cones (since he can't really sell exactly 833.33 cones).

The **contribution margin** is a concept related to the break-even point. Even though the selling price per product or unit less the variable cost per product or unit is often referred to as the profit per unit, it is actually the contribution margin. Until the break-even point is reached, the profit per unit contributes to paying the fixed costs—thus the term contribution margin. Essentially, until a company reaches its break-even point, all of the revenue coming from sales is being used to pay fixed expenses.

Lesson 24.1 Break-Even Analysis (cont'd)

To determine the number of units that must be sold to reach a desired profit, managers conduct **cost-volume-profit analysis**. To determine how many products need to be sold to obtain a certain target profit, we can use the following formula:

(Sales Price Per Product * x) – (Variable Costs Per Product * x) – Total Fixed Costs = Profit

Example: Using our previous example of Joe's ice cream, let's find out how many ice cream cones Joe must sell if he wants to make a profit of $500.

Solution: To determine how many ice cream cones must be sold to make $500 in profit, let's plug our sales price per product, variable costs per product, total fixed costs, and profit into our formula.

$$\$1.15x - \$0.19x - \$800 = \$500$$

Now, treat this as an algebraic equation, and solve for x.

$$\$1.15x - \$0.19x - \$800 = \$500$$
$$\$0.96x - \$800 = \$500$$
$$\$0.96x = \$500 + \$800$$
$$\$0.96x = \$1{,}300$$
$$x = \$1{,}300 / \$0.96$$
$$x = 1{,}354.17 \text{ cones}$$

Joe must sell 1,355 ice cream cones to make a $500.00 profit.

24.1.1 Break-Even Point

1. Tom plans to open a store and sell screen-printed shirts for $16.00 each. He estimates fixed expenses to be $20,000 and variable expenses to be $6.00 per shirt. How many shirts must Tom sell to break even?
2. If fixed costs are $43,000, the variable cost per unit is $16.40, and each unit sells for $52.00, how many units must be sold to break even?
3. Johnny sells chili cheese dogs for $2.19 each. Each hot dog costs $0.42; each bun is $0.07; each serving of chili is $0.12; each serving of cheese is $0.04; and total fixed costs are $3,200. How many chili cheese dogs must Johnny sell to break even?
4. Joe and John's hamburger stand sells a burger for $1.89. If the meat patty costs $0.30, a bun is $0.08, a pickle costs $0.03, and total fixed costs are $2,345, how many burgers must be sold to break even? How many burgers must be sold to have a profit of $500?
5. The Kodiak Manufacturing Company makes tents, backpacks, and other camping gear. Company managers are evaluating the sales and profits of some of their products and have asked you to **calculate the break-even point for three of the products**. Information about the products follows.

Product	Selling Price	Unit Variable Costs	Fixed Costs
One-person tent	$ 79.00	$ 27.80	$ 8,000.00
Four-person tent	199.00	74.80	18,000.00
Backpack	39.00	7.40	1,200.00

Break-even point:

One-person tent

Four-person tent

Backpack

6. The Kodiak Manufacturing Company managers have asked you to explain the impact of changes in fixed costs, variable costs, and selling price on the break-even point.
   a. What happens to the break-even point when fixed costs are increased?

   b. What happens to the break-even point when variable costs are increased?

   c. What happens to the break-even point when the selling price increases?

24.1.1 Break-Even Point (cont'd)

7. Label the following as either a variable (V) or fixed (F) cost.
    a. Monthly loan payment
    b. Repair on a machine used for production
    c. Production employee payroll costs
    d. Advertising expense
    e. Monthly lease on an office copy machine
    f. Liability insurance for the business
    g. Electric expense
    h. Executive payroll

24.1.2 Break-Even Analysis Case Study: Used Book Store

Read the College of Entrepreneurial Studies' *Lesson 9: Break-Even Analysis* at http://www.jbv.com/lessons-CES/breakeven.php. Then, click "Next" to move on to the next lesson, which is a case study of a used-book store. Read the case study, and use the break-even analysis calculator at http://www.anz.com/aus/Small-Business/Tools-Forms-And-Guides/Benchmark-Your-Business/Breakeven-Analyser/ to determine the break-even point for the book store.

Takin' Care of Business

#3

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Overview

Certified Public Accountants (CPAs) provide insight into bottom-line business performance through the use of math-based analytical and forecasting tools. One such tool is **break-even analysis.** A business is said to "**break-even**" when its **revenue** (sales in terms of dollars) exactly equals its **expenses.** The importance of the break-even "point" lies in the fact that until the break-even point is reached, a company will incur a loss. Thus, it can be said that a business will start to earn a profit only when sales (in units) exceed the break-even point. In addition, once the break-even point is determined, businesses can then analyze their expenses to determine those that can be reduced and by what amount in order to prevent losses and increase profits.

Break-even analysis uses the following basic equation to determine the break-even point:

Revenue – Variable Costs – Fixed Costs = 0

Note that "zero" represents the "break-even" point because at that point revenues **equal** expenses, thus neither a profit nor a loss exists. Total revenue, expressed in dollar terms, is calculated by multiplying the **sales price** (or revenue) per unit by the **total number of units sold.** The total number of units that must be sold in order to "break even" is the "unknown" – the variable represented by "x."

Expenses are separated into two categories, **fixed expenses** and **variable expenses. Fixed expenses** are costs that a business incurs, such as rent and insurance, that *are not* directly related to the volume of production. That is, total fixed expenses remain the same regardless of the number of units the business produces. Note, however, that fixed expenses PER UNIT will vary according to the number of units produced.

Variable expenses, such as materials and labor, are those costs that are directly related to the volume of production. Total variable expenses, therefore, vary according to the number of units produced. That is, total variable expenses will increase as the number of units produced increases and conversely decrease as units produced decreases. As such, total variable expenses, expressed in dollar terms, are calculated by multiplying the variable cost per unit by the total number of units sold, which is the variable "x." (Note that variable costs per unit remain constant; that is, variable costs per unit do not vary.)

To expand upon the basic equation, total revenue is equal to total units sold (variable "x") multiplied by the sales price per unit. Total variable expenses are equal to total units sold (variable "x") multiplied by the variable cost per unit. Therefore, the break-even equation now reads:

(Sales price per unit * x) less (Variable costs per unit * x) less Total fixed costs equals Zero

Or

$$X = \frac{\textit{Total fixed costs}}{\textit{Sales price per unit} - \textit{Variable costs per unit}}$$

*Where x represents the number of units that must be sold to break-even, (Sales price per unit * x) represents total revenue, and (Variable cost per unit * x) represents total variable expenses*

In addition, the sales price per unit less the variable cost per unit is often referred to as the profit per unit but is actually the **contribution margin.** Until the break-even point is reached, the "profit" per unit contributes to paying the fixed costs, thus the term **contribution margin.** In order to determine the number of units that must be sold to earn a desired profit, substitute the desired profit figure for "zero" in the equation. For example:

(Sales price per unit * x) less (Variable cost per unit * x) less Total fixed costs equals Desired profit

"Revenue follows expenses" is an accounting concept that means expenses are incurred first, before revenue can be recognized and cash inflow realized. This is true of any business. In addition, note that the price of an item, the "revenue" factor, can be established only after the total cost of that item, the expense factor, is determined. This is also true of any business.

ROUND - 1

First, use the data on your team's card to analyze your business' financial position, and enter the results in your team's column below. Do the same for your competition and enter their results in the appropriate column.

Remember, the equation for the break-even point is:

(Sales Price per unit * X) – (Variable Costs per Unit * X) – Total Fixed Costs = 0, where X is the number of units that must be sold to break-even.

Then, assign points to your business and your competition based on the following scoring model:

	Business Data	Higher Figure	Lower Figure
1	Sales price per unit	1 point	0 points
2	Variable cost per unit	0 points	1 point
3	Total fixed costs	0 points	1 point
4	Contribution margin	1 point	0 points
5	Break-even point	0 points	1 point
6	Number of units to be sold to earn $10,000	0 points	1 point

If your business and the competition have the ***same figure*** *for any of the business data,* **assign 1 point to BOTH** *your team and the competition.*

Business Score Card

	Business Data	Your Team	Points	The Competition	Points
1	Sales price per unit				
2	Variable cost per unit				
3	Total fixed costs				
4	Contribution margin				
5	Break-even point				
6	Number of units to be sold to earn $10,000				
	Round 1 Points				
7	Explanation…				
8	Calculation…				
	Round 2 Points				
	TOTAL POINTS				

ROUND - 2

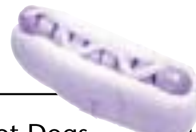
The team with the **LOW SCORE** will now get a chance to analyze their business' financial position and improve their point total. **See questions #7 and #8 below.**

For each correct answer, assign your team 2 points. If the team with the lower score from Round 1 fails to answer a question correctly, the opposing team will be given the opportunity to answer.

At the conclusion of Round 2, total your points and your competitor's points from both rounds. The team with the higher point total is the winner!

Bob's Burgers	
Sales price per burger	$2.75
Cost Per Burger	
Hamburger patty	$.80
Bun	.32
2 pickles	.19
Ketchup & mustard (packets)	.14
Monthly Business Expenses	
Rent	$1,250
Manager's salary	975
Utilities	175
Advertising	80
Maintenance	120

VS



Harriet's Hot Dogs	
Sales price per hot dog	$2.75
Cost Per Hot Dog	
Hot dog	$.24
Bun	.11
Sauerkraut	.08
Ketchup & mustard (packets)	.07
Monthly Business Expenses	
Rent	$2,125
Manager's salary	1,375
Utilities	375
Advertising	275
Maintenance	350

Bob's Burgers vs. Harriet's Hot Dogs

7 **Explain** to Bob why he must sell more burgers than Harriet has to sell hot dogs to earn a profit of $10,000, despite the fact that he (Bob) sells his burgers for the same price that Harriet sells her hot dogs.

8 **Calculate** the dollar amount of Bob's variable expenses that must be reduced so that Bob can earn $10,000 by selling the same number of burgers that Harriet sells hot dogs to earn $10,000.

Duke's Dairy Store	
Sales price per milkshake	$2.25
Cost Per Milkshake	
Milk	$.47
Ice Cream	.73
Flavoring	.15
Monthly Business Expenses	
Rent	$1,800
Manager's salary	1,050
Utilities	400
Insurance	350

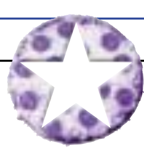
VS

Queen's Coffee Shop	
Sales price per cup of coffee	$1.25
Cost Per Cup of Coffee	
Milk or cream	$.05
Flavored coffee	.18
Sugar	.02
Monthly Business Expenses	
Rent	$1,800
Manager's salary	1,050
Utilities	400
Insurance	350

Duke's Dairy Store vs. Queen's Coffee Shop

7 **Explain** to Duke why he must sell more milkshakes than Queen must sell cups of coffee in order to break-even, despite the fact that Duke charges more for a milkshake than Queen charges for a cup of coffee.

8 **Calculate** the dollar amount of Duke's variable costs that must be reduced so that Duke can earn $10,000 by selling the same number of milkshakes that Queen sells cups of coffee to earn $10,000.



Star Pizzeria	
Sales price per pizza	$8.00
Cost Per Pizza	
Dough	$.45
Sauce	.94
Mozzarella	.21
Monthly Business Expenses	
Rent	$1,650
Manager's salary	1,200
Utilities	825
Insurance	325

VS

Uptown Pizza Plus	
Sales price per pizza	$8.00
Cost Per Pizza	
Dough	$.45
Sauce	.94
Mozzarella	.21
Monthly Business Expenses	
Rent	$1,025
Manager's salary	1,100
Utilities	800
Insurance	275

Star Pizzeria vs. Uptown Pizza

7 **Explain** to Star why they must sell more pizzas than Uptown in order to break-even, despite the fact that they both sell pizzas for the same price and the ingredients cost each the same amount.

8 **Calculate** the dollar amount of Star's fixed costs that must be reduced so that Star can break-even by selling the same number of pizzas that Uptown sells to break-even.

Lesson 25.1 Productivity

Technological advancements and improvements such as faster computers and better software are assets that allow people to perform tasks in a more productive manner. To be successful, companies need to assess how well they use resources as well as what improvements could be made to be more productive.

Productivity encompasses two different elements—efficiency and effectiveness. To maximize profits, companies must be both efficient and effective.

Efficiency measures how well a company uses its resources (inputs). Efficiency is measured by comparing the actual inputs to the expected inputs. Inputs include material and time required to make a product.

For example, if a shirt can be made with just one yard of material but Employee A typically uses three yards to make the same shirt, that employee is considered inefficient or wasteful. Someone or something is **inefficient** if the actual number of inputs exceeds the expected number (actual inputs > expected inputs). On the other hand, an **efficient** employee's actual inputs are less than expected (actual inputs < expected inputs).

Effectiveness is a measure of how well the final product (output) is made. To determine effectiveness, you must compare how well a product is actually made with how well the product *should have been* made. An employee is considered to be **effective** if the employee can produce the desired amount of product in a specific time. An employee is **ineffective** if the employee either does not produce enough products in a given time or if the products produced do not meet minimum standards.

