

# Financial & Managerial Accounting

12e

WARREN • REEVE • DUCHAC



Equity Success Liabilities

Assets

PP&E 2.43 97.3 31.7% Cash 2.32 IFRS 36 months \$270,000 17.5%

\$18,000 Depreciation FIFO Accounts Receivable 2.2% Sales Business 2.2% \$270,000 17.5%

Activate Learning Notes Payable Expense

WARREN REEVE DUCHAC

# **Financial and Managerial Accounting**

**12e**

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Professor Emeritus of Accounting  
University of Georgia, Athens

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Professor Emeritus of Accounting  
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**Financial and Managerial Accounting, 12e**

**Carl S. Warren**  
**James M. Reeve**  
**Jonathan E. Duchac**

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## Carl S. Warren

Dr. Carl S. Warren is Professor Emeritus of Accounting at the University of Georgia, Athens. Dr. Warren has taught classes at the University of Georgia, University of Iowa, Michigan State University, and University of Chicago. Professor Warren focused his teaching efforts on principles of accounting and auditing. He received his Ph.D. from Michigan State University and his B.B.A. and M.A. from the University of Iowa. During his career, Dr. Warren published numerous articles in professional journals, including *The Accounting Review*, *Journal of Accounting Research*, *Journal of Accountancy*, *The CPA Journal*, and *Auditing: A Journal of Practice & Theory*. Dr. Warren has served on numerous committees of the American Accounting Association, the American Institute of Certified Public Accountants, and the Institute of Internal Auditors. He has also consulted with numerous companies and public accounting firms. Professor Warren is an avid handball player and has played in the World Handball Championships in Portland, Oregon, and Dublin, Ireland. He enjoys backpacking and recently took an eleven-day, ten-night trip in the Thorofare area of Yellowstone National Park. He has rafted the Grand Canyon and backpacked rim-to-rim. Professor Warren also enjoys fly fishing, skiing, golfing, and motorcycling.

Charles J. Garvey III / Garvey Photography



## James M. Reeve

Dr. James M. Reeve is Professor Emeritus of Accounting and Information Management at the University of Tennessee. Professor Reeve taught on the accounting faculty for 25 years, after graduating with his Ph.D. from Oklahoma State University. His teaching efforts focused on undergraduate accounting principles and graduate education in the Master of Accountancy and Senior Executive MBA programs. Beyond this, Professor Reeve is also very active in the Supply Chain Certification program, which is a major executive education and research effort of the College. His research interests are varied and include work in managerial accounting, supply chain management, lean manufacturing, and information management. He has published over 40 articles in academic and professional journals, including the *Journal of Cost Management*, *Journal of Management Accounting Research*, *Accounting Review*, *Management Accounting Quarterly*, *Supply Chain Management Review*, and *Accounting Horizons*. He has consulted or provided training around the world for a wide variety of organizations, including Boeing, Procter & Gamble, Norfolk Southern, Hershey Foods, Coca-Cola, and Sony. When not writing books, Professor Reeve plays golf and is involved in faith-based activities.

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## Jonathan Duchac

Dr. Jonathan Duchac is the Merrill Lynch and Co. Professor of Accounting and Director of International Programs at Wake Forest University. He holds a joint appointment at the Vienna University of Business and Economics in Vienna, Austria. Dr. Duchac currently teaches introductory and advanced courses in financial accounting and has received a number of awards during his career, including the Wake Forest University Outstanding Graduate Professor Award, the T.B. Rose Award for Instructional Innovation, and the University of Georgia Outstanding Teaching Assistant Award. In addition to his teaching responsibilities, Dr. Duchac has served as Accounting Advisor to Merrill Lynch Equity Research, where he worked with research analysts in reviewing and evaluating the financial reporting practices of public companies. He has testified before the U.S. House of Representatives, the Financial Accounting Standards Board, and the Securities and Exchange Commission and has worked with a number of major public companies on financial reporting and accounting policy issues. In addition to his professional interests, Dr. Duchac serves on the Board of Directors of The Special Children's School of Winston-Salem, a private, nonprofit developmental day school serving children with special needs. Dr. Duchac is an avid long-distance runner, mountain biker, and snow skier. His recent events include the Grandfather Mountain Marathon, the Black Mountain Marathon, the Shut-In Ridge Trail run, and NO MAAM (Nocturnal Overnight Mountain Bike Assault on Mount Mitchell).

# A History of Success

## Leading the Way by Activating Learning

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Generations of business students have learned accounting from the Warren, Reeve, and Duchac textbook. This tradition of success goes back twenty-five editions. *Financial and Managerial Accounting* is successful because it continues to innovate and respond to changing student learning styles while introducing students to accounting through a variety of learning models and multimedia.

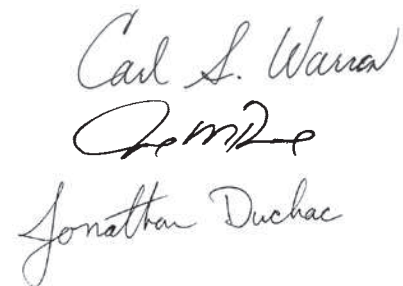
This tradition of innovation continues today. Countless conversations with accounting instructors and the authors' own experiences in the classroom have revealed how much the teaching and learning environment has changed. Today's internet generation has grown up on the computer. The online and digital universe is both a natural learning environment for students and a learning medium they expect beyond the textbook.

In response to changes in student learning, the authors have ensured their text is an integrated print/digital learning experience for students. In crafting the philosophy for this edition, the authors extended the time-tested integrated learning experience of their text to the technology in interactive ways.

For this 12th edition, new online Activation Exercises were created by the authors. These foundational learning activities are the perfect introduction to the major concepts in each chapter. *By using the online environment to demonstrate concepts through activities, the authors have gone beyond what is possible in a printed text.* Students who complete these activities will come to class with a deeper understanding of key terminology, economic events, the accounting system, and the impact on the financial statements. With a better foundational knowledge of accounting concepts, class sessions can be utilized to help students delve even further in their understanding.

These activities are a result of much collaboration with many accounting instructors over the past two years. They reflect the suggestions and feedback we receive from instructors and students on an ongoing basis. We are very happy with the results and think you will be pleased with the new activities as well.

The original author of *Accounting* (the two-semester version of this book), James McKinsey, could not have imagined the success and influence this text has enjoyed over the past 25 editions—or that his original vision would lead the market into the online world through subsequent authors' expertise. As the current authors, we appreciate the responsibility of protecting and enhancing this vision, while continuing to refine it to meet the changing needs of students and instructors. Always in touch with a tradition of excellence, but never satisfied with yesterday's success, this edition enthusiastically embraces a changing environment and continues to proudly lead the way in activating student learning and success. We sincerely thank our many colleagues who have helped to make it happen.



Carl S. Warren  
James O. McKinsey  
Jonathan Duchac

“The teaching of accounting is no longer designed to train professional accountants only. With the growing complexity of business and the constantly increasing difficulty of the problems of management, it has become essential that everyone who aspires to a position of responsibility should have a knowledge of the fundamental principles of accounting.”

