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28E

# ACCOUNTING

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28e

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## Preface

### **Roadmap for Success**

Warren's *Accounting 28e* makes it easy for you to give students a solid foundation in accounting without overwhelming students. Warren covers the fundamentals AND motivates students to learn by showing how accounting is important to a business.

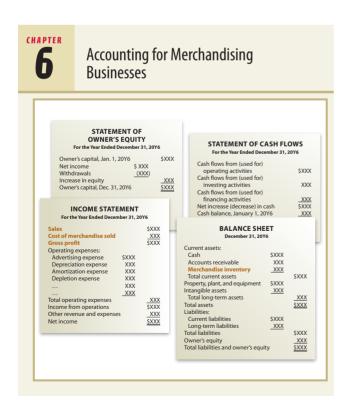
The Warren presentation style provides content in a way that this generation reads and assimilates information.

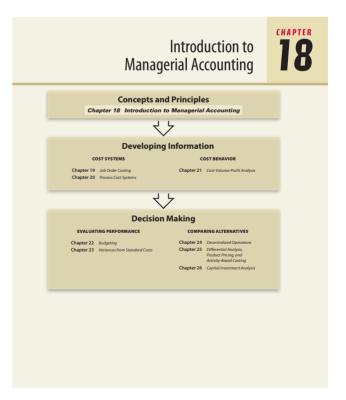
- · Short, concise paragraphs and bullets
- Stepwise progression
- Meaningful illustrations and graphs

### **Hallmarks**

Schemas provide a roadmap of accounting that emphasizes the big picture. Each chapter begins with a graphic Schema, or Roadmap of Accounting, that shows readers how the chapter material fits within the larger context of the overall book. With this approach, students view chapter concepts as part of a larger whole rather than as mere independent pieces of knowledge, for a truly functional understanding of accounting.

Financial and managerial sections use separate schemas. A four-part schema (Chs. 1–4) demonstrates how chapter content integrates within the accounting cycle. The financial accounting chapters' schema (Chs. 5–17) highlights chapter content within a set of integrated financial statements. A separate managerial accounting schema (Chs. 18–26) shows how chapter content integrates within the managerial accounting functions.





Revised and refreshed real company chapter openers engage readers from the start. Chapter openers introduce and briefly describe a real company and how its challenges relate to the chapter content. Links to this opening company appear throughout the chapter to reinforce the importance of what readers are learning.



**Revised end-of-chapter assignments** (homework) provide important hands-on practice. Refined, meaningful review and applications at the end of each chapter include Discussion Questions, Practice Exercises (A and B versions), Exercises, Problems (Series A and B), and Cases & Projects that emphasize ethics, teamwork, and communication skills.



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The MindTap eReader for Warren's *Accounting* is the most robust digital reading experience available. Hallmark features include:

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### **New to This Edition**

- Updated dates and real company information for currency.
- Refreshed end-of-chapter assignments with different numerical values and updated information.
- A new "Time Period Concept" discussion has been added to the "Generally Accepted Accounting Principles" section of Chapter 1. This discussion defines and illustrates the natural business year and fiscal year accounting periods.
- The fiscal year discussion was moved from the prior edition's Chapter 4. In addition, the notation of 20Y1, 20Y2, ... is introduced for indicating years throughout the text.
- In Chapter 2, the discussion on "Errors Not Affecting the Trial Balance" has been revised to better aid student understanding and to simplify the preparation of correcting journal entries.
- In Chapter 4, the Accounting Cycle illustration in Exhibit 8 has been revised to facilitate student review.
- In Chapter 4, the "Fiscal Year" discussion has been moved to Chapter 1.

- In Chapter 4, the "Reversing Entry" appendix has been moved to an online appendix.
- A new "Why Is the Accrual Basis of Accounting Required by GAAP?" discussion has been added as Appendix 2 to Chapter 4. The understanding of why accrual accounting is required by GAAP is important for students' ability to analyze and evaluate financial statements. Why accrual accounting is required is illustrated by comparing NetSolutions' financial statements under the accrual basis (Chapters 1–4) with related cash basis financial statements.
- To simplify and give the instructor more flexibility in Chapter 6, the discussion of the accounting for customer merchandise refunds, including the related adjusting entries, has been moved to Appendix 2 at the end of the chapter.
- For those instructors who prefer to cover sales discounts using the gross method, Appendix 1, "Gross Method of Recording Sales Discounts," has been added to the end of Chapter 6.

### **About the Authors**

### 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. He focused his teaching efforts on principles of accounting and auditing. Dr. Warren received his PhD from Michigan State University and his BBA and MA 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 also has consulted with numerous companies and public accounting