For example, if managers expect an employee to make four products a day (all of which meet specified standards) but an employee only makes three, that employee is considered ineffective—even if the products meet standards. Likewise, if an employee makes six products but none of them meet the standards, that employee is also considered ineffective.

One way to measure productivity is through the use of a **quality-control** inspector. The inspector checks an item for damage and determines if the specifications for that product are met. Many companies allow for minor mistakes—since everyone makes a mistake every once in a while—but to keep the company running effectively, checks and balances must be in place. Inspectors use the following formula to calculate effectiveness:

Percent Defective = Number Defective / Total Number Checked

Individual companies determine what they see as an appropriate percentage of defective products, but a common standard is five percent.

Example: If an employee can make 300 products in a day and six of those are considered defective, is that employee considered effective or ineffective? (The company allows for a five-percent defective rate.)

Solution:

Percent Defective = Number Defective / Total Number Checked
= 6 / 300
= 2%

Since the employee's defective rate of two percent is less than the company's expected rate of defective products, that employee is considered effective.

25.1.1 Productivity: Efficiency & Effectiveness Word Problems

1. If Jess made 400 products in a day and eight of those are considered defective, is Jess considered effective or ineffective? The company allows for a five-percent defective rate.

   Percent defective: __________

   Effective or Ineffective: __________

2. If Robert made 600 shirts in a day and 30 of those are considered defective, is Robert considered effective or ineffective? The company allows for a four-percent defective rate.

   Percent defective: __________

   Effective or Ineffective: __________

3. If Mason made 500 pairs of pants in a day and 15 of those are considered defective, is Mason considered effective or ineffective? The company allows for a five-percent defective rate.

   Percent defective: __________

   Effective or Ineffective: __________

4. If Annie made 400 pair of jeans in one day and four of those are considered defective, is Annie considered effective or ineffective? The company allows for a four-percent defective rate.

   Percent defective: __________

   Effective or Ineffective: __________

5. If Jordan made 200 purses in one week and five of those are considered defective, is Jordan considered effective or ineffective? The company allows for a two-percent defective rate.

   Percent defective: __________

   Effective or Ineffective: __________

MEASURING PRODUCTIVITY

"From Air to Market"

Takin' Care of Business

#4

CPA... Imagine the possibilities!

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#4 MEASURING PRODUCTIVITY "From Air to Market"

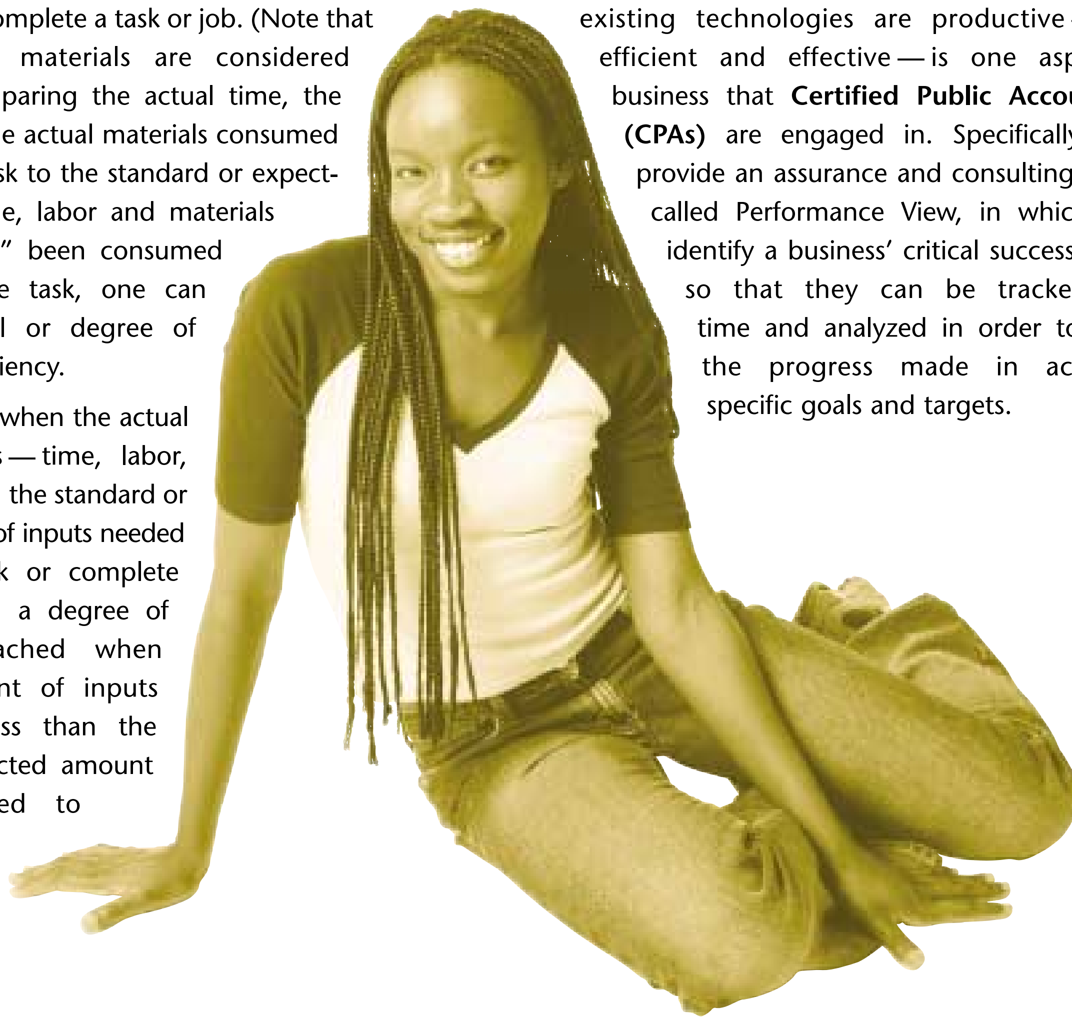
Overview

Advancements and improvements in technology, such as faster computers and user-friendly computer software, are assets that allow people to perform tasks in a more productive manner or to engage in activities they otherwise could not do. For example, more powerful personal computers allow students and business people alike to perform their jobs more effectively and efficiently. In addition, new technologies, such as the Internet, allow both business people and students to communicate with associates and friends like never before.

Inventions and new technologies, as well as technological improvements in existing products, serve one of two purposes: enabling people to increase their productivity in accomplishing a task, or allowing people to engage in activities they otherwise could not. Productivity is defined or categorized into two segments, efficiency and effectiveness. In turn, the success of a new or existing asset or technology is traced to how efficient and how effective (i.e., "how productive") that asset or technology is.

Efficiency and effectiveness are both measured in comparison terms. Efficiency, for example, is measured by comparing actual "inputs" to standard or expected inputs needed to complete a task or job. (Note that time, labor and materials are considered "inputs.") By comparing the actual time, the actual labor and the actual materials consumed in completing a task to the standard or expected amount of time, labor and materials that "should have" been consumed in completing the task, one can determine a level or degree of efficiency or inefficiency.

Inefficiency occurs when the actual amount of inputs — time, labor, materials — exceed the standard or estimated amount of inputs needed to perform a task or complete a job. Conversely, a degree of efficiency is reached when the actual amount of inputs consumed are less than the estimated or expected amount of inputs needed to perform a task.



In contrast to efficiency where "inputs" are measured, effectiveness is a measure of "outputs." Effectiveness, a comparison measure as well, compares the actual completed "product" to that of a standard product, or what the "end" or finished product "should" be. For example, does the finished product accomplish — in a productive manner — the task it was intended to accomplish, or does the end result embody the characteristics that it was intended to embody? If the finished product or end result does not meet established standards or expectations, a degree of ineffectiveness is gauged. By contrast, if the finished product or end result exceeds expectations, a level of effectiveness if gauged.

As noted above, a new or existing technology is only successful if it is productive. That is, the technology must be both efficient and effective to be productive and therefore successful. If a technology, for example, is efficient but not effective, or vice-versa, it is not considered productive and therefore not successful. By combining a technology's efficiency and effectiveness measures, one can determine the technology's degree of productivity.

The process of determining the degree to which new and existing technologies are productive — both efficient and effective — is one aspect of business that **Certified Public Accountants (CPAs)** are engaged in. Specifically, CPAs provide an assurance and consulting service called Performance View, in which CPAs identify a business' critical success factors so that they can be tracked over time and analyzed in order to assess the progress made in achieving specific goals and targets.

Activities

How Much Money Can Your New Shoe Do?

You have just invented a revolutionary new product called Air Zone. Air Zone is a basketball sneaker that absorbs the energy generated by an "impact," such as when a player jumps and then lands during a game, and converts it into new energy for the next time the player jumps.

You have contacted two sneaker-manufacturing companies that have expressed interest in bringing Air Zone to market. Each company uses the same technology and equipment to produce and assemble sneakers. Your task is to determine which of the two companies—The Sneaker Factory or Footwear, Inc.—is more productive, and therefore the more profitable.

Each company has provided you with last year's productivity reports for one day.

PART-1: Production of sneaker soles.

Equipment is designed to produce 100 Air Zone sneaker soles a day.

Sneaker Factory produced 120 soles in one day.

Footwear, Inc. produced 95 soles in one day.

1. Calculate the effectiveness or ineffectiveness of Sneaker Factory and Footwear, Inc. in terms of soles produced.
2. Using your answers from #1 and assuming that each new sole is valued at $55, calculate the dollar savings attributed to each company if it operates effectively and the dollar cost attributed to each if it operates ineffectively.

	Step 1: Sneaker Soles	Sneaker Factory	Footwear Inc.
1	Effective/(Ineffective)	20 sneaker soles–effective	sneaker soles
2	Savings/(Cost)	$1,100	$

PART-2: Application of leather casings to sneaker soles.

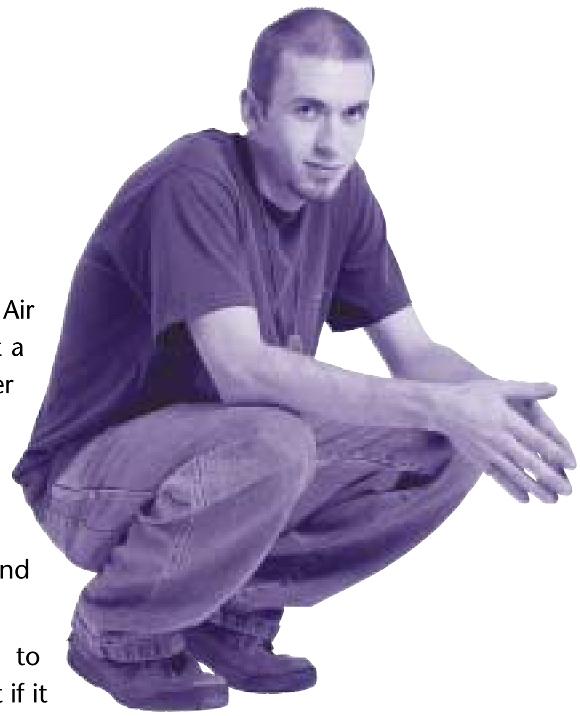
Equipment is designed to apply 100 leather casings to Air Zone sneaker soles in one day.

Sneaker Factory applied 75 leather casings in one day.

Footwear, Inc. applied 115 leather casings in one day.

1. Calculate the effectiveness or ineffectiveness of Sneaker Factory and Footwear, Inc. in terms of leather casings applied.
2. Using your answers from #1 and assuming that each leather casing is valued at $35, calculate the dollar savings attributed to each company if it operates effectively and the dollar cost attributed to it if it operates ineffectively.

	Step 2: Leather casings	Sneaker Factory	Footwear Inc.
1	Effective/(Ineffective)	leather casings	leather casings
2	Savings/(Cost)	$	$



PART–3: Apply color to leather casings.

Equipment applies color to the leather casing once the casing is applied to Air Zone. It is estimated that this equipment can color 600 pairs of sneakers at a cost of $3,000 based on 10 hours of operation. Each pair of colored sneaker is valued at $20.

Sneaker Factory colored 600 pairs of sneakers in 12 hours during one day.

Footwear, Inc. colored 600 pairs of sneakers in 8 hours during one day.

1. Calculate the effectiveness or ineffectiveness of Sneaker Factory and Footwear, Inc. in terms of sneakers colored.
2. Using your answers from #1, calculate the total savings attributed to each company if it operates effectively and the dollar cost attributed to it if it operates ineffectively.
3. Calculate the efficiency or inefficiency of Sneaker Factory and Footwear, Inc. in terms of hours of operation.
4. Using your answers from #3, calculate the total cost attributed to each company if it operates efficiently and the dollar cost attributed to it if it operates inefficiently.

	Step 3: Apply color	Sneaker Factory	Footwear Inc.
1	Effective/(Ineffective)	pairs of sneakers	pairs of sneakers
2	Savings/(Cost)	$	$
3	Efficient/(Inefficient)	hours	2 hours–efficient
4	Savings/(Cost)	$	$
5	Total Savings/(Cost)		

What's The Bottom Line?

Using your Productivity Assessments (Steps 1, 2 and 3), calculate the productivity of Sneaker Factory and Footwear, Inc. in terms of total dollar savings or total dollar cost for one day of operation. Based on your calculations, which company would you select to bring Air Zone to market?