—James O. McKinsey, Author, first edition, 1929



# New to the 12th Edition

NEW


## Online Homework Solutions and Student Study Tools

Given the prevalence and expansion of student learning through the use of online tools, the Warren, Reeve, and Duchac team has dedicated significant focus to creating new and valuable homework and teaching solutions for the 12th edition. Designed to work with the typical instructor's workflow in mind, the following online homework solutions offer a number of new and innovative choices for both instructors and students using Cengage Learning's technology platforms: Animated Activities, Activation Exercises, Blueprint Problems, and Blueprint Connections.

## Animated Activities

Many instructors struggle to expose students to concepts before class begins. Students who come to class more prepared are more likely to succeed, and **Animated Activities** are the perfect pre-lecture assignment! Animated Activities use illustrations to visually explain and guide students through selected core topics in introductory financial and managerial accounting. Each activity uses a realistic company example to illustrate how the concepts relate to the everyday activities of a business. These activities offer excellent resources for students prior to coming to lecture and will especially appeal to visual learners.

	February 26, 2016	February 27, 2015
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 1,181,587	\$ 1,096,100
Short-term investment securities	406,608	431,476
Merchandise inventories	1,958,907	1,759,703
Other current assets	315,736	276,066
Total current assets	<u>4,073,838</u>	<u>3,563,345</u>
Long-term investment securities	126,446	132,860
Property and equipment, net	1,116,297	1,119,292
Other assets	334,612	336,633
Total assets	<u>\$ 5,646,193</u>	<u>\$ 5,152,130</u>



Accounting concepts are brought to life through the use of engaging visuals!

Topics covered include Introduction to the Financial Statements, Transaction Analysis, Adjusting Entries, Receivables, Bank Reconciliations, Inventory, Depreciation, Bonds, Stockholders' Equity, Cost of Goods Sold Model, Job Order Costing, Activity-Based Costing, Mixed Costs, Budgeting, *and more*. Coverage and terminology is consistent with the textbook presentation.

Animated Activities are in CengageNOW as assignable homework items and as assets that populate the Study Tools/Personalized Study Plan. The assignable activities include multiple-choice questions that quiz students on the larger concepts addressed in the animation.

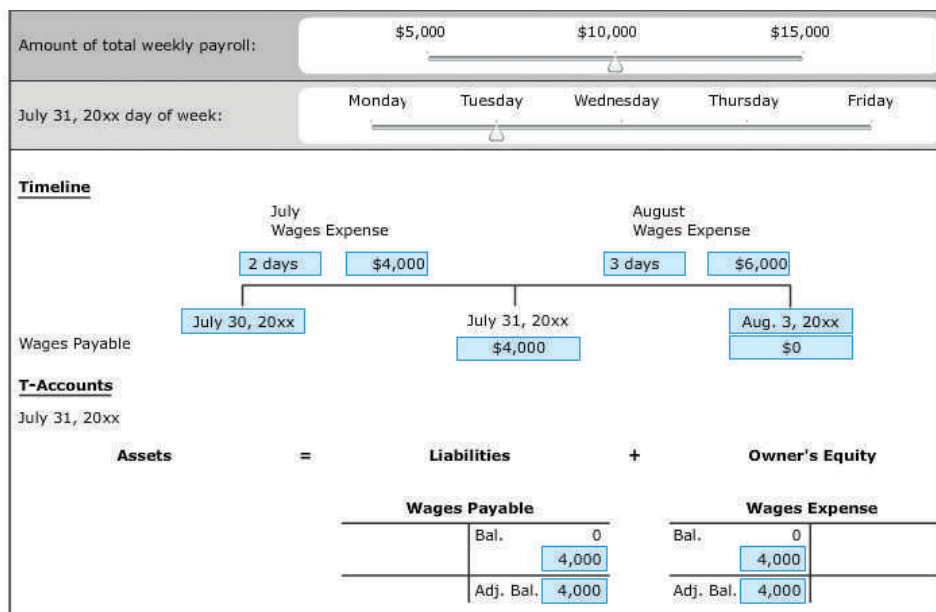


## Activation Exercises

For most students, a Principles of Accounting course is their first exposure to both *business transactions* and the *accounting system*. While these concepts are already difficult to master individually, their combination and interdependency in the introductory accounting course causes students to struggle. Students often resort to memorization as a way to pass the course, but such surface learning does little to develop the critical thinking skills and deep understanding that are necessary for success in future business courses.

To overcome these challenges, the authors created the **Activation Exercises** to providing a learning system that focuses on developing a better understanding of (1) key terms and definitions, (2) the economics of business transactions, (3) how these transactions are recorded in the accounting system, and where relevant, (4) how these transactions are ultimately reflected in the financial statements.

The Activation Exercise structure builds the critical thinking skills that are necessary for students to succeed in both introductory accounting and future accounting courses. Reviewers have enthusiastically praised the authors' new online activities and indicated that they would be both ideal pre-class activities and after-class assignments. The Activation Exercises are applied to the following financial chapters in this text and available within CengageNOW: Chapters 1–4, 5, 6, and 8–12.

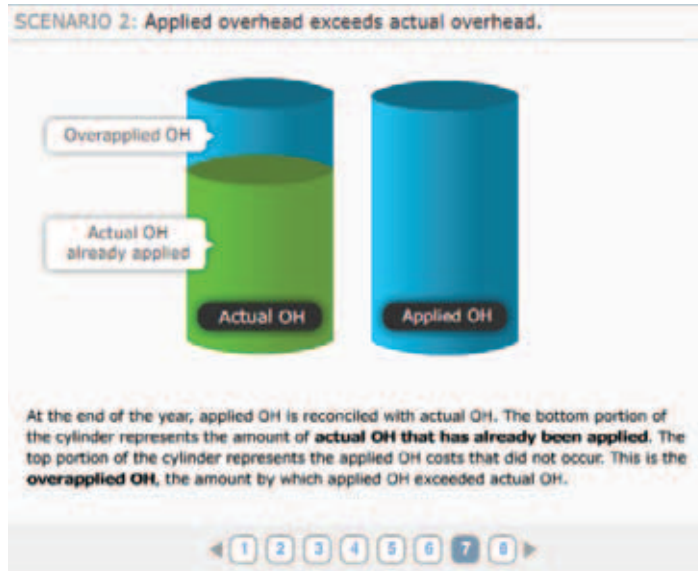


## Blueprint Problems

**Blueprint Problems** provide an opportunity to *teach* more than an opportunity to assess the student's knowledge. Blueprint Problems cover the primary learning objectives and help students understand the fundamental accounting concepts and their associated building blocks, and not just memorize the formulas or journal entries



required for a single concept. This means that a Blueprint Problem can include basic concepts from previous chapters, such as account types, the impact on the accounting equation, and other fundamental aspects of the financial statements.



Where applicable, selected Blueprint Problems include dynamic visual elements that help students with difficult concepts.