	Sneaker Factory	Footwear Inc.
Step 1: Sneaker soles	$	$
Step 2: Leather casings	$	$
Step 3: Apply color	$	$
Total	**$**	**$**

Lesson 26.1 Culminating Project A

You have been hired as a staff accountant for Newton Park. Your first assignment is to prepare a vertical analysis of the income statement.

Newton Park
Income Statement
For Year Ended December 31, 20XX

Revenues	
Theme Park Admissions Revenue	320,000
Concessions & Gift Shop Revenue	175,000
Total Revenue	$495,000
Expenses	
Cost of Goods Sold, Gift Shop & Concessions	
Beginning Inventory, January 1	17,000
Purchases	39,000
Goods Available for Sale	56,000
Ending Inventory, December 31	13,000
Cost of Goods Sold, Gift Shop & Concessions	43,000
Gross Profit, Gift Shop & Concessions	132,000
Operating Expenses	
Salaries Expense	70,000
Utility Expense	60,000
Advertising Expense	56,000
Depreciation Expense	52,000
Insurance Expense	40,000
Administrative Expenses	35,000
Total Operating Expenses	313,000
Other Expenses	
Interest Expense	15,000
Income Tax Expense	8,750
Total Other Expenses	23,750
Net Income	**$26,250**

Lesson 26.1 Culminating Project A (cont'd)

Requirements:

Use the vertical analysis you have completed to answer the following questions:

1. What is the gross profit for gift shop & concessions as a percent of total revenue?
2. What is the gross profit for gift shop & concessions as a percent of concessions & gift shop revenue?
3. What is interest expense as a percent of total revenue?
4. What is the profit margin?
5. Which operating expense is 10.5% of total revenue?

Lesson 26.2 Culminating Project B

Newton Park
Balance Sheet
As of December 31, 20XX

Current Assets		
Cash	15,000	
Accounts Receivable	10,000	
Notes Receivable	8,000	
Gift Shop & Concessions Inventory	13,000	
Prepaid Insurance	4,000	
Total Current Assets		50,000
Property, Plant, & Equipment		
Land	100,000	
Buildings	300,000	
Office Equipment	50,000	
Rides and Equipment	295,000	
Less: Accumulated Depreciation	45,000	
Total Property, Plant, & Equipment		700,000
Total Assets		**$750,000**
Current Liabilities		
Accounts Payable	20,000	
Notes Payable	12,000	
Salaries Payable	8,000	
Total Current Liabilities		40,000
Long-term Liabilities		
Mortgage Payable	300,000	
Total Long-term Liabilities		300,000
Stockholder's Equity		
Common Stock	350,000	
Retained Earnings	60,000	
Total Equity		410,000
Total Liabilities and Equity		**$750,000**

Lesson 26.2 Culminating Project B (cont'd)

Requirements:

As a financial analyst for Newton Park, you have been asked to prepare the annual analysis report using key performance indicators and vertical analysis.

1. Determine the current ratio for Newton Park.
2. Determine the debt ratio for Newton Park.
3. Determine the inventory turnover for Newton Park. Note that cost of goods sold is $43,000 for the year, and concessions and gift shop inventory was $17,000 as of January 1.
4. Determine the return on assets for Newton Park. Note that the net income was $26,250, and the total assets were $750,000.
5. Determine salaries payable as a percentage of total liabilities and equity.

Skill Standards

Academic:

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AD 4 Use tables, graphs, diagrams, and charts to obtain or convey information

Accounting:

OE 13 Use financial statements to analyze business financial conditions

OE 15 Recognize the primary areas of analysis (e.g., trend analysis, profitability, liquidity) and explain the information obtained from each analysis

OE 16 Perform a horizontal and vertical analysis of the income statement and balance sheet

Scenario

You are a professional financial analyst, and the ABC Company has hired you to evaluate changes in its financial performance. You are in the midst of developing a comparative income statement:

ABC Company
Comparative Income Statement for Years Ending
December 31, 20XX and 20YY

	20XX ($)	20YY ($)	Increase or (Decrease) Amount	Percent
Sales (Total Units)	1,525,958	1,221,526		%
Cost of Goods Sold	995,234	752,241		%
Gross Profit	530,724	469,285		%
Selling Expenses	151,000	121,000		%
General Expenses	132,255	119,219		%
Total Operating Expenses	283,255	240,219		%
Operating Income	247,469	229,066		%
Other Income	2,500	1,250		%
	249,969	230,316		%
Other Expenses	12,221	11,265		%
Net Income	237,748	219,051		%

Tasks

A. Complete the company's comparative income statement. Be sure to calculate the increase or decrease for each item on the statement, and then express each increase/decrease as a percentage.

B. Examine the changes in sales, cost of goods sold, gross profit, total operating expenses, and net income. Determine whether each change is favorable, unfavorable, or neutral. Write an explanation of the significance of those specific changes for company management.

C. Identify and explain the financial analysis method that you just used. Make sure that you discuss the purpose of the method, the role of comparative financial statements in the method, and how you used the comparative income statement to draw conclusions about changes in the company's financial performance.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Completes the comparative income statement correctly.
- Makes no mathematical errors.
- Thoroughly explains significance of changes in sales, cost of goods sold, gross profit, total operating expenses, and net income.
- Thoroughly identifies and explains the financial analysis method used.

3

- Completes most or all of the comparative income statement correctly.
- Makes few mathematical errors.
- Adequately explains significance of changes in sales, cost of goods sold, gross profit, total operating expenses, and net income.
- Adequately identifies and explains the financial analysis method used.

2

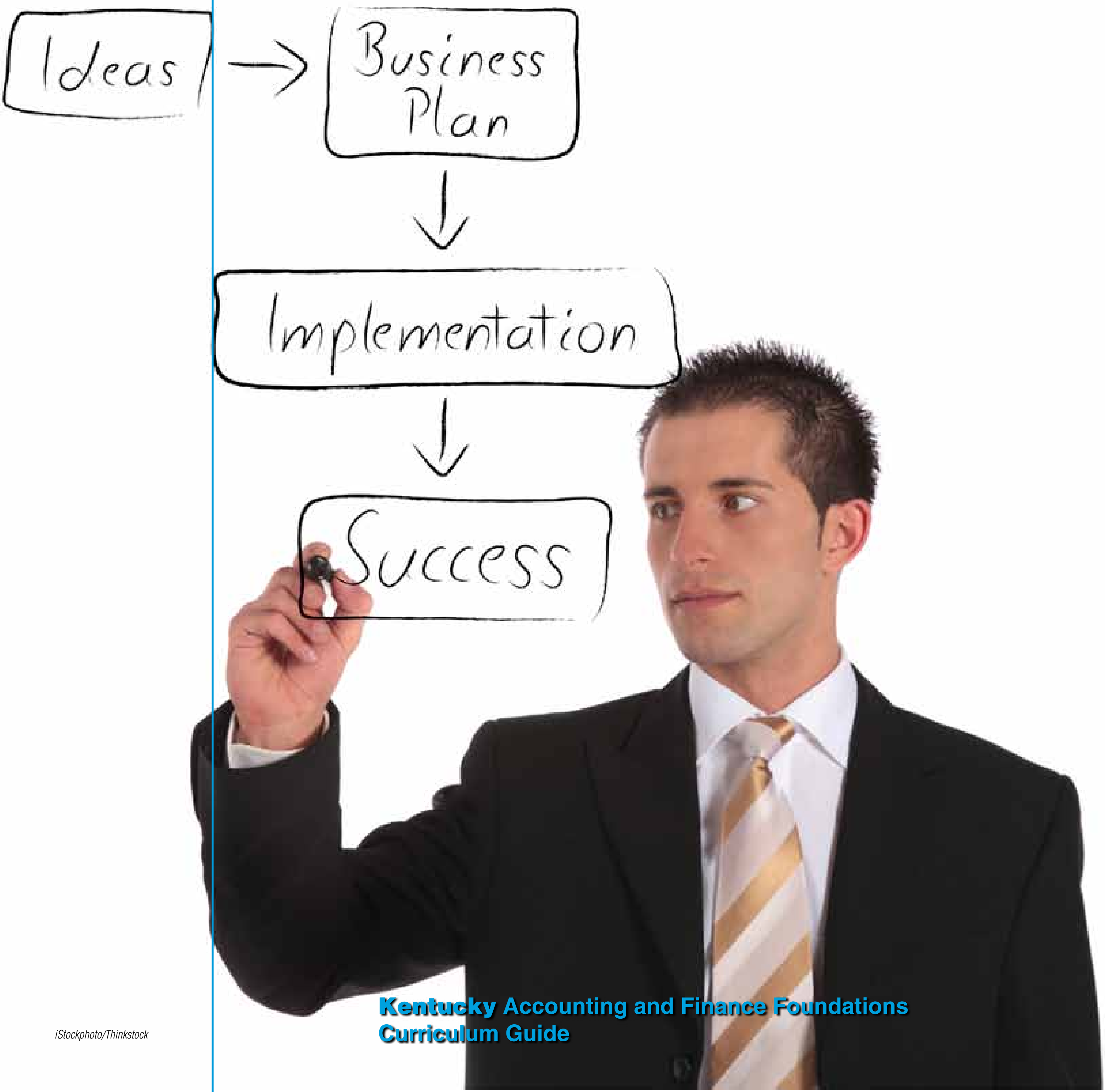
- Completes some of the comparative income statement correctly.
- Makes some mathematical errors.
- Provides limited explanation of significance of changes in sales, cost of goods sold, gross profit, total operating expenses, and net income.
- Provides limited explanation of the financial analysis method used.

1

- Completes the comparative income statement incorrectly.
- Makes numerous mathematical errors.
- Provides little or no explanation of significance of changes in sales, cost of goods sold, gross profit, total operating expenses, and net income.
- Provides little or no explanation of the financial analysis method used.

Unit 12

Budgeting and Business Plans



iStockphoto/Thinkstock

Lesson 27.2 Budgeting Tips and Advice

List Your Expenses

Make a list of your fixed expenses such as mortgage or rent payments, car payments, insurance payments, etc. After that, make a list of your fluctuating expenses. These expenses include dining out, hobbies, and other bills or expenses that don't have a consistent payment. Take the time to review old bank statements and check registers to help you calculate estimated figures for these expenses. Reviewing your expenses is vital to successful budgeting.

Separate Your Wants and Needs

After you have made your lists and can see where you're spending your money, check those lists for places where you can curb costs or eliminate them entirely. This process is especially important when budgeting to eliminate debt or to save money toward a specific goal. Any place where you see you're clearly wasting money, get rid of it.

Make Sure Your Expectations Are Realistic

The objective of successful budgeting is to help you plan for actual expenses while at the same time setting goals for spending that will allow you to save money.

Consider Buying Budgeting Software

Part of the reason you do this is, of course, for guidance in successful budgeting. It helps you understand the expenses categories and helps you map out strategies for successful budgeting. Another part of it, though, is psychological. By investing in budgeting software, you mean business when it comes to your budget and saving goals.

SOURCE: Money Instructor. (2002-2013). *5 steps to budgeting success.* Retrieved March 12, 2013, from http://content.moneyinstructor.com/450/steps-budgeting-success.html

27.3.1 Budgets and Excel

You can find many different helpful budgeting tools online, including some that you can download and use offline—either on your computer or on your smartphone.

To become more comfortable using a spreadsheet program to maintain your budget, go to the Education Cents web site at http://www.educationcents.org, and register for a free account.

Then, click on the *See All Tools* link in "My Toolbox" (just below the "Course Catalog" column) on the web site home page. Select the *Budget Worksheet—High School Student* from the list of tools (or click on https://www.educationcents.org/Calculators/Budget-Worksheets/High-School-Student.aspx#HSStudentWorksheet). Download and save the Excel file.

Finally, open the file, and complete the projected monthly column based on your specific income and expenses. Keep in mind that you probably won't fill out every income or expense line. Then, keep track of your income and spending for the next month. Will you come in over or under your budget?

27.3.2 A Sample Budget

This sample budget was prepared by Dick and Jane, who are both employed. Dick is paid $700 (after taxes and deductions) each week. Jane, who is paid every two weeks, brings home $1,000 each pay day.

Jane sometimes receives overtime pay, and Dick receives a bonus from time to time. However, since these amounts are not guaranteed, Dick and Jane did not consider them when preparing their budget. If and when the extra money is received, it will be added to their income at that time.

If we assume that Dick is paid four times a month and that Jane is paid twice monthly, their combined net income would appear to be $4,800 per month. However, this approach to calculating monthly income, which many people use, is incorrect. So, let's look at the proper way to determine monthly income.

During the year, Dick is paid a total of 52 times—for a yearly net income of $36,400. Jane is paid 26 times per year—for a yearly net income of $26,000. Their combined yearly income of $62,400, when divided by 12 months, yields a monthly income of $5,200. This is $400.00 a month more than the amount figured incorrectly above.

After arriving at their total monthly net income, Dick and Jane compiled a list of all their known monthly expenses. Here is Dick and Jane's list*:

Item	Amount
Mortgage payment	1,100.00
Auto loan	460.00
Auto insurance	200.00
Auto expenses (gas, etc.)	175.00
Groceries ($150/week)	650.00
Utilities	210.00
Telephone	65.00
Medical	130.00
Loan payment	125.00
Life/Health insurance	240.00
Entertainment	125.00
Savings	500.00
Weekly Cash ($100.00/week)	433.33
Total Expenses	**$4,413.33**

* The budget categories listed here are commonly included in household budgets, but they are not meant to represent a complete list of budget categories. The categories you use in your budget should be based on your specific expenses.

Subtracting the total expenses from the total monthly income leaves them with a balance of $786.67. This amount is placed into an "expendable" account (at least on paper) and is the amount that Dick and Jane are free to spend each month on non-budgeted items.

To manage their newly created budget, Dick and Jane need to do the following:

- The first month's budget shows each expense item and the "left over" amount in their expendable account.
- On each payday, the amount received is placed in a checking account. If the amount received is the exact amount that was used to figure their budget, no notation is made. However, if the amount is greater or less than the budgeted amount, the difference is added to or deducted from their expendable account.

  It is very important that they account for each paycheck in this manner. For example, if Jane takes a day off without pay, it would result in a loss of $100.00 for the pay period. If that is the case, she must deduct the $100.00 from the budget's expendable account when she receives her paycheck. By the same token, if Dick receives a bonus of $500.00, the $500.00 is added to the expendable account. In this way, their budget is compensated for the loss or gain of income.
- Once a week, Dick and Jane withdraw $100.00 from their checking account, as indicated in their budget. The balance of the weekly cash account could be positive or negative at the end of any given month, depending on whether Dick and Jane withdraw money four or five times during the month. This variance does not need to be compensated for because it will even out over the course of the year.
- As each budget expense is paid, the amount is deducted from the item's budgeted amount. If the amount paid is less than the budgeted amount, a balance will remain. On the other hand, if more than the budgeted amount is paid, the account will go negative (will be less than zero). For expense items that have been budgeted using an average amount, this is normal. The account will have a balance when the payment is less than average, and that balance will be available when the payment is greater than average.
- Any payment for an item that is not listed in the budget is deducted from the expendable account balance. Any extra income, from any source, is added to the expendable account. The expendable account thus becomes a sort of savings account from which money can be withdrawn as needed.
- At the end of each month, Dick and Jane start over with a new piece of paper. The budget is again listed, but this time each item's budgeted amount is added to the balance left over (if any) from the previous month. If a negative balance is shown, it is subtracted from the budgeted amount, and the new amount is listed. If it becomes necessary, money can be transferred by subtracting a dollar amount from one account and adding the same amount to another account that needs it.
- If, after several months, Dick and Jane realize that a budget item is repeatedly going over or under budget, they need to make a correction. The budgeted amount for the month should be changed so that it is closer to what is actually being spent. Any change will, of course, change the amount credited to the expendable account at the beginning of each month.
- By using their budget, Dick and Jane are confident that they will never find themselves spending more money than what they earn. However, they also understand that no budget plan can work without commitment and diligence.

SOURCE: Household Budget Management. (1996-2012). *A sample budget*. Retrieved March 13, 2013, from http://www.dacomp.com/sample.html

27.4.1 Budget Exercise—College Graduate

Full-time Employee—40 hours per week

Income:

Gross Salary: $31,200 ($15/hour)

Net Salary (after taxes & health benefits): $24,000

Monthly Expenses:

1. Savings: $50 (Pay yourself first!)
2. Rent for two-bedroom apartment: $575
3. Phone: $45
4. Natural gas: $20
5. Electric: $25
6. Car payment: $407 (Toyota 4Runner; cost = $27,000; loan = 7 years @ 7% interest)
7. Student loans: $182 (In 2012, the average outstanding student loan balance was $23,300.)
8. Car insurance: $75
9. Gasoline: $50
10. Groceries: $130
11. Eating out: $20
12. Direct TV: $55
13. Internet access: $20
14. Clothing: $50
15. Recreation & entertainment: $120
16. Personal expenses: $20
17. Dry cleaning, haircuts, etc.: $40
18. Bank credit card: $25 (Balance = $1,000; interest = 11%; estimated time to pay off debt = 49 months—paying minimum payment with no further charges)
19. Furniture store credit card: $50 (Balance = $1,250; interest = 21%; estimated time to pay off debt = 33 months—paying minimum payment with no further charges)

Income

Wages	$ ______
Public assistance	$ ______
Child support/Alimony	$ ______
Interest/Dividends	$ ______
Odd jobs	$ ______
Allowance	$ ______
Other	$ ______
Total Income	**$ ______**

Expenses

Fixed Expenses

Rent/Mortgage	$ ______
Property taxes/insurance	$ ______
Car payment	$ ______
Car insurance	$ ______
Mass transit (bus, etc.)	$ ______
Other loan payments	$ ______
Credit card payments	$ ______
Health insurance	$ ______
Day care	$ ______

Flexible Expenses

Savings	$ ______
Natural gas	$ ______
Electricity	$ ______
Other utilities	$ ______
Phone	$ ______
Food	$ ______
Gasoline	$ ______
Car maintenance	$ ______
Education	$ ______
Personal & clothing expenses	$ ______

Discretionary Expenses

Dry cleaning, haircuts, etc.	$ ______
Recreation & entertainment	$ ______
Total Expenses	$ ______

27.4.3 Budget Exercise—High-School Graduate

Full-time Employee—40 hours per week

Income:

Gross Salary: $20,800 ($10/hour)

Net Salary (after taxes & health benefits): $16,000

Monthly Expenses:

1. Rent for one-bedroom apartment: $425
2. Phone: $45
3. Natural gas: $20
4. Electric: $20
5. Internet access $19
6. Car payment: $257 (Honda Civic; cost = $13,000; loan = 5 years @ 7% interest)
7. Car insurance: $55
8. Bank credit card: $75 (Balance = $1,900: interest = 15%; estimated time to pay off debt = 31 months—paying minimum payment with no further charges)
9. Gasoline: $25
10. Personal/Clothing: $30
11. Hair cuts, magazines, etc.: $40
12. Clothing store credit card: $40 (Balance = $800: interest = 21%; estimated time to pay off debt = 25 months—paying minimum payment with no further charges)
13. Groceries: $125
14. Eating out: $15
15. Recreation & entertainment: $100
16. Cable: $45
17. Savings: $0
    (Pay yourself first!)

Income

Wages	$ ______
Public assistance	$ ______
Child support/Alimony	$ ______
Interest/Dividends	$ ______
Odd jobs	$ ______
Allowance	$ ______
Other	$ ______
Total Income	**$ ______**

Expenses

Fixed Expenses

Rent/Mortgage	$ ______
Property taxes/insurance	$ ______
Car payment	$ ______
Car insurance	$ ______
Mass transit (bus, etc.)	$ ______
Other loan payments	$ ______
Credit card payments	$ ______
Health insurance	$ ______
Day care	$ ______

Flexible Expenses

Savings	$ ______
Natural gas	$ ______
Electricity	$ ______
Other utilities	$ ______
Phone	$ ______
Food	$ ______
Gasoline	$ ______
Car maintenance	$ ______
Education	$ ______
Personal & clothing expenses	$ ______

Discretionary Expenses

Haircuts, magazines, etc.	$ ______
Recreation & entertainment	$ ______
Total Expenses	$ ______

28.1.2 Standard of Living Worksheet

Your Name: ______________________________

Annual Gross Income: ______________________________

Monthly Gross Income: ______________________________

Education Level: ______________________________

Occupation: ______________________________

Directions: Use the *Monthly Budget Options* handout to determine your monthly budget.

Monthly Budget Item	Description	Dollar Amount
Housing		
Food		
Transportation		
Clothing		
Healthcare		
Miscellaneous		
Savings		
TOTAL MONTHLY AMOUNT SPENT		**$**

Gross monthly income	
Taxes (30% of income)	
NET MONTHLY INCOME	**$**

SOURCE: Watts, M.; McCorkle, S.; Meszaros, B.T.; Schug, M.C.; & Becker, S. (2003). *Focus: High school economics* (2nd ed.) [pp. 97–112]. New York: National Council on Economic Education.

28.1.3 Monthly Budget Options

Housing Options

(Electricity, Telephone & Water)

Live at home $100
Apartment with friend 250
Apartment, one bedroom 490
Apartment, two bedroom 575
Own a house 750

Food Options

Groceries:

$120 month/$30 per week
$180 month/$45 per week
$240 month/$60 per week
$300 month/$75 per week

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Eating Out:

Fast Food (per person)................................$10.00 +
Restaurant (per person)..............................$10.00 +

Transportation Options

(Car Payment, Insurance, Gas, Maintenance)

Cab and Bus Fare $75
Used Car (Ford Focus) 300
Used Car (Honda Accord) 400
New Mid-sized Car (Chevy Malibu) 475
New Mid-sized Car (Toyota Camry).................... 625
New Chevy Tahoe 700
New Luxury Car (Lexus) 895
New Luxury Car (BMW) 945

Clothing Options

(Clothes, Shoes, etc.)

New Clothes......................................$10.00 and up
New Shoes..$20.00 and up

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Healthcare Options

(Personal, Doctor, Dentist, Insurance, Prescriptions, Glasses)

$100.00 per month
Personal Care Items.................................. $15.00 +
(toothpaste, makeup, shaving cream, etc.)
Hair Care ....$10.00 +

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Miscellaneous Options

(Entertainment/Recreation, Personal Care Items)

Movie Tickets $6.00
Books..6.00
Pet Care 10.00
Gifts .... 10.00+
Trips/Vacations 75.00
Subscriptions... 15.00
Concert Tickets .... 20.00+
Music Downloads .... 12.00+
Hobbies.. 25.00+
Sporting Events... 25.00+
Other ______________________________ _____

Savings Options—You Decide!

28.1.4 Standard of Living Questions

1. What kinds of choices did you have to make? What did you have to give up? What could you afford?

2. How did your monthly income compare with that of individuals who had a level of education different from yours?

3. Explain what standard of living means.

4. What is human capital, and how can you improve yours?

5. In general, what is the relationship between the amount of income you earn and your level of education?

6. What is the relationship between the amount of income you earn and your standard of living?

SOURCE: Watts, M.; McCorkle, S.; Meszaros, B.T.; Schug, M.C.; & Becker, S. (2003). *Focus: High school economics* (2nd ed.) [pp. 97–112]. New York: National Council on Economic Education.

BUDGETING & FORECASTING

"Forecasting your Future"

#2

Takin' Care of Business

CPA... Imagine the possibilities!

AICPA

#2 BUDGETING & FORECASTING "Forecasting your Future"

Overview

Budgeting is a financial planning tool that requires companies and individuals to estimate and track revenues and expenses. **Revenue** is a generic term used to describe money that is earned and received, or will be received, at a future date. **Expenses** are costs associated with a particular activity that require the payment of cash now or at a future date. When revenues exceed expenses, what remains is **profit**. **Certified Public Accountants (CPAs)** label this profit **net income** because it is income net of expenses — that is, income after deducting expenses. Individuals call such net income a **surplus** or **savings**. In contrast, when expenses exceed revenues, the result is a **loss** or a **debt**. CPAs label this debt **net loss**.

The term **budget** most often refers to revenue and expenses of the current year or the next year. CPAs also prepare budgets for the long term. This activity is called **forecasting**. Most companies prepare forecasts of revenue and expenses for the next three to five years, and in some cases, the next ten years. The process of forecasting revenue and expenses requires CPAs to estimate the rate (percentage) at which revenue and expenses will grow (increase) or decline (decrease).

At the conclusion of every year, a company will report a net income or a net loss — a net **savings** or **debt**, respectively, for individuals. In addition, the company will add this net income or net loss figure to the prior year's net income or net loss amount. The resulting figure, which is an accumulation of a company's revenue and expenses for every year of operation, is termed **retained earnings**. Retained earnings are calculated every year by adding the current year's net income or net loss to last year's retained earnings. The result is a figure that is used by CPAs to describe a company's "worth" or "value" in accounting terms. (Note that net income increases one's "worth" or retained earnings and conversely, a net loss decreases one's "worth" or retained earnings.)

Individuals perform a similar calculation. However, we refer to our "retained earnings" as our total **savings** if we are able to spend less than our income over a number of years and, on the other hand, if we incur a deficit for a number of years, we refer to this as our total **debt**.

Certified Public Accountants provide a variety of **financial planning services** to organizations and individuals. These services include everything from tax planning and financial statement analysis to structuring investment portfolios and executing complex financial transactions.

Activities

Who Will Have More Money in the Bank at the Tenth Year Class Reunion?

PART-1:

Jack and Diane graduate from high school the same year. Jack begins a full-time job, starting at $19,900, and keeps his part-time job (where he earns an additional $1,500 a year). Feeling flush, Jack moves into his own apartment, buys a new car ($400 a month for four years), purchases $1,300 worth of new clothing and goes on a one-week vacation to Florida.

Diane heads to Florida as well — to college, where tuition for the first year is $13,500 and a room in a dormitory costs $7,000. Diane works all 12 weeks of the summer for $350 per week, enters a work-study program at her school, wins a partial scholarship and qualifies for financial aid. In addition, she sells her car for $1,000 and spends the money on clothes ($250 per year).

Use this information to complete Year 1 of the spreadsheet below for both Jack and Diane. Then forecast revenue and expenses over the next three years for each, making the following assumptions:

FOR JACK: Revenue increases 3% each year over the prior year and all expenses, except the car payment, increase 4% each year (over the prior year).