Blueprint Problems cover most major topics and concepts in financial and managerial accounting and include rich feedback to help students when checking their work. In addition, these problems provide detailed explanations to reinforce the correct solutions, providing students with an excellent learning resource. Coverage and terminology used is consistent with the textbook examples and homework problems. Blueprint Problems are available in CengageNOW and Aplia.

## Blueprint Connections

**Blueprint Connections** are shorter extensions of the Blueprint Problems, created based on market demand for briefer but more focused homework assignments that build upon concepts covered and introduced within the Blueprint Problems.

Cash received: \$0      \$24,750      \$27,500      \$30,000

Scenario A      Scenario B      Scenario C      Scenario D

Review and analyze the scenarios to respond to the following questions:

- Under scenario A, how does the disposal of the machine affect the balance sheet?
- What asset is affected in scenario B that is not affected in scenario A?
- Under which scenario was no gain or loss recorded?   
Why was there no gain or loss?
- Which scenario will cause equity to increase?   
Why will equity increase?

**Scenario C: Gain/loss calculation:**

Original cost, January 1, 2007	\$50,000
Less: Accumulated depreciation (as of July 1, 2009)	22,500
Book value, July 1, 2009	\$27,500
Cash received	27,500
Gain/loss on disposal of asset	\$0

**Asset disposal entry on July 1, 2009:**

Cash	24,750	
Accumulated Depreciation—Machine	22,500	
Machine		50,000

Blueprint Connections extend beyond the foundations covered in the Blueprint Problems. In this example, students are asked to respond to different scenarios related to the disposal of a fixed asset.

Blueprint Connections offer a natural sequence immediately following the completion of a corresponding Blueprint Problem, or completed independently. Blueprint Connections share a similar structure and level of feedback and explanation with Blueprint Problems. Coverage and terminology used is consistent with the textbook examples and homework problems. Blueprint Connections are available in CengageNOW.

## Textbook Changes in the 12th Edition

Even with the shift of student learning online, we recognize that textbooks continue to play an invaluable role in the teaching and learning environments. Continuing our focus from previous editions, we collaborated with accounting instructors in an effort to improve the textbook presentation and make sure the printed textbook also meets students' changing needs. Our research revealed to us the need to remain current in the areas of emerging topics/trends and to continue to look for ways to make the book more accessible to students. The results of this collaboration with hundreds of accounting instructors are reflected in the following significant improvements made to the 12th edition.

As with every new edition, the authors have ensured that new real-world companies have been added to the content, existing real world data has been updated, and names and values of end-of-chapter material have been changed. New highlighted chapter opener companies include Twitter (Chapter 1); Apple (Chapter 2); Google, along with updated bylaws and an activity using Google (Chapter 11); and Dick's Sporting Goods (Chapter 12).

"Accounting for Merchandising Businesses" (Chapter 5) was restructured from the prior edition. The discussion of financial statements, including the multiple-step income statement, has been moved to the end of the chapter. The chapter now begins with a brief description of the nature of merchandising operations, followed by the accounting for purchase and sales transactions. The perpetual inventory system is used throughout the chapter to illustrate merchandise transactions. The periodic inventory system is discussed in the end-of-chapter appendix. The homework has been designed so that the instructor can assign the perpetual, periodic, or both systems.

"Inventories" (Chapter 6) has been revised to include coverage of the weighted average inventory cost flow method. The weighted average cost method is now described and illustrated for the perpetual and periodic inventory systems. In doing so, the chapter illustrations were revised and amounts changed to facilitate comparisons between the perpetual and periodic systems, as well as to avoid rounding issues. New homework exercises and problems were added so that instructors can cover the first-in, first-out (FIFO), last-in, first-out (LIFO), and weighted average cost methods using either perpetual or periodic inventory systems. The weighted average cost method for the perpetual inventory system was added because of the increased use of accounting software packages that use it with point-of-sale systems. In addition, many instructors suggested increasing coverage of the weighted average cost method.

Working Paper problems (for series A & B) remaining from prior editions in Chapters 2, 4, and 17 have been moved to the product companion site, and the Chapter 17 problems have been altered within the text to stand alone without the Working Papers requirement.

# Hallmark Features

*Financial and Managerial Accounting, 12e*, is unparalleled in pedagogical innovation. Our constant dialogue with accounting faculty continues to affect how we refine and improve the text to meet the needs of today's students. Our goal is to provide a logical framework and pedagogical system that caters to how students of today study and learn.

**Clear Objectives and Key Learning Outcomes** To guide students, the authors provide clear chapter objectives and important learning outcomes. All the chapter materials relate back to these key points and outcomes, which keeps students focused on the most important topics and concepts in order to succeed in the course.

**Example Exercises** Example Exercises reinforce concepts and procedures in a bold, new way. Like a teacher in the classroom, students follow the authors' example to see how to complete accounting applications as they are presented in the text. This feature also provides a list of Practice Exercises that parallel the Example Exercises so students get the practice they need. In addition, the Practice Exercises include references to the chapter Example Exercises so that students can easily cross-reference when completing homework.

See the example of the application being presented.

Follow along as the authors work through the Example Exercise.

**Example Exercise 2-2 Journal Entry for Asset Purchase**

OBJ  
2

Prepare a journal entry for the purchase of a truck on June 3 for \$42,500, paying \$8,500 cash and the remainder on account.

Try these corresponding end-of-chapter exercises for practice!

Follow My Example 2-2

June 3	Truck.....	42,500
	Cash.....	8,500
	Accounts Payable.....	34,000

Practice Exercises: **PE 2-2A, PE 2-2B**

**"At a Glance" Chapter Summary** Students prepare for homework and tests by referring to our end-of-chapter grid, which outlines learning objectives, linking concept coverage to specific examples. Using At a Glance, students can review the chapter's

At a Glance 3

OBJ  
1

Describe the nature of the adjusting process.

**Key Points** The accrual basis of accounting requires that revenues are reported in the period in which they are earned and expenses are matched with the revenues they generate. The updating of accounts at the end of the accounting period is called the adjusting process. Each adjusting entry affects an income statement and balance sheet account. The four types of accounts requiring adjusting entries are prepaid expenses, unearned revenues, accrued revenues, and accrued expenses.

Learning Outcomes	Example Exercises	Practice Exercises
• Explain why accrual accounting requires adjusting entries.	EE3-1	PE3-1A, 3-1B
• List accounts that do and do NOT require adjusting entries at the end of the accounting period.	EE3-2	PE3-2A, 3-2B
• Give an example of a prepaid expense, unearned revenue, accrued revenue, and accrued expense.		

# Hallmark Features

learning objectives and key learning outcomes. In addition, all the *Example Exercises* and *Practice Exercises* have been indexed so that each learning objective and key outcomes can be viewed. At the end of each chapter, the “At a Glance” summary grid ties everything together and helps students stay on track.