FOR DIANE: Revenue remains constant each year and expenses increase 2% each year.

JACK	1	2	3	4
REVENUE				
Full-time job	$			
Part-time job	$			
Total Revenue	$			
EXPENSES				
Rent	$ 4,800			
Utilities	$ 600			
Food	$ 2,500			
Insurance	$ 200			
Car payment	$			
Car insurance	$ 1,200			
Gasoline	$ 700			
Clothing	$			
Vacation	$ 1,800			
Total Expenses	$			
Savings/(Debt)	$			
Cumulative Savings (Cumulative Debt)	$			

DIANE	1	2	3	4
REVENUE				
Summer Job	$			
Scholarship	$ 1,500			
Financial Aid	$ 6,500			
Work-study Program	$ 2,000			
Sale of Car	$ 1,000			
Total Revenue	$			
EXPENSES				
Tuition	$			
Meal Plan	$ 2,100			
Room & Board	$			
Books	$ 1,000			
Spring Break	$ 500			
Clothing	$			
Total Expenses	$			
Savings/(Debt)	$			
Cumulative Savings (Cumulative Debt)				

PART-2: Diane graduates from college and lands a job with an accounting firm, starting at $35,000 a year. Diane gets her own place, buys a new car, takes a vacation, and can now spend more money on new clothes. Use this information to complete Year 5 of the spreadsheet below for Diane. Then forecast revenue and expenses for both Jack and Diane up to the point they meet again at their tenth-year high school reunion, making the following assumptions:

FOR DIANE: Revenue increases 10% each year over the prior year and all expenses, except the car payment, increase 4% each year over the prior year. Assume that the car payment remains constant and is made for four years, starting with Year 5.

FOR JACK: Same assumptions since graduating from high school.

	Jack's Forecast Years 5 Through 10						Diane's Forecast Years 5 Through 10					
	5	6	7	8	9	10	5	6	7	8	9	10
REVENUE												
Full-time job	$ 22,398						$					
Part-time job	$ 1,688						$					
Total Revenue	$						$					
EXPENSES												
Rent	$						$ 6,000					
Utilities	$						$ 700					
Food	$						$ 3,000					
Insurance	$						$ 250					
Car payment	$						$ 6,250					
Car insurance	$						$ 1,400					
Gasoline	$						$ 800					
Clothing	$						$ 2,000					
Vacation	$						$ 2,300					
Total Expenses	$						$					
Savings /(Debt)	$						$ 12,300					
Cumulative Savings (Cumulative Debt)	$						($ 30,231)					

PART-3: Write a brief explanation of the effect savings and debt have on Jack and Diane's **net worth**, and the effect that each might have on their respective lifestyle options in the future.

Lesson 28.3 Business Budgeting

Budgets are essential to business success. That's because they help businesses develop wise spending habits and reach financial goals. By developing a spending plan for your business, you can make smarter economic decisions, too.

Most business budgets include two types of expenses: fixed and variable. A **fixed** expense is an expense that isn't affected by changes in sales volume, level of production, and/or resource usage. A **variable** expense, on the other hand, changes when sales, production levels, and/or resource usage go up or down.

To maintain its budget, a business must keep accurate, complete financial records. At the end of each month or budget period, the business should compare the actual amount it spent on different expenses to the amount budgeted. If there is a difference between the two amounts, managers should examine the difference closely. If the business spent more than what it budgeted, a **deficit** exists. But, if the business spent less than the budgeted amount, it enjoys a **surplus**.

Most successful business budgets have similar characteristics. They are:

- Realistic
- Well-planned
- Clearly communicated
- Flexible
- Evaluated regularly

Lesson 29.1 The Business Plan

In addition to a budget, every business needs a business plan to be successful. A business plan is your company's business model in written form. This important document is like a map and a compass. You wouldn't start out on a long journey without knowing which direction you're going or where you want to end up. And you shouldn't start a business without planning ahead, either.

Although each business plan is unique, a typical business plan includes the following information:

- Executive summary
- Company profile/description
- Industry analysis
- Target market
- Competitive analysis
- Marketing plan and sales strategy
- Operations
- Management and organization
- Long-term development
- Financials
- Appendix

Each of these parts or pieces of information fulfills a particular purpose within the business plan. Let's take a closer look at each.

Executive Summary

The first thing that you usually see in a business plan is the executive summary. This section is the most important part of the business plan because it gives an overview of the entire document.

Within the executive summary, the company emphasizes its main point—its reason for writing the plan. If the company is looking for funding, the plan shows how that funding will enhance its business operations or increase its bottom line.

From the executive summary, the reader—perhaps a banker, investor, etc.—can determine whether it is worthwhile to read any further. A banker is typically looking for evidence that the company is stable and can pay its bills on time, while a potential investor wants to see that the business is (or soon will be) growing significantly.

Company Profile/Description

In the company profile or description, the business plan explains the new company or venture. This is where a start-up business explains what the company is all about, and an existing business includes how its venture fits into the company's current operations. The company profile/description should, in essence, answer the following questions:

- What is your business?
  - Are you a retailer, wholesaler, manufacturer, or service provider?
  - What need(s) do you meet for your customers?
- Is your business a start-up or an existing business?
- What is your business's legal structure?

Company Profile/Description (cont'd)

- When did (or will) your business open?
- Who are the founders?
- Where is your business located?
- What are your operating days and hours?
- What successes has your business achieved so far?
    - If you are a start-up business, why do you think you will be successful?
- What resources does your business have available for achieving its goals?
- What is special or unique about your business?
- What is your vision for the future of the business?

Industry Analysis

The industry analysis describes the larger industry to which the business belongs. It discusses the general outlook for the industry, trends in the industry, and key players in the industry. If there are any possible barriers that could prevent the business from successfully entering the market, those should also be mentioned. In essence, the industry analysis should indicate that the owners understand and are aware of external business conditions.

Target Market

This component of the business plan identifies the business's target market in specific terms. It defines the target market's key characteristics and trends and identifies key customers (or customer groups). The target market section should also provide evidence of customer interest and explain how the business's product uniquely meets the customers' need(s).

Competitive Analysis

At this point in the business plan, it's important to examine how competitors' activities compare to those of the business. The competitive analysis should include a realistic, factual analysis of the business's competition. It should identify competing companies' strengths and weaknesses, as well as the business's strengths and weaknesses relative to those of competitors. It should also point out the advantages that the business's goods/services have over the competition.

Marketing Plan and Sales Strategy

The marketing plan, including the business's sales strategy, should detail a clear, goal-attaining method—with well-defined steps—for marketing and selling the business's product or service. It explains the role of advertising, direct mail, and public relations in effectively communicating with potential and current customers. This section also explains the type of sales force that the business plans to have, how it intends to train its sales force, and how it plans to carry out its sales strategy.

Operations

The operations section provides an overview of how the business will operate on a daily basis. It should include a description of the business's production processes, its physical facility, the technology involved in producing and offering its goods and services, and its processes for ensuring the delivery of these products.

Management and Organization

Most business plan readers are very interested in the quality of the business's management. In fact, the quality of a business's management team is often considered the single most important indicator of success.

The management and organization section in a business plan typically identifies key employees and describes their experience, skills, and accomplishments. This section also usually answers questions like:

- How many employees does the business have?
- What vacant positions need to be filled, and what is the timetable for filling them?
- What is the business's organizational structure?
  - Divisions?
  - Departments?
  - Etc.?
- What are the business's personnel costs?
  - Salaries?
  - Vacation and sick pay?
  - Benefits?
  - Taxes?

Long-Term Development

In the long-term development section of the business plan, the business should summarize its future plans. This section explains owners'/management's vision and priorities for the future of the business—in three, five, or even more than five years. It also should contain an honest and complete evaluation of the business's potential for success and failure.

Financials

A start-up business's financial plan explains the accounting methodology that the business will use. It describes how the firm plans to generate a profit, its financing needs, and the source(s) of this financing.

It also contains prospective financial data (projected income statements, balance sheets, and cash flow statements) for the firm, along with a discussion of any assumptions made in projecting the business's financial results. The plan is likely to include quarterly or monthly projections for the first year as well as annual projections for the next five years. Regardless of how the projections are organized, they should be presented honestly and conservatively.

Appendix

At the end of the document is the appendix, which contains all of the extra bits of information that describe or lend support to a point made in the document. The purpose is to provide details for further investigation. Included are management résumés, specific charts or diagrams, market research results, contracts, licenses, letters of intent, etc.

Learning More

To learn more about business plans and other aspects of owning your own business, go to the U.S. Small Business Administration's web site at www.sba.gov.

Student Assignment

Lesson 29.3 Business Plan Helper

Directions: Access the ODU Entrepreneurial Center Business Plan Helper at http://www.hrtc.org/attachments/files/301/ODUBusinessPlanHelper.pdf. Read the business plan outline, and then use it to answer each of the following questions. Use a separate sheet of paper to record your responses.

I. Business Plan—Overview

1. What are two purposes of a written business plan?
2. Writing a business plan forces __________ and __________ into the business.
3. The business plan establishes concrete __________ and __________, with general parameters to guide the organization.
4. The business plan provides a basis for communicating the company's message—internally to __________ and externally to __________.
5. How does a written business plan serve as a map for the company?
6. According to the outline, a business plan should be a "living" document. What does that mean?

II. Key Initial Questions

7. What are five basic questions that you should ask yourself when preparing to write a business plan?

III. Create an Outline, Feasibility Study, or Abbreviated Plan

8. Why should you identify your key personnel in your business plan?
9. Why should you include monthly cash-flow projections in your business plan?

IV. Organization of a Full Written Plan

10. What are five sections that you should include in your market analysis?
11. What four topics should you address in your description of your product and/or services?
12. In the operations section, you should explain your production and/or service delivery. What information should you include in this part of your business plan?

Student Assignment

Lesson 29.4 Culminating Project—Creating a Business Plan

Business plans are an effective tool for evaluating, organizing, and selling a new business concept. A well-developed business plan can be a key component of a successful business start-up. This assignment allows you to demonstrate an understanding and mastery of the process required in developing and implementing a new business venture.

Directions: Team up with one or two of your classmates (two or three students per group) to develop a written business plan. Base your business plan on a proposed business venture or current business that has been in operation for less than 12 months. Be sure to use the *Business Plan Report Rating Sheet* as a guide while preparing your business plan.

29.4.2 Business Plan Report Rating Sheet

BUSINESS PLAN					
Rating Sheet (200 points)					
Evaluation Item	**Not Demonstrated**	**Does Not Meet Expectations**	**Meets Expectations**	**Exceeds Expectations**	**Points Earned**
Content					
Executive Summary • Convinces reader that business concept is sound and has a reasonable chance of success • Is concise and effectively written	0	1–7	8–14	15–20	
Company Profile/Description • Legal form of business • Effective date of business • Company mission statement/vision • Company governance • Company location(s) • Immediate development goals • Overview of company's financial status	0	1–5	6–10	11–15	
Industry Analysis • Description of industry (size, growth rates, nature of competition, history) • Trends and strategic opportunities within industry	0	1–5	6–10	11–15	
Target Market • Target market defined (size, growth potential, needs) • Effective analysis of market's potential, current patterns, and sensitivities	0	1–5	6–10	11–15	

29.4.2 Business Plan Report Rating Sheet (cont'd)

BUSINESS PLAN					
Rating Sheet (200 points)					
Evaluation Item	Not Demonstrated	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Content					
Competition • Key competitors identified • Effective analysis of competitor's strengths and weaknesses • Potential future competitors • Barriers to entry for new competitors identified	0	1–5	6–10	11–15	
Marketing Plan and Sales Strategy • Key message to be communicated identified • Options for message delivery identified and analyzed including Web process • Sales procedures and methods defined	0	1–5	6–10	11–15	
Operations • Business facilities described • Production plan defined and analyzed • Workforce plan defined and analyzed • Impact of technology	0	1–5	6–10	11–15	

29.4.2 Business Plan Report Rating Sheet (cont'd)

BUSINESS PLAN					
Rating Sheet (200 points)					
Evaluation Item	**Not Demonstrated**	**Does Not Meet Expectations**	**Meets Expectations**	**Exceeds Expectations**	**Points Earned**
Content					
Management and Organization • Key employees/principals identified and described • Board of directors, advisory committee, consultants, and other human resources identified and described • Plan for identifying, recruiting, and securing key participants described • Compensation and incentives plan	0	1–5	6–10	11–15	
Long-term Development • Goals for three, five, or more years are identified and documented • Risks and potential adverse results identified and analyzed • Strategy in place to take business toward long-term goals	0	1–5	6–10	11–15	

Financials
• Type of accounting system to be used is identified
• Financial projections are included and reasonable
  • 1st year monthly cash flow
  • 1st year monthly income statement
  • Yearly income statements for years 1, 3, & 5
• Financial assumptions clearly identified
	0	1–7	8–14	15–20	

29.4.2 Business Plan Report Rating Sheet (cont'd)

BUSINESS PLAN					
Rating Sheet (200 points)					
Evaluation Item	**Not Demonstrated**	**Does Not Meet Expectations**	**Meets Expectations**	**Exceeds Expectations**	**Points Earned**
Content					
Supporting Documents • May include works cited page, certifications, licenses, tax requirements, codes, technical descriptions, advance contracts, etc.	0	1–5	6–10	11–15	
Report Format Clear and Concise presentation with logical arrangement of information following the rating sheet categories	0	1–3	4–7	8–10	
Professional written presentation appropriate to audience	0	1–2	3–4	5	
Correct grammar, punctuation, spelling, and acceptable business style	0	1–3	4–7	8–10	
Total Points					**/200 max.**

SOURCE: Future Business Leaders of America-Phi Beta Lambda (FBLA-PBL). (2012). *FBLA competitive events: Business plan*. Retrieved March 15, 2013, from: http://www.fbla-pbl.org/docs/ct/gdlrs/FBLA/business_plan_fbla_1213c.pdf

WRITING A BUSINESS PLAN
"Entrepreneurial starts here"

#8

Takin' Care of Business

CPA... Imagine the possibilities!

AICPA

#8 WRITING A BUSINESS PLAN "Entrepreneurial starts here"

Overview

A **business plan** is an essential aspect of starting a business or continuing the operation of a current business. It serves as a guide to what a business does and how it will accomplish its goals and objectives. A business plan consists of the following key sections: **Strategic Plan**, **Marketing Plan**, and **Financial Plan**.

The Strategic Plan. A strategic plan is a detailed outline of a company's goals and objectives and the methods by which the objectives will be met. A strategic plan consists of three components: a mission statement, strategies, and methods of implementation. A **mission statement** is a goal, objective or purpose. A company's mission statement articulates specifically what that company plans to achieve or accomplish. As a company goal or objective, the mission statement reads "To provide…," "To service…," "To produce…," "To establish…," "To develop…," "To achieve… ," "To gain…," "To maintain…," et cetera.

Business plan **strategies** state specifically how the stated goals or objectives will be accomplished. A strategic plan and mission statement can be applied to individuals as well as companies. For example, a high school student may have a mission statement, "To attend the University of Connecticut," or other college or university of choice. In order to accomplish that particular mission statement, the student will need to develop strategies. The strategies may include finishing high school ranked in the top 10% of the graduating class, scoring 1200 on the Scholastic Aptitude Test, and exhibiting characteristics of a well-rounded individual.

Methods of implementation relate to specific strategies and are described as "how" the strategies will be carried out or implemented, which in turn translates into accomplishing the mission statement. For example, one method of implementing a high school student's strategy to be ranked in the top 10% of the graduating class is to study at least two hours every night during the week. In order to implement the strategy of scoring 1200 on the SAT, the student will seek extra help from English and Math teachers after school at least once a week. And in order to become a well-rounded person, the student will become involved in extracurricular activities such as athletic teams, student council, yearbook staff, prom committee and, if possible, obtain a part-time job or become a volunteer in community activities. If a company, or individual, has a clear mission statement supported by well-developed strategies and well-exercised methods of implementation, the probability of accomplishing the goals and objectives set forth by that company or individual increases dramatically.

The Marketing Plan. The essentials of a marketing plan involve defining the target market and outlining the "4 Ps": Place, Product, Promotion, and Price.

A **target market** is that segment of potential buyers to whom the company intends to sell its product or service. In order to be successful, the company must define its target market and the product or service being provided by the company must be identified as a "need" or a "want" for that defined target market.

With respect to the "4 Ps" of marketing, **Place** refers to location. Specifically, "place" must be defined in terms of outlet location, number of locations, and channels and methods of distribution. **Product** refers to the item produced or delivered or the service provided. The product or service must be described in detail, including an outline of distinguishing characteristics embodied by the company and provided by the product or service. **Promotion** refers to the actual marketing and advertising of a company and its product or service. In developing a promotional plan, advertising methods such as television and radio commercials, magazine and newspaper advertisements, and outdoor advertising must be considered, as well as the target market itself and the unique or distinguishing characteristics of the product or service. In establishing the **Price** of a product or service, the cost to produce or deliver the product or service is the primary consideration. In addition, if similar or alternative products or services are provided by competitors, the competitor's price must also be a major consideration.

The Financial Plan. Projecting the financing and cash flow requirements for a new business venture is also a critical element of a business plan. Based on the type of product or service, estimated costs, competition, price and demand, one can estimate gross revenue. In addition, one can identify and estimate the costs incurred to manufacture a product or provide a service as well as the operating expenses of the business such as wages, employee benefits, rent, insurance, advertising, utilities and maintenance. Finally, with this information, a three-year projection of revenue and expenses can be prepared.

Activities

PART-1: What's Your Big Idea?

Develop an idea for a new product or service, one that does not exist today. Your team will act as the new company's management responsible for developing, producing and distributing this new product or providing this new service.

PART-2: Write Your Business Plan

Prepare a written business plan for your company based on the new product or service you have created. Use the following business plan outline for HOT SEATS, Inc. as a guide. Note that a complete business plan written in its entirety should be organized, detailed, specific and descriptive.

I. Strategic Plan

A. Mission statement **Goals, objectives, purpose**	To provide skiers a means of warmth and comfort on a chairlift between ski runs.
B. Strategy #1 **1. Method of implementation**	Provide a warm seat. 1. Run electronically heated coils beneath a padded HOT SEAT that fits on a variety of ski chairlifts. The electricity will be generated from insulated wires that run through the cables above the chair. The cables are protected against freezing.
C. Strategy #2 **1. Method of implementation**	Provide a comfortable seat. 1. Insert a thick foam padding with protective exterior into the HOT SEAT that not only provides comfort, but also protects riders from the electric coils.
D. Strategy #3 **1. Method of implementation**	Provide a quality seat in a variety of colors. 1. Manufacture HOT SEATS with a durable protective exterior to prevent "normal wear and tear" as well as protect the seat from extreme winter conditions. 2. Offer HOT SEATS in all primary colors so that buyers can customize color design with ski lodge/resort colors.

II. Marketing Plan

A. Target market **1. Description** **2. Customer needs vs. customer wants**	Ski equipment companies, ski owners, ski expositions. HOT SEATS is a luxury — a customer "want"
B. Place **1. Location(s)** **2. Distribution channels**	HOT SEATS will be manufactured in an industrial park using an automated production line.
C. Promotion **1. Advertising** **2. Key benefits** **3. Target market**	Provide brochures and a prototype of a HOT SEAT at ski expositions and ski lodges/resorts. Advertise in ski and snowboarding magazines such as *SKI* and *Transworld Snowboarding*.
D. Product **1. Description** **2. Unique qualities**	HOT SEATS are designed for ski chairlifts on any ski mountain. HOT SEATS is a safe, permanent and comfortable seat that provides warmth (60° F) to riders on a ski chairlift. HOT SEATS are designed for all sizes — quad, triple, double — of chairlifts.
E. Price **1. Rationale & considerations** **a. Competitors price** **b. Cost estimate**	HOT SEATS, Inc. will hire a CPA to determine the cost of producing an individual HOT SEAT in order to determine a competitive selling price. HOT SEATS, Inc. estimates that the selling price of each HOT SEAT will range from $1,500 to $2,500 depending on size and color. Buyers will be offered discount prices if a large quantity of HOT SEATS is ordered over a period of time.

III. Financial Plan

A. Revenue **1. Year 1** **2. Year 2** **3. Year 3**	Revenue 1. Year 1: $20 million (based on 10,000 units) 2. Year 2: $32.5 million (based on 15,000 units) 3. Year 3: $45 million (based on 25,000 units)
B. Cost of manufacture **1. Year 1** **2. Year 2** **3. Year 3**	Cost to Manufacture 1. Year 1: $12 million (based on 10,000 units) 2. Year 2: $18 million (based on 15,000 units) 3. Year 3: $23 million (based on 25,000 units)
C. Operating expenses (includes wages, employee benefits, rent, insurance, advertising and utilities) **1. Year 1** **2. Year 2** **3. Year 3**	Operating Expenses 1. Year 1: $4 million 2. Year 2: $5.275 million 3. Year 3: $6.75 million
D. Net profit **1. Year 1** **2. Year 2** **3. Year 3**	Net Profit 1. Year 1: $4 million 2. Year 2: $9.225 million 3. Year 3: $15.25 million

Name of Your New Product or Service, and a Brief Description:

____

____

____

Company Name: ______________________________

I. Strategic Plan

A. Mission statement Goals, objectives, purpose	
B. Strategy #1 1. Method of implementation	
C. Strategy #2 1. Method of implementation	
D. Strategy #3 1. Method of implementation	

II. Marketing Plan

A. Target market 1. Description 2. Customer needs vs. customer wants	
B. Place 1. Location(s) 2. Distribution channels	
C. Promotion 1. Advertising 2. Key benefits 3. Target market	
D. Product 1. Description 2. Unique qualities	
E. Price 1. Rationale & considerations a. Competitors price b. Cost estimate	

III. Financial Plan

A. Revenue 1. Year 1 2. Year 2 3. Year 3	
B. Cost of manufacture 1. Year 1 2. Year 2 3. Year 3	
C. Operating expenses (includes wages, employee benefits, rent, insurance, advertising and utilities) 1. Year 1 2. Year 2 3. Year 3	
D. Net profit 1. Year 1 2. Year 2 3. Year 3	

Skill Standards

Academic:

AD 1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)

AE 2 Identify the components of a budget and how one is created

Employability:

ED 3 Work within budgetary constraints

Scenario

Picture yourself five years after high school. You have already graduated from college or trade school and started your career. Your net earnings per year are $42,750 (after taxes and healthcare costs are deducted), and you don't receive any financial assistance from your parents. Next year, you want to go on a vacation to Cancún that will cost $4,599. To save up enough money to pay for the trip, you have decided to put together a monthly budget.

Tasks

A. Create a monthly budget for yourself either in a spreadsheet program or on the budgeting sheet provided. Remember that you bring home $42,750 a year, and include the following monthly income and expenses in your budget:

- Mortgage payment—$950
- Car payment—$225
- Car insurance—$89
- Student loan—$131
- Savings (Pay yourself first!)—$25.00
- Phone—$185
- Gas—$65
- Electric—$112
- Groceries—$225
- Eating out—$550
- Cable TV— $85
- Movie rental membership—$22
- Month-to-month gym pass—$47
- Entertainment—$225
- Personal expenses—$112
- Bank credit cards—$50
- Dividends/Interest received—$15

Budgeting Sheet

Name: ______________________________

Date: ______________________________

Month: ______________________________

Item	Income
Wages	$ ________
Interest/Dividends	$ ________
Other	$ ________
Total Income	$

Item	Fixed Expenses
____________	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
Total Fixed Expenses	$

Item	Flexible Expenses
Savings (Pay Yourself First)	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
Total Flexible Expenses	$

Item	Discretionary Expenses
____________	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
____________	$ ________
Total Discretionary Expenses	$
Total Expenses	$

Total Income	$ ________
Total Expenses	$ ________
Total Expendable Account	$ ________
Total Added to Savings	$ ________
Savings needed for Cancun Vacation	$

Tasks (cont'd)

B. What discretionary expenses could you eliminate to create additional savings? Explain your answer, and use your budget to support your response.

C. If you reduce or eliminate these discretionary expenses, will you be able to save enough for the Cancun vacation? Explain your answer, and use your budget to support your response.

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this portion of the assessment.

Scoring Rubric

4

- Completes the budgeting sheet correctly.
- Makes no mathematical errors.
- Thoroughly explains methods for cutting discretionary expenses to achieve savings goal.
- Thoroughly explains his/her chances of saving enough for the Cancun vacation.

3

- Completes most or all of the budgeting sheet correctly.
- Makes few mathematical errors.
- Adequately explains methods for cutting discretionary expenses to achieve savings goal.
- Adequately explains his/her chances of saving enough for the Cancun vacation.

2

- Completes some of the budgeting sheet correctly.
- Makes some mathematical errors.
- Provides limited explanation of methods for cutting discretionary expenses to achieve savings goal.
- Provides limited explanation of his/her chances of saving enough for the Cancun vacation.

1

- Completes the budgeting sheet incorrectly.
- Makes numerous mathematical errors.
- Provides little or no explanation of methods for cutting discretionary expenses to achieve savings goal.
- Provides little or no explanation of his/her chances of saving enough for the Cancun vacation.

Unit 13

Auditing

Hemera/Thinkstock

Lesson 30.1 Introduction to Auditing

In previous units, you learned the fundamentals of accounting and finance. Now, in this unit, you're going to take an up-close look at auditing, which is related to—yet different from—accounting and finance. Accounting involves recording, classifying, and interpreting financial data, while the finance function in a business involves all money and money management matters. The purpose of **auditing** is to verify that a business's accounts and financial records are accurate and complete.

Why verify that a business's accounts and financial records are correct? Because both internal stakeholders (such as management and business owners) and external stakeholders (including shareholders and potential investors) can't make good decisions without accurate information. So, these stakeholders look to auditors to review company accounting records and supporting documents to determine if the business's financial statements are true. In other words, auditors (who are often Certified Public Accountants) provide assurance to individuals making financial decisions that a business's accounting and financial data are correct.

When businesses are audited, auditors and company managers develop either verbal or written agreements identifying what areas, processes, or data will be audited. Then, the auditors gather and evaluate relevant evidence. This **evidence** is any data that auditors can use to determine if a company's accounting and financial data are stated correctly. Finally, after analyzing the evidence, the auditor develops an **audit report** that details and communicates his/her audit findings to the internal and external stakeholders.