**Real-World Chapter Openers** Building on the strengths of past editions, these openers continue to relate the accounting and business concepts in the chapter to students' lives. These openers employ examples of real companies and provide invaluable insight into real practice. Several of the openers created especially for this edition focus on interesting companies such as Twitter, Rhapsody, Razor, E.W. Scripps Company, a diverse media concern, and Facebook.

**Continuing Case Study** Students follow a fictitious company, **NetSolutions**, throughout Chapters 1–5, which demonstrates a variety of transactions. The continuity of using the same company facilitates student learning especially for Chapters 1–4, which cover the accounting cycle. Also, using the same company allows students to follow the transition of the company from a service business in Chapters 1–4 to a merchandising business in Chapter 5.

**Illustrative Problem and Solution** A solved problem models one or more of the chapter's assignment problems so that students can apply the modeled procedures to end-of-chapter materials.

**Integrity, Objectivity, and Ethics in Business** In each chapter, these cases help students develop their ethical compass. Often coupled with related end-of-chapter activities, these cases can be discussed in class or students can consider the cases as they read the chapter. Both the section and related end-of-chapter materials are indicated with a unique icon for a consistent presentation.

## Integrity, Objectivity, and Ethics in Business



### ON BEING GREEN

Process manufacturing often involves significant energy and material resources, which can be harmful to the environment. Thus, many process manufacturing companies, such as chemical, electronic, and metal processors, must address environmental issues. Companies, such as **DuPont**, **Intel**, **Apple**, and **Alcoa**, are at the forefront of providing environmental solutions for their products and processes.

For example, Apple provides free recycling programs for Macs®, iPhones®, and iPads®. Apple recovers over 90% by weight of the original product in reusable components, glass, and plastic. You can even receive a free gift card for voluntarily recycling an older Apple product.

Source: Apple Web site.

**Business Connection and Comprehensive Real-World Notes** Students get a close-up look at how accounting operates in the marketplace through a variety of *Business Connection* boxed features.

**Business**



**Connection**

### **AVATAR: THE HIGHEST GROSSING MOVIE OF ALL TIME (BUT NOT THE MOST PROFITABLE)**

Prior to the release of the blockbuster *Avatar* in December 2009, many were skeptical if the movie's huge \$500 million investment would pay off. After all, just to break even the movie would have to perform as one of the top 50 movies of all time. To provide a return that was double the investment, the movie would have to crack the top 10. Many thought this was a tall order, even though James Cameron, the force behind this movie, already had the number one grossing movie of all time: *Titanic*, at \$1.8

billion in worldwide box office revenues. Could he do it again? That was the question.

So, how did the film do? Only eight weeks after its release, *Avatar* had become the number one grossing film of all time, with over \$2.5 billion in worldwide box office revenue. However, even though *Avatar* made the most money, was it the most profitable when taking account of the total investment? **CNBC** analyzed movies by their return on investment (total box office receipts divided by the total movie cost) and found that *Avatar* wasn't even in the top 15 movies by this measure. Number one on this list was *My Big Fat Greek Wedding* with a 6,150% return. To make this list, it helped to have a small denominator.

Sources: Michael Cieply, "A Movie's Budget Pops from the Screen," *New York Times*, November 8, 2009; "Bulk of Avatar Profit Still to Come," *The Age*, February 3, 2010. Daniel Bukszpan, "15 Most Profitable Movies of All Time," *cnbc.com*, September 10, 2010.

## **International Financial Reporting Standards (IFRS)**

IFRS is on the minds of many accounting educators of today. While the future is still unclear, our research indicates a growing need to provide more basic awareness of these standards within the text. We have continued to incorporate some elements of IFRS throughout the text as appropriate to provide this level of awareness, being careful not to encroach upon the core GAAP principles that remain the hallmark focus of the book. These elements include icons that have been placed throughout the financial chapters which point to specific IFRS-related content, outlined with more detail in Appendix C. This table outlines the IFRS impact on the accounting concept.





# Hallmark Features

**International Connection** *International Connection* features highlight IFRS topics from a real-world perspective and appear in Chapters 1, 4, 6, 9, 11, and 14.

IFRS

International

→

Connection

**IFRS FOR STATEMENT OF CASH FLOWS**

The statement of cash flows is required under International Financial Reporting Standards (IFRS). The statement of cash flows under IFRS is similar to that reported under U.S. GAAP in that the statement has separate sections for operating, investing, and financing activities. Like U.S. GAAP, IFRS also allow the use of either the indirect or direct method of reporting cash flows from operating activities. IFRS differ from U.S. GAAP in some minor areas, including:

- Interest paid can be reported as either an operating or a financing activity, while interest received

\* IFRS are further discussed and illustrated on pages 716–723 and in Appendix D.

can be reported as either an operating or an investing activity. In contrast, U.S. GAAP reports interest paid or received as an operating activity.

- Dividends paid can be reported as either an operating or a financing activity, while dividends received can be reported as either an operating or an investing activity. In contrast, U.S. GAAP reports dividends paid as a financing activity and dividends received as an operating activity.
- Cash flows to pay taxes are reported as a separate line in the operating activities, in contrast to U.S. GAAP, which does not require a separate line disclosure.

## Mornin’ Joe International

Our authors have prepared statements for Mornin’ Joe under IFRS guidelines as a basis for comparison with U.S.-prepared statements. This allows students to see how financial reporting differs under IFRS.

## The Accounting Equation

We maintain the recently revamped format in Chapter 2 for analyzing transactions. This format includes the following elements: (1) transaction description, (2) analysis, (3) journal entry, and (4) accounting equation impact. This will help students understand that a transaction ultimately affects the accounting equation—*Assets = Liabilities + Owner’s Equity*.

**Transaction G** Nov. 30 Chris Clark determined that the cost of supplies on hand at November 30 was \$550.

**Analysis**

NetSolutions purchased \$1,350 of supplies on November 10. Thus, \$800 (\$1,350 – \$550) of supplies must have been used during November. This transaction is recorded in the journal as an \$800 increase (debit) to Supplies Expense and an \$800 decrease (credit) to Supplies.

**Journal Entry**

	Nov.	30	Supplies Expense		800		
			Supplies		800		
			Supplies used during November.				

**Accounting Equation Impact**

<b>Assets</b>	=	<b>Liabilities</b>	+	<b>Stockholders’ Equity (Expense)</b>
<b>Supplies</b>				<b>Supplies Expense</b>
Nov. 30 800				Nov. 30 800



## Activity-Based Costing

Pulling from our existing appendix coverage, we have placed in Chapter 24 a thorough discussion of activity-based costing (ABC). ABC is framed in the context of product pricing and profit analysis.

A new uniform method for performing differential analysis is employed for all the differential analysis illustrations and end-of-chapter materials. This approach provides the student a consistent solution grid for solving differential analyses.

## Financial Analysis and Interpretation

We continue to highlight Financial Analysis and Interpretation learning objectives in the financial chapters and, where appropriate, link to real-world situations. FAI encourages students to go deeper into the material to analyze accounting information and improve critical thinking skills.



## Test Bank

Last edition's test bank was completely revamped with the assistance of more than fifteen distinguished professors. We've continued to refresh many of the questions as well as verify for accuracy. The Test Bank delivers more than 3,500 questions overall. Additional tagging has been implemented for increased options in performance outcomes measurement.

## Excel Templates

Our enhanced Excel templates allow professors to turn off the "instant feedback" asterisks. Based on the file provided to them, students can complete the spreadsheet and email the file to their instructor. The instructor can then input a code that will automatically grade the student's work. These Excel templates complement end-of-chapter problems. They are located on the companion website at [www.cengagebrain.com](http://www.cengagebrain.com) and also within CengageNOW.

**Market Leading End-of-Chapter Material** Students need to practice accounting so that they can understand and use it. To give students the greatest possible advantage in the real world, *Financial and Managerial Accounting, 12e*, goes beyond presenting theory and procedure with comprehensive, time-tested, end-of-chapter material.

# Online Solutions

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## CengageNow

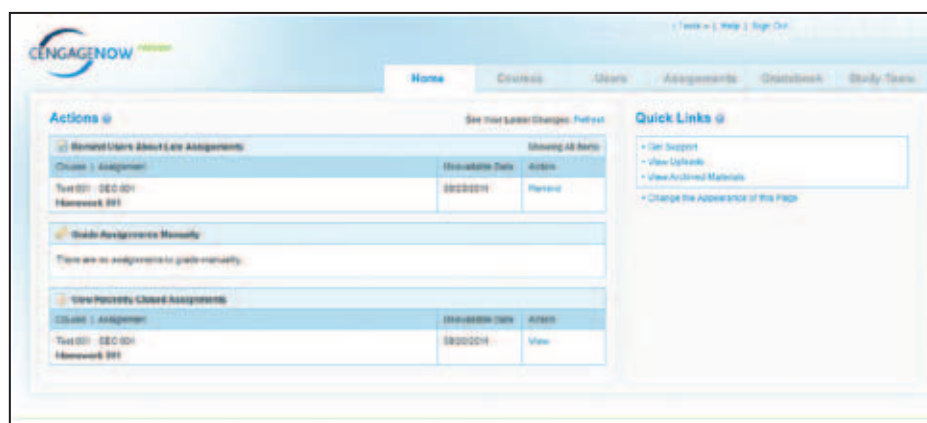


**CengageNOW** is a powerful course management and online homework tool that provides robust instructor control and customization to optimize the student learning experience and meet desired outcomes. CengageNOW offers:

- Auto-graded homework (static and algorithmic varieties), test bank, Personalized Study Plan, and eBook are all in one resource.
- Easy-to-use course management options offer flexibility and continuity from one semester to another.
- Different levels of feedback and engaging student resources guide students through material and solidify learning.
- The most robust and flexible assignment options in the industry.
- “Smart Entry” helps eliminate common data entry errors and prevents students from guessing their way through the homework.
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JOURNAL				
Date	Description	Post. Ref.	Debit	Credit
Apr 3	Raw and In Process Inventory			
	Raw Materials			
	Rent Expense			
	Rent Revenue			
	Repairs and Maintenance Expense			
	Repairs Expense			
	Restructuring Charge			
	Retained Earnings			
	Retirement Savings Deductions Payable			

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# For the Student

Students come to accounting with a variety of learning needs. *Financial and Managerial Accounting, 12e*, offers a broad range of supplements in both printed form and easy-to-use technology. We continue to refine our entire supplement package around the comments instructors have provided about their courses and teaching needs.

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**Companion Web Site: [www.cengagebrain.com](http://www.cengagebrain.com)** At the home page's search area, type in your book's ISBN (the number located on the back of your text cover) or search by title. Click on "Access" under Related Products and Free Materials. This site provides students with a wealth of introductory accounting resources, including quizzing and supplement downloads and access to the Enhanced Excel® Templates.

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Visit the companion Web site at  
[www.cengagebrain.com](http://www.cengagebrain.com).

**Appendix E: Special Journals and Subsidiary  
Ledgers (online)**

Visit the companion Web site at  
[www.cengagebrain.com](http://www.cengagebrain.com).

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**Company Index I-18**



ANNETTE SHAFF/SHUTTERSTOCK

# Introduction to Accounting and Business

## Twitter

**W**hen two teams pair up for a game of football, there is often a lot of noise. The band plays, the fans cheer, and fireworks light up the scoreboard. Obviously, the fans are committed and care about the outcome of the game. Just like fans at a football game, the owners of a business want their business to “win” against their competitors in the marketplace. While having your football team win can be a source of pride, winning in the marketplace goes beyond pride and has many tangible benefits. Companies that are winners are better able to serve customers, provide good jobs for employees, and make money for their owners.

**Twitter** is one of the most visible companies on the Internet. It provides a real-time information network where members can post messages, called Tweets, of up to 140 characters for free. Millions post Tweets every day throughout the world.

Do you think Twitter is a successful company? Does it make money? How would you know? Accounting helps to answer these questions.

This textbook introduces you to accounting, the language of business. Chapter 1 begins by discussing what a business is, how it operates, and the role that accounting plays.



## Learning Objectives

After studying this chapter, you should be able to:

Example Exercises

OBJ  
1

Describe the nature of a business and the role of accounting and ethics in business.

**Nature of Business and Accounting**

Types of Businesses

Role of Accounting in Business

Role of Ethics in Accounting and Business

Opportunities for Accountants

OBJ  
2

Summarize the development of accounting principles and relate them to practice.

**Generally Accepted Accounting Principles**

Business Entity Concept

Cost Concept

EE 1-1

OBJ  
3

State the accounting equation and define each element of the equation.

**The Accounting Equation**

EE 1-2

OBJ  
4

Describe and illustrate how business transactions can be recorded in terms of the resulting change in the elements of the accounting equation.

**Business Transactions and the Accounting Equation**

EE 1-3

OBJ  
5

Describe the financial statements of a corporation and explain how they interrelate.

**Financial Statements**

Income Statement

EE 1-4

Retained Earnings Statement

EE 1-5

Balance Sheet

EE 1-6

Statement of Cash Flows

EE 1-7

Interrelationships Among Financial Statements

OBJ  
6

Describe and illustrate the use of the ratio of liabilities to stockholders' equity in evaluating a company's financial condition.

**Financial Analysis and Interpretation: Ratio of Liabilities to Stockholders' Equity**

EE 1-8

At a Glance 1

Page 22

OBJ  
1

Describe the nature of business and the role of accounting and ethics in business.

## Nature of Business and Accounting

A **business**<sup>1</sup> is an organization in which basic resources (inputs), such as materials and labor, are assembled and processed to provide goods or services (outputs) to customers. Businesses come in all sizes, from a local coffee house to **Starbucks**, which sells over \$10 billion of coffee and related products each year.

The objective of most businesses is to earn a **profit**. Profit is the difference between the amounts received from customers for goods or services and the amounts paid for the inputs used to provide the goods or services. This text focuses on businesses operating to earn a profit. However, many of the same concepts and principles also apply to not-for-profit organizations such as hospitals, churches, and government agencies.

## Types of Businesses

Three types of businesses operating for profit include service, merchandising, and manufacturing businesses. Some examples of each type of business are given below.

**Service businesses** provide services rather than products to customers.

**Delta Air Lines** (transportation services)

**The Walt Disney Company** (entertainment services)

<sup>1</sup> A complete glossary of terms appears at the end of the text.

**Merchandising businesses** sell products they purchase from other businesses to customers.

[Walmart](#) (general merchandise)

[Amazon.com](#) (Internet books, music, videos)

**Manufacturing businesses** change basic inputs into products that are sold to customers.

[Ford Motor Co.](#) (cars, trucks, vans)

[Dell, Inc.](#) (personal computers)

## Role of Accounting in Business

The role of accounting in business is to provide information for managers to use in operating the business. In addition, accounting provides information to other users in assessing the economic performance and condition of the business.

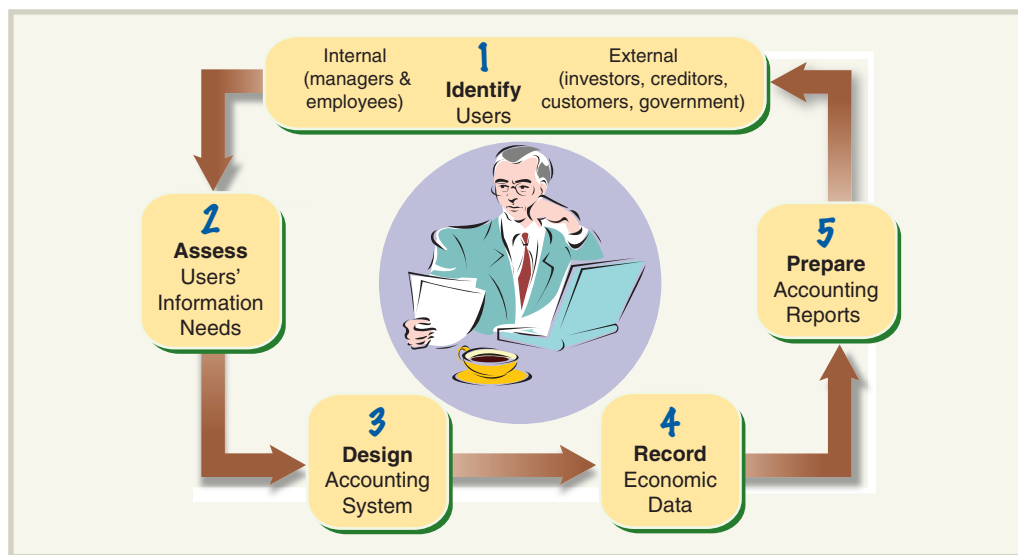
Thus, **accounting** can be defined as an information system that provides reports to users about the economic activities and condition of a business. You could think of accounting as the “language of business.” This is because accounting is the means by which businesses’ financial information is communicated to users.

The process by which accounting provides information to users is as follows:

1. Identify users.
2. Assess users’ information needs.
3. Design the accounting information system to meet users’ needs.
4. Record economic data about business activities and events.
5. Prepare accounting reports for users.

As illustrated in Exhibit 1, users of accounting information can be divided into two groups: internal users and external users.

**Note:**  
Accounting is an information system that provides reports to users about the economic activities and condition of a business.



### EXHIBIT 1

#### Accounting as an Information System

Internal users of accounting information include managers and employees. These users are directly involved in managing and operating the business. The area of accounting that provides internal users with information is called **managerial accounting**, or **management accounting**.

The objective of managerial accounting is to provide relevant and timely information for managers’ and employees’ decision-making needs. Oftentimes, such information is sensitive and is not distributed outside the business. Examples of sensitive information might include information about customers, prices, and plans to

expand the business. Managerial accountants employed by a business are employed in **private accounting**.

External users of accounting information include investors, creditors, customers, and the government. These users are not directly involved in managing and operating the business. The area of accounting that provides external users with information is called **financial accounting**.

The objective of financial accounting is to provide relevant and timely information for the decision-making needs of users outside of the business. For example, financial reports on the operations and condition of the business are useful for banks and other creditors in deciding whether to lend money to the business. **General-purpose financial statements** are one type of financial accounting report that is distributed to external users. The term *general-purpose* refers to the wide range of decision-making needs that these reports are designed to serve. Later in this chapter, general-purpose financial statements are described and illustrated.

## Role of Ethics in Accounting and Business

The objective of accounting is to provide relevant, timely information for user decision making. Accountants must behave in an ethical manner so that the information they provide users will be trustworthy and, thus, useful for decision making. Managers and employees must also behave in an ethical manner in managing and operating a business. Otherwise, no one will be willing to invest in or loan money to the business.

**Ethics** are moral principles that guide the conduct of individuals. Unfortunately, business managers and accountants sometimes behave in an unethical manner. Many of the managers of the companies listed in Exhibit 2 engaged in accounting or business fraud. These ethical violations led to fines, firings, and lawsuits. In some cases, managers were criminally prosecuted, convicted, and sent to prison.

### EXHIBIT 2

#### Accounting and Business Frauds

Company	Nature of Accounting or Business Fraud	Result
Computer Associates International, Inc.	Fraudulently inflated its financial results.	CEO and senior executives indicted. Five executives pled guilty. \$225 million fine.
Enron	Fraudulently inflated its financial results.	Bankruptcy. Senior executives criminally convicted. Over \$60 billion in stock market losses.
HealthSouth	Overstated performance by \$4 billion in false entries.	Senior executives criminally convicted.
Qwest Communications International, Inc.	Improperly recognized \$3 billion in false receipts.	CEO and six other executives criminally convicted of "massive financial fraud." \$250 million SEC fine.
Xerox Corporation	Recognized \$3 billion in revenue prior to when it should have been recorded.	\$10 million fine to SEC. Six executives forced to pay \$22 million.

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What went wrong for the managers and companies listed in Exhibit 2? The answer normally involved one or both of the following two factors:

**Failure of Individual Character.** An ethical manager and accountant is honest and fair. However, managers and accountants often face pressures from



supervisors to meet company and investor expectations. In many of the cases in Exhibit 2, managers and accountants justified small ethical violations to avoid such pressures. However, these small violations became big violations as the company's financial problems became worse.

**Culture of Greed and Ethical Indifference.** By their behavior and attitude, senior managers set the company culture. In most of the companies listed in Exhibit 2, the senior managers created a culture of greed and indifference to the truth.

As a result of the accounting and business frauds shown in Exhibit 2, Congress passed new laws to monitor the behavior of accounting and business. For example, the **Sarbanes-Oxley Act of 2002 (SOX)** was enacted. SOX established a new oversight body for the accounting profession called the **Public Company Accounting Oversight Board (PCAOB)**. In addition, SOX established standards for independence, corporate responsibility, and disclosure.

How does one behave ethically when faced with financial or other types of pressure? Guidelines for behaving ethically are shown in Exhibit 3.<sup>2</sup>

1. Identify an ethical decision by using your personal ethical standards of honesty and fairness.
2. Identify the consequences of the decision and its effect on others.
3. Consider your obligations and responsibilities to those who will be affected by your decision.
4. Make a decision that is ethical and fair to those affected by it.

### EXHIBIT 3

#### Guidelines for Ethical Conduct

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## Integrity, Objectivity, and Ethics in Business



### BERNIE MADOFF

In June 2009, Bernard L. "Bernie" Madoff was sentenced to 150 years in prison for defrauding thousands of investors in one of the biggest frauds in American history. Madoff's fraud started several decades earlier when he began a "Ponzi scheme" in his investment management firm, Bernard L. Madoff Investment Securities LLC.

In a Ponzi scheme, the investment manager uses funds received from new investors to pay a return to existing investors, rather than basing investment returns

on the fund's actual performance. As long as the investment manager is able to attract new investors, he or she will have new funds to pay existing investors and continue the fraud. While most Ponzi schemes collapse quickly when the investment manager runs out of new investors, Madoff's reputation, popularity, and personal contacts provided a steady stream of investors, which allowed the fraud to survive for decades.

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## Opportunities for Accountants

Numerous career opportunities are available for students majoring in accounting. Currently, the demand for accountants exceeds the number of new graduates entering the job market. This is partly due to the increased regulation of business caused by the accounting and business frauds shown in Exhibit 2. Also, more and more businesses have come to recognize the importance and value of accounting information.

As indicated earlier, accountants employed by a business are employed in private accounting. Private accountants have a variety of possible career options within a company. Some of these career options are shown in Exhibit 4 along with their

<sup>2</sup> Many companies have ethical standards of conduct for managers and employees. In addition, the Institute of Management Accountants and the American Institute of Certified Public Accountants have professional codes of conduct.

**EXHIBIT 4** Accounting Career Paths and Salaries

Accounting Career Track	Description	Career Options	Annual Starting Salaries*	Certification
Private Accounting	Accountants employed by companies, government, and not-for-profit entities.	Bookkeeper	\$38,500	
		Payroll clerk	\$37,000	Certified Payroll Professional (CPP)
		General accountant	\$44,625	Certified Management Accountant (CMA)
		Budget analyst	\$47,250	
		Cost accountant	\$46,625	
		Internal auditor	\$51,875	Certified Internal Auditor (CIA)
		Information technology auditor	\$60,750	Certified Information Systems Auditor (CISA)
Public Accounting	Accountants employed individually or within a public accounting firm in tax or audit services.	Local firms	\$47,313	Certified Public Accountant (CPA)
		National firms	\$57,250	Certified Public Accountant (CPA)

Source: Robert Half 2012 U.S. Salary Guide (Finance and Accounting), Robert Half International, Inc. (<http://www.rhi.com/salaryguides>)

\*Mean salaries of a reported range. Private accounting salaries are reported for large companies. Salaries may vary by region.

starting salaries. Accountants who provide audit services, called auditors, verify the accuracy of financial records, accounts, and systems. As shown in Exhibit 4, several private accounting careers have certification options.

Accountants and their staff who provide services on a fee basis are said to be employed in **public accounting**. In public accounting, an accountant may practice as an individual or as a member of a public accounting firm. Public accountants who have met a state's education, experience, and examination requirements may become **Certified Public Accountants (CPAs)**. CPAs typically perform general accounting, audit, or tax services. As can be seen in Exhibit 4, CPAs have slightly better starting salaries than private accountants. Career statistics indicate, however, that these salary differences tend to disappear over time.

Because all functions within a business use accounting information, experience in private or public accounting provides a solid foundation for a career. Many positions in industry and in government agencies are held by individuals with accounting backgrounds.



Summarize the development of accounting principles and relate them to practice.

## Generally Accepted Accounting Principles

If a company's management could record and report financial data as it saw fit, comparisons among companies would be difficult, if not impossible. Thus, financial accountants follow **generally accepted accounting principles (GAAP)** in preparing reports. These reports allow investors and other users to compare one company to another.

Accounting principles and concepts develop from research, accepted accounting practices, and pronouncements of regulators. Within the United States, the **Financial Accounting Standards Board (FASB)** has the primary responsibility for developing accounting principles. The FASB publishes *Statements of Financial Accounting Standards* as well as *Interpretations* of these Standards. In addition, the **Securities and Exchange Commission (SEC)**, an agency of the U.S. government, has authority over the accounting and financial disclosures for companies whose

shares of ownership (stock) are traded and sold to the public. The SEC normally accepts the accounting principles set forth by the FASB. However, the SEC may issue *Staff Accounting Bulletins* on accounting matters that may not have been addressed by the FASB.

Many countries outside the United States use generally accepted accounting principles adopted by the **International Accounting Standards Board (IASB)**. The IASB issues *International Financial Reporting Standards (IFRSs)*. Differences currently exist between FASB and IASB accounting principles. However, the FASB and IASB are working together to reduce and eliminate these differences into a single set of accounting principles. Such a set of worldwide accounting principles would help facilitate investment and business in an increasingly global economy.

In this chapter and text, accounting principles and concepts are emphasized. It is through this emphasis on the “why” as well as the “how” that you will gain an understanding of accounting.

IFRS

IFRS

See Appendix C for more information.

IFRS

## International Connection

### INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

IFRS are considered to be more “principles-based” than U.S. GAAP, which is considered to be more “rules-based.” For example, U.S. GAAP consists of approximately 17,000 pages, which include numerous industry-specific

accounting rules. In contrast, IFRS allow more judgment in deciding how business transactions are recorded. Many believe that the strong regulatory and litigation environment in the United States is the cause for the more rules-based GAAP approach. Regardless, IFRS and GAAP share many common principles.\*

\*Differences between U.S. GAAP and IFRS are further discussed and illustrated in Appendix C.

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## Business Entity Concept

The **business entity concept** limits the economic data in an accounting system to data related directly to the activities of the business. In other words, the business is viewed as an entity separate from its owners, creditors, or other businesses. For example, the accountant for a business with one owner would record the activities of the business only and would not record the personal activities, property, or debts of the owner.

A business entity may take the form of a proprietorship, partnership, corporation, or limited liability company (LLC). Each of these forms and their major characteristics are listed below.

**Note:**  
Under the business entity concept, the activities of a business are recorded separately from the activities of its owners, creditors, or other businesses.

Form of Business Entity	Characteristics
<b>Proprietorship</b> is owned by one individual.	<ul style="list-style-type: none"> <li>• 70% of business entities in the United States.</li> <li>• Easy and cheap to organize.</li> <li>• Resources are limited to those of the owner.</li> <li>• Used by small businesses.</li> </ul>
<b>Partnership</b> is owned by two or more individuals.	<ul style="list-style-type: none"> <li>• 10% of business organizations in the United States (combined with limited liability companies).</li> <li>• Combines the skills and resources of more than one person.</li> </ul>
<b>Corporation</b> is organized under state or federal statutes as a separate legal taxable entity.	<ul style="list-style-type: none"> <li>• Generates 90% of business revenues.</li> <li>• 20% of the business organizations in the United States.</li> <li>• Ownership is divided into shares called <i>stock</i>.</li> <li>• Can obtain large amounts of resources by issuing stock.</li> <li>• Used by large businesses.</li> </ul>
<b>Limited liability company (LLC)</b> combines the attributes of a partnership and a corporation.	<ul style="list-style-type: none"> <li>• 10% of business organizations in the United States (combined with partnerships).</li> <li>• Often used as an alternative to a partnership.</li> <li>• Has tax and legal liability advantages for owners.</li> </ul>

The three types of businesses discussed earlier—service, merchandising, and manufacturing—may be organized as proprietorships, partnerships, corporations, or limited liability companies. Because of the large amount of resources required to operate a manufacturing business, most manufacturers such as **Ford Motor Company** are corporations. Most large retailers such as **Walmart** and **Home Depot** are also corporations. Companies organized as corporations often include *Inc.* as part of their name to indicate that they are incorporated. For example, Apple’s legal name is Apple Inc.

## Cost Concept

Under the **cost concept**, amounts are initially recorded in the accounting records at their cost or purchase price. To illustrate, assume that Aaron Publishers purchased the following building on February 20, 2012, for \$150,000:

Price listed by seller on January 1, 2012	\$160,000
Aaron Publishers’ initial offer to buy on January 31, 2012	140,000
Purchase price on February 20, 2012	150,000
Estimated selling price on December 31, 2014	220,000
Assessed value for property taxes, December 31, 2014	190,000

Under the cost concept, Aaron Publishers records the purchase of the building on February 20, 2012, at the purchase price of \$150,000. The other amounts listed above have no effect on the accounting records.

The fact that the building has an estimated selling price of \$220,000 on December 31, 2014, indicates that the building has increased in value. However, to use the \$220,000 in the accounting records would be to record an illusory or unrealized profit. If Aaron Publishers sells the building on January 9, 2016, for \$240,000, a profit of \$90,000 (\$240,000 – \$150,000) is then realized and recorded. The new owner would record \$240,000 as its cost of the building.

The cost concept also involves the objectivity and unit of measure concepts. The **objectivity concept** requires that the amounts recorded in the accounting records be based on objective evidence. In exchanges between a buyer and a seller, both try to get the best price. Only the final agreed-upon amount is objective enough to be recorded in the accounting records. If amounts in the accounting records were constantly being revised upward or downward based on offers, appraisals, and opinions, accounting reports could become unstable and unreliable.

The **unit of measure concept** requires that economic data be recorded in dollars. Money is a common unit of measurement for reporting financial data and reports.

### Example Exercise 1-1 Cost Concept

On August 25, Gallatin Repair Service extended an offer of \$125,000 for land that had been priced for sale at \$150,000. On September 3, Gallatin Repair Service accepted the seller’s counteroffer of \$137,000. On October 20, the land was assessed at a value of \$98,000 for property tax purposes. On December 4, Gallatin Repair Service was offered \$160,000 for the land by a national retail chain. At what value should the land be recorded in Gallatin Repair Service’s records?

### Follow My Example 1-1

\$137,000. Under the cost concept, the land should be recorded at the cost to Gallatin Repair Service.

Practice Exercises: **PE 1-1A, PE 1-1B**

State the accounting equation and define each element of the equation.

## The Accounting Equation

The resources owned by a business are its **assets**. Examples of assets include cash, land, buildings, and equipment. The rights or claims to the assets are divided into two types: (1) the rights of creditors and (2) the rights of owners. The rights of creditors are the debts of the business and are called **liabilities**. The rights of the owners are

called **stockholders' equity** for a corporation and **owner's equity** for a proprietorship, partnership, or limited liability company. Throughout this text, we use the corporate form of business. However, most of the concepts and principles described and illustrated also apply to proprietorships, partnerships, and limited liability companies.

The following equation shows the relationship among assets, liabilities, and stockholders' equity:

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$$

This equation is called the **accounting equation**. Liabilities usually are shown before stockholders' equity in the accounting equation because creditors have first rights to the assets.

Given any two amounts, the accounting equation may be solved for the third unknown amount. To illustrate, if the assets owned by a business amount to \$100,000 and the liabilities amount to \$30,000, the stockholders' equity is equal to \$70,000, as shown below.

$$\begin{array}{rcl} \text{Assets} - \text{Liabilities} & = & \text{Stockholders' Equity} \\ \$100,000 - \$30,000 & = & \$70,000 \end{array}$$

### Example Exercise 1-2 Accounting Equation

OBJ  
3

You're A Star is a motivational consulting business. At the end of its accounting period, December 31, 2013, You're A Star has assets of \$800,000 and liabilities of \$350,000. Using the accounting equation, determine the following amounts:

- Stockholders' equity as of December 31, 2013.
- Stockholders' equity as of December 31, 2014, assuming that assets increased by \$130,000 and liabilities decreased by \$25,000 during 2014.

### Follow My Example 1-2

- $$\begin{array}{l} \text{Assets} = \text{Liabilities} + \text{Stockholders' Equity} \\ \$800,000 = \$350,000 + \text{Stockholders' Equity} \\ \text{Stockholders' Equity} = \$450,000 \end{array}$$
- First, determine the change in stockholders' equity during 2014 as follows:
 
$$\begin{array}{l} \text{Assets} = \text{Liabilities} + \text{Stockholders' Equity} \\ \$130,000 = -\$25,000 + \text{Stockholders' Equity} \\ \text{Stockholders' Equity} = \$155,000 \end{array}$$

Next, add the change in stockholders' equity during 2014 to the stockholders' equity on December 31, 2013 to arrive at stockholders' equity on December 31, 2014, as shown below.

$$\text{Stockholders' Equity on December 31, 2014} = \$450,000 + \$155,000 = \$605,000$$

Practice Exercises: **PE 1-2A, PE 1-2B**

## Business Transactions and the Accounting Equation

Paying a monthly bill, such as a telephone bill of \$168, affects a business's financial condition because it now has less cash on hand. Such an economic event or condition that directly changes an entity's financial condition or its results of operations is a **business transaction**. For example, purchasing land for \$50,000 is a business transaction. In contrast, a change in a business's credit rating does not directly affect cash or any other asset, liability, or stockholders' equity amount.

All business transactions can be stated in terms of changes in the elements of the accounting equation. How business transactions affect the accounting equation can be illustrated by using some typical transactions. As a basis for illustration, a business organized by Chris Clark is used.

OBJ  
4

Describe and illustrate how

business transactions can be recorded in terms of the resulting change in the elements of the accounting equation.

**Note:**  
All business transactions can be stated in terms of changes in the elements of the accounting equation.