Types of Audits

There are three main types of audits: financial statement audits, operational audits, and compliance audits. Let's take a closer look at each.

Audit Type	Purpose	Evidence Used
Financial Statement Audit	To determine if a company's financial statements are correct and complete	Ledgers, documents, records, reconciliations, and outside resources
Operational Audit	To determine if operational processes (e.g., accounts payable) are operating efficiently and effectively	Evidence will vary based on the process being audited. For example, when auditing accounts payable, cash disbursement journals, general ledger transactions, bank statements, cancelled checks, and other supporting documents would be required.
Compliance Audit	To determine whether a company is following specific procedures, rules, and regulations established by a higher authority	Regulations, expert guidance, internal standard operating procedures, desk procedures, company records, laws, loan agreements, contract agreements (including bid information), and financial statements

Lesson 30.1 Introduction to Auditing (cont'd)

Types of Auditors

Just as there are several types of audits, there are several types of auditors. Three of the most common types of auditors are independent auditors, internal auditors, and Internal Revenue agent auditors.

Independent auditors are not associated in any way with the companies that they audit. Because they have no relationship with these companies, the companies' managers, or the companies' owners, independent auditors can be trusted to provide audit conclusions and opinions that are impartial and not biased. Independent auditors conduct all three types of audits—financial statement audits, operational audits, and compliance audits.

Internal auditors have responsibilities similar to independent auditors, although rather than being independent, internal auditors are company employees who audit their own companies' financial statements, records, and operational processes. Unlike independent auditors' reports, an internal auditor's findings are not often shared with people outside her/his company. Instead, s/he typically reports his/her audit findings to the company's board of directors and upper management.

A third type of auditor is an **Internal Revenue agent auditor**. As the name implies, these auditors work for the Internal Revenue Service (IRS), which (as you'll recall) is a U.S. federal agency that collects taxes and enforces tax laws. Internal Revenue agent auditors' primary responsibilities include auditing tax records and determining if tax payers—individuals as well as companies—are compliant with tax regulations.

30.1.1 Auditing Basics

Fill in the blank.

1. Individuals who record, classify, and interpret financial data are _________________ professionals.
2. The purpose of auditing is to verify that a business's accounts and financial records are _________________ and _________________.
3. Any data that auditors can use to determine if a company's accounting and financial data are stated correctly are called _________________.
4. The final step in the audit process is preparing the _________________.
5. Cyndi is auditing her company's balance sheet, income statement, and statement of cash flow. Cyndi is conducting a(n) _________________ audit.
6. If you are an auditor responsible for determining if a company's accounts payable area is operating efficiently, you are responsible for conducting a(n) _________________ audit.
7. If you are conducting an investigation to determine whether your company is following regulations, rules, and specific procedures, you are completing a(n) _________________ audit.
8. Auditors who are not associated in any way with the companies that they audit are _________________ auditors.
9. Company employees who perform audit functions are known as _________________ auditors.
10. Someone who audits company tax returns to determine if the company is compliant with tax laws is a(n) _________________ auditor.

Name: ____ Date: ____________

Lesson 30.2 The Audit Process—Planning

Although the length of time required to conduct an external audit can vary greatly depending on the complexity and size of the company, most external audits—especially external financial statement audits—typically consist of four stages. These stages include planning; testing internal controls; conducting analytical procedures (also known as substantive procedures); and issuing the audit report.

Stage 1: Planning

During the planning and design stage of an audit, the auditor and company management meet to identify their responsibilities as well as the objectives of the audit. The general objectives of a financial statement audit, for instance, are usually to determine if the company's financial statements are fair, relevant, and accurate; to determine if the company's accounts comply to GAAP and other accounting standards; and to determine if the company's internal controls are effective. (More about internal controls later.)

Then, the auditor conducts thorough research to become familiar with the company that s/he is auditing, its issues, and the overall business environment in which it operates. Auditors gather this information by meeting with company management, reading through company records, and accessing data about the company from outside sources.

Auditors also spend time during the first stage determining which of the business's financial transactions to examine during the audit. After all, examining every one of the company's financial transactions occurring in the past year would be extremely time-consuming. So, instead, auditors typically test just a sample—a small portion—of these financial transactions. Keep in mind, though, that they must examine enough transactions to draw definitive conclusions about the company's financial data as a whole.

30.2.1 Planning the Audit

Answer each of the following questions. Use a separate sheet of paper to record your responses.

1. What are the four typical stages of an audit?
2. During the planning and design stage of an audit, what do the auditor and company management identify?
3. Why should the auditor review the overall business environment of the company?
4. Instead of testing and reviewing all of a company's transactions, an auditor typically tests a __________.
5. What is the purpose of examining financial transactions?

Lesson 30.3 The Audit Process—Testing Internal Controls

Internal Controls

The second stage of the audit process involves testing internal controls, but before we get into the details, let's back up a minute to discuss what happens before an audit even occurs. For an audit to take place, the company must develop financial statements, right? And, who is ultimately responsible for preparing those statements? Company management. To ensure that financial transactions are accounted for correctly and that they are presented properly in the financial statements, managers are responsible for implementing accounting processes and internal controls.

Internal controls are policies and procedures that guide daily business operations and help management to achieve company objectives and goals. More specifically, good internal controls help to ensure:

- **Reliable financial reporting.** Internal controls increase the likelihood that information in financial statements is presented fairly—and in accordance with Generally Accepted Accounting Principles (GAAP).
- **Efficient and effective operations**. Internal controls assist the business to run more efficiently and effectively.
- **Compliance with applicable laws and regulations**. Internal controls help prevent the business or its employees from doing anything improper or illegal.

Management's goal in implementing internal controls is to provide **reasonable assurance**—but not necessarily absolute assurance—that the company is reporting its financial data reliably and fairly, that business operations are efficient and effective, and that the company is in legal compliance.

Internal controls can be divided into two categories: preventative controls and detective controls. Preventative controls, as the name implies, help to prevent errors from occurring, while detective controls detect or find errors after they have occurred. No matter how effective a company's internal controls are, however, managers assume that these controls possess **inherent limitations**. In other words, they will not prevent or detect every error.

Stage 2: Testing Internal Controls

The Sarbanes-Oxley Act of 2002 requires independent auditors to examine and assess the effectiveness of public companies' internal controls. To become knowledgeable about a particular company's internal controls, an auditor might study narratives describing the internal controls written by managers or other employees, flowcharts indicating the roles of different internal controls within business operations, and internal control questionnaires completed by finance and accounting department staff. Then, after learning about the company's internal controls, the auditor tracks a sampling of transactions through the entire accounting cycle to determine if the different internal controls are effective.

Audit sampling is the process of choosing a representative group of transactions, accounts, or other data to study. Auditors have a number of options when it comes to audit sampling, including some that are very systematic and statistical and others that are based more on judgment. Regardless, auditors should use the methods that they feel will best support their audit findings.

30.3.1 Internal Controls

Answer each of the following questions. Use a separate sheet of paper to record your responses.

1. Who is ultimately responsible for preparing a business's financial statements?
2. What are three things that good internal controls help to ensure?
3. What is management's goal in implementing internal controls?
4. Explain two categories of internal control.
5. Why do managers assume that their internal controls possess inherent limitations, even if an auditor determines that the controls are effective?
6. What is audit sampling?
7. Which audit sampling method(s) should an auditor use?

Lesson 30.4

The Audit Process—Conducting Analytical Procedures

Stage 3: Conducting Analytical Procedures

After planning the audit and testing the company's internal controls, the auditor digs into his/her evidence and audit samples to ensure that the data are accurate, complete, and not materially misstated. S/He analyzes a wide range of data, including—but not limited to—the following:

- Sales
- Non-collectible accounts
- Expenses
- Account balances
- Similar prior-period data
- Industry data
- Management's expected results
- The auditor's expected results

Conducting analytical procedures to determine the accuracy and completeness of a business's financial records can take anywhere from a few hours to a few days to even a few months. In some instances, auditors form quick conclusions by calculating different financial ratios (e.g., calculating changes in accounts from one year to the next). In other cases, though, much more research and study is required. Regardless, the goal of performing analytical procedures is to provide support or evidence that the business's financial records meet the following requirements:

- **Completeness—**Do the balances contain all transactions for the period?
- **Existence and occurrence—**Do the transactions really exist?
- **Rights and obligations—**Do the balances (e.g., accounts payable) reflect the business's true liabilities?
- **Valuation and allocation—**Are the transactions recorded in the financial statements according to standard procedures?
- **Presentation and disclosure—**Have the transactions been recorded properly?

Examples of analytical procedures

Now that we understand the basic goal of performing analytical procedures, let's look at a number of different analytical procedures that auditors can use.

Lesson 30.4

The Audit Process—Conducting Analytical Procedures (cont'd)

When evaluating any account:

- Fluctuation analysis
  - Compares prior year account balances to current year account balances and/or with the company's budgeted amount
  - Is used to look for unusual or unexpected balance increases and decreases

When evaluating assets:

- Liquidity activity ratios
  - Accounts Receivable Turnover = Net Sales / Average Gross Receivables
  - Days to Collect Receivables = 365 Days / Accounts Receivable Turnover
  - Inventory Turnover = Cost of Goods Sold / Average Inventory
- Comparison of prior and current years' sales returns and allowances as a percentage of gross sales
- Comparison of prior and current years' bad debt expense as a percentage of gross sales
- Comparison of the gross profit percentage by product line with previous years or by month
  - Is used to find unrecorded or understated revenue
- Auditing of receivables for completeness
  - Involves performing "cut-off" tests that compare shipping documents and related sales invoices and then performing analytical procedures with sales and cost of goods sold

When evaluating liabilities:

- Ability to pay short-term debt
  - Cash Ratio = (Cash + Securities) / Current Liabilities
  - Current Ratio = Current Assets / Current Liabilities
- Accounts-payable turnover ratio
- Ability to meet long-term debt obligation
  - Debt to Equity = Total Liabilities / Total Equity

When evaluating equity:

- Profitability ratios
  - Gross Profit Percent = (Net Sales – Cost of Goods Sold) / Net Sales
  - Profit Margin = Operating Income / Net Sales

Auditors use analytical procedures throughout their audits to identify possible **misstatements** (errors), to reduce the need for detailed testing of data, and to assess **going-concern** issues, which involve determining whether a firm is likely to continue business operations in the future.

Lesson 30.4

The Audit Process—Conducting Analytical Procedures (cont'd)

Fraud

Auditors understand that mistakes happen. That's why minor errors and approximations are expected and accepted—even within business financial records. An employee might enter an expense in the wrong account accidentally, the allowance for bad debt might be over- or under-estimated, or assets might be recorded at their market value rather than their cost. At the same time, though, auditors must exercise professional skepticism. In other words, they look for reasonable assurance that the financial data are accurate and aren't the result of fraud.

What is **fraud**? It's any deception purposely carried out to secure unfair or unlawful gain and typically takes one of two forms—one that involves managers and owners and another that involves non-management employees.

Many large corporations—along with their top business managers and owners—became famous in the early 2000s for their fraudulent activities. Take Enron, for example, which was the seventh largest company in the U.S. prior to its collapse. In the late 1990s and into the 2000s, Enron accumulated hundreds of millions of dollars in debt. To keep analysts and the company's investors from learning about the debt, Enron executives omitted the debt from their financial statements and reported revenue that didn't actually exist. In other words, they committed fraud to make the corporation look much more successful than it really was. But, the Securities and Exchange Commission (SEC) caught on to Enron's act. The company fell apart—and took Arthur Andersen (a highly successful accounting firm that was responsible for auditing Enron's books) with it.

WorldCom is another corporation that fell victim to fraud early in the 21st Century—and office supplies played a big role in the scandal. Ordinarily, office supplies are recorded as operating expenses for the fiscal year in which they were purchased. However, WorldCom executives chose to view the supplies as investments in the company and therefore recorded them over several years. By doing so, they were able to report much, much higher profits than actually existed. Essentially, WorldCom executives approved the development of fraudulent financial statements to cover up the fact that the business was in decline. When the executives' dishonest activities were discovered, WorldCom collapsed, and its stock price fell from over $60 to less than $0.20 per share.

Business owners and managers aren't the only ones to commit fraud. Regular employees are sometimes guilty of "cooking the books," too. If an employee is stealing money, inventory, or equipment from his/her employer, for example, s/he might omit, change, or add certain transactions in company records to conceal her/his crimes.

Unfortunately, this type of fraud isn't all that uncommon. For instance, in February 2013, a longtime employee of the Longview (Washington) YMCA admitted to stealing more than $180,000 from her employer over a five-year timespan. As the YMCA's bookkeeper, the woman had access to the organization's financial records, which she altered to cover up her theft. (See http://tdn.com/news/local/bookkeeper-accused-of-stealing-from-ymca/article_91a53444-811d-11e2-bbc3-001a4bcf887a.html for more information about the fraud.) Here's where internal controls come in: More effective internal controls could probably have prevented the crime from occurring.

Lesson 30.4

The Audit Process—Conducting Analytical Procedures (cont'd)

Following GAAP

Remember that in addition to verifying that a company's financial records are accurate and free from fraud, auditors look for evidence that the company is following Generally Accepted Accounting Principles (GAAP). GAAP, you'll recall, are accounting principles used to prepare, present, and report financial statements—in other words, rules that businesses must follow when recording and sharing their financial data. When auditing a company's financial records, an auditor looks for evidence that:

- The business's accounting records are kept separate from those of the business's owners and managers.
- The business is expected to remain in operation indefinitely.
- A stable currency such as the U.S. dollar is used.
- The financial statements are prepared for a specific accounting period.
- Assets are entered into the records at the prices paid to purchase them.
- Revenues and related expenses are recorded in the same accounting period.
- Revenues are recognized when they are earned or realized.
- The business has fully disclosed everything that people need to know to develop an accurate picture of the business's finances.
- The business only records events that are significant enough to justify the usefulness of the information.
- The financial information that the business provided is beneficial enough to justify preparing it.
- The business uses consistent reporting practices.
- The business has chosen the accounting method that is least likely to overstate its assets or understate its liabilities.

30.4.1 Analytical Procedures

Answer each of the following questions. Use a separate sheet of paper to record your responses.

1. The goal of performing analytical procedures is to provide support or evidence that the business's financial records meet five different requirements. Explain these requirements.
2. What analytical procedures could an auditor use to evaluate a business's assets?
3. What analytical procedures could an auditor use to evaluate a business's liabilities?
4. What analytical procedures could an auditor use to evaluate a business's equity?
5. Conduct online research to identify two businesses (besides Enron and WorldCom) that have been accused of accounting fraud in the last 15 years. What are the names of the companies? What type(s) of accounting fraud did each company supposedly commit? What have been the consequences of the fraud allegations for each company?
6. What is the connection between Generally Accepted Accounting Principles (GAAP) and auditing?

Lesson 30.5 The Audit Process—Issuing the Audit Report

Stage 4: Issuing the Audit Report

The last stage of an audit is to prepare and issue an audit report. Auditors use audit reports to share their conclusions about audited companies' financial statements, while businesses use these same reports to build credibility, attract investors, and obtain loans. Regardless of how these businesses plan to use the reports, audit reports are typically quite similar and include the following components:

- **Title**
- **Addressee**
  - Is usually the company that was audited
- **Introduction**
  - Explains the auditor's and audited company's responsibilities
  - Example: "The financial statements are the responsibility of management and the auditor's responsibility is to express an opinion."
- **Scope**
  - Explains the audit work that was performed
  - Identifies any limitations that the auditor faced
  - Typically states that the audit:
    - Was conducted in accordance to GAAS (Generally Accepted Auditing Standards)
    - Was planned and performed to obtain reasonable assurance
    - Included examining evidence
    - Included assessing significant estimates made by management as well as the accounting principles used
    - Provides a reasonable basis for an opinion
- **Opinion**
  - States the auditor's opinion on the financial statements, including the fair presentation of the financial statements and the audited company's compliance with Generally Accepted Accounting Principles (GAAP)
- **Auditor's name and contact information**
- **Date**

Opinions

Auditors have four options in terms of their opinions: unqualified, qualified, disclaimer, and adverse. While businesses hope to receive an unqualified or, at the very least, a qualified opinion, they strive to avoid disclaimers and adverse opinions as much as possible. Let's look at each opinion more closely.

- **Unqualified opinion**
  - The financial statements are complete and free of misstatements, were prepared using GAAP, and comply with relevant laws and explanations.
  - The auditor could not find any significant problems with the financial statements.

Lesson 30.5 The Audit Process—Issuing the Audit Report (cont'd)

- **Qualified opinion**
  - Although the financial statements generally followed GAAP, there were some exceptions.
  - If the auditor has a qualified opinion, s/he usually adds an explanatory paragraph after the scope to explain the qualification.
- **Disclaimer of opinion**
  - The auditor could not form an opinion on the financial statements.
  - The auditor could not complete the audit due to conflict of interest, scope limitations, doubt about the company's ability to continue operating, etc.
- **Adverse opinion**
  - The financial statements do not adhere to GAAP and therefore do not present the company's financial situation fairly or accurately.
  - The financial statements are materially misstated, incorrect, unreliable, and inaccurate.

How does the auditor determine which opinion is most appropriate? S/He typically asks himself/herself the following questions:

	Were any significant/material issues discovered during the audit?	Did the company follow Generally Accepted Accounting Principles (GAAP)?	Was the audit completed in accordance with Generally Accepted Auditing Standards (GAAS)?
Unqualified opinion	No. No significant/material issues were discovered.	Yes. The company followed GAAP at all times.	Yes. The audit was completed in accordance with GAAS.
Qualified opinion	Yes and no. Somewhat significant/material issues were discovered.	Yes and no. Although the company followed GAAP most of the time, there were minor exceptions.	Yes and no. The auditor was uncertain about a few somewhat significant/material issues and was unable to gather sufficient evidence to clarify the issues. Therefore, the audit was not in complete accordance with GAAS.
Adverse opinion	Yes. Highly significant/material issues were discovered.	No. The company did not follow GAAP.	No. The auditor encountered several highly significant/material issues that s/he could not clarify through audit evidence. Therefore, the audit was not in complete accordance with GAAS.
Disclaimer of opinion	If the auditor concludes—at any time—that s/he cannot complete the audit due to conflict of interest, scope limitations, or doubt about the company's going concern, s/he may withdraw from the audit and issue no opinion.		

Lesson 30.5 The Audit Process—Issuing the Audit Report (cont'd)

Here's a sample audit opinion:

Independent Auditors' Report

To the Board of Directors and Shareholders
Company XYZ
Address

We have audited the accompanying balance sheets of X Company as of December 31, 20X2, 20X1, and 20X0, and the related statements of income, retained earnings, and cash flows for the years then ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of XYZ Company as of December 31, 20X2, 20X1 and 20X0, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

(Signature)

(Date)

SOURCE: Dana S. Beane and Company, P.C. (1999-2013). *Sample audit opinion for business entity.* Retrieved May 1, 2013, from http://www.dsbcpas.com/services/accounting/audit/opinionaudit.html

30.5.1 Audit Reports

Review the audit reports provided, and answer each of the following questions.

1. The following is an auditor's standard report on financial statements covering a single year:

   We have audited the accompanying balance sheet of X Company as of December 31, 20XX, and the related statements of income, retained earnings, and cash flows for the year then ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

   We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

   In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of X Company as of [at] December 31, 20XX, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

   Mark Smith, CPA

   121 Blue Blvd
   Happenings, KY 55555

   January 31, 20YY

   a. What audit report components are missing from this report?

   b. What is the purpose of the first paragraph in this audit report?

   c. What is the purpose of the third paragraph in this audit report?

30.5.1 Audit Reports (cont'd)

2. The following is an auditor's standard report on comparative financial statements:

Independent Auditor's Report

We have audited the accompanying balance sheets of X Company as of December 31, 20X2 and 20X1, and the related statements of income, retained earnings, and cash flows for the years then ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above, present fairly, in all material respects, the financial position of X Company as of [at] December 31, 20X2 and 20X1, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Mark Smith, CPA

121 Blue Blvd
Happenings, KY 55555

a. What audit report components are missing from this report?

b. What is the purpose of the second paragraph in this audit report?

30.5.1 Audit Reports (cont'd)

3. Fill in the missing information.

	Were any significant/material issues discovered during the audit?	Did the company follow Generally Accepted Accounting Principles (GAAP)?	Was the audit completed in accordance with Generally Accepted Auditing Standards (GAAS)?
Unqualified opinion	No. No significant/material issues were discovered.	a.	Yes. The audit was completed in accordance with GAAS.
Qualified opinion	Yes and no. Somewhat significant/material issues were discovered.	Yes and no. Although the company followed GAAP most of the time, there were minor exceptions.	b.
Adverse opinion	c.	No. The company did not follow GAAP.	No. The auditor encountered several highly significant/material issues that s/he could not clarify through audit evidence. Therefore, the audit was not in complete accordance with GAAS.
Disclaimer of opinion	d.		

Lesson 30.6 Putting Auditing to the Test

Why do companies hire independent auditors to review their financial records? As we mentioned before, the SEC requires that all publicly-owned companies in the U.S. be audited to ensure that the businesses' financial statements are reliable, accurate, and complete. Managers, government agencies, investors, and even creditors depend on it. These and other users of financial data rely on independent auditors to act with honor and integrity in protecting the public interest. Plus, more so than ever, audits hold everyone—including managers, employees, and other stakeholders who may have a vested interest in a company—accountable for their actions.

Knowing all this, let's walk through an audit from start to finish:

The ABC Company requested 4As Accounting to audit its financial statements for the year ending December 31, 20YY. In the first stage of the audit, 4As met with executives from the ABC Company and became familiar with ABC's business practices, products and services, and previous year's financial statements. 4As also met with ABC's audit team (created internally by ABC) to discuss some of management's assertions on the account balances. Finally, 4As identified the sampling of financial data that it would use to evaluate ABC's records.

In the second stage of the financial statement audit, 4As examined the company's internal controls. The auditors followed a sampling of transactions through the entire accounting cycle to determine if ABC's internal controls are affective.

Then, in the next stage, 4As compared recorded financial information with ABC management's anticipated results for the year. In addition, 4As contrasted the current year's sales to prior years' sales volumes. Auditors also completed detailed analyses of transactions, confirmed that certain transactions occurred, and evaluated account balances. Tests included examining invoices to support additions to the fixed asset accounts during the year; comparing the current expenses with last year's expenses and investigating unusual fluctuations; reviewing the aged trial balance for significant past-due accounts; and performing sales cut-off tests to obtain assurance that sales transactions were recorded in the proper period. 4As also audited ABC investments to ensure that the investments were properly valued at the balance sheet date and traced investment transactions back to the minutes of ABC Board of Directors meetings to determine that the investments were properly authorized.

At this point in the audit, 4As had enough audit evidence to form an opinion for the ABC Company. 4As concluded, based on the audit evidence that it had collected, that the financial statements were fairly stated and were in accordance with GAAP. So, 4As developed an audit report offering an unqualified opinion.

Skill Standards

Academic:

AB 2 Read and interpret workplace documents

AB 6 Demonstrate the ability to write clearly and concisely using industry specific terminology

Accounting:

OE 4 Describe the users and uses of financial information

Financial Services:

OF 4 Understand the importance of audits and regulations

Scenario

When your best friend Jaden started college four years ago, his wealthy uncle promised to give him $5,000 to invest in stocks if he finished college and earned a degree. Now, fast forward to today—Jaden's graduation day. After receiving his diploma, his uncle gave him a check for the $5,000, along with an investment tip: Put your money in Microsoft. Since you know a lot about accounting and finance, Jaden contacted you for help.

Tasks

A. While reviewing Microsoft's investor relations web site, Jaden ran across the company's 2011 auditor's report, prepared by Deloitte and Touche LLP. He's pretty sure that the report contains valuable information that he should know before investing in Microsoft, but he needs your help in making sense of it. Read the 2011 auditor's report for the Microsoft Corporation on the next page.

Tasks (cont'd)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Microsoft Corporation:

We have audited the accompanying consolidated balance sheets of Microsoft Corporation and subsidiaries (the "Company") as of June 30, 2011 and 2010, and the related consolidated statements of income, cash flows, and stockholders' equity for each of the three years in the period ended June 30, 2011. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Microsoft Corporation and subsidiaries as of June 30, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 2011, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of June 30, 2011, based on the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated July 28, 2011, expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP
Seattle, Washington
July 28, 2011

B. Compose a letter or e-mail to Jaden in which you answer the following questions:
   a. What is the purpose of this auditor's report?
   b. Who is the addressee?
   c. Who is responsible for preparing Microsoft's financial statements?
   d. What are the auditor's responsibilities during an audit?
   e. What type of opinion has the auditor issued for Microsoft?
   f. What is the auditor's opinion regarding Microsoft's internal controls?

SOURCE: Deloitte & Touche LLP. (2011, July 28). (*Auditor's report: Report of independent registered public accounting firm.*) Retrieved May 15, 2013, from http://www.microsoft.com/investor/reports/ar11/financial_review/auditors_report.html

Evaluation Criteria

You must score a 3 or 4 on the scenario in order to pass this assessment.

Scoring Rubric

4

- Thoroughly describes the purpose of the auditor's report
- Clearly identifies the addressee of the auditor's report
- Explains the auditor's and company management's responsibilities during an audit correctly
- Thoroughly explains the auditor's opinions regarding Microsoft's financial statements and internal controls

3

- Adequately describes the purpose of the auditor's report
- Identifies the addressee of the auditor's report in a reasonably clear manner
- Explains most or all of the auditor's and company management's responsibilities during an audit correctly
- Adequately explains the auditor's opinions regarding Microsoft's financial statements and internal controls

2

- Provides limited explanation of the purpose of the auditor's report
- Provides limited explanation of the addressee of the auditor's report
- Explains some of the auditor's and company management's responsibilities during an audit correctly
- Provides limited explanation of the auditor's opinions regarding Microsoft's financial statements and internal controls

1

- Provides little or no explanation of the purpose of the auditor's report
- Provides little or no explanation of the addressee of the auditor's report
- Explains the auditor's and company management's responsibilities during an audit incorrectly
- Provides little or no explanation of the auditor's opinions regarding Microsoft's financial statements and internal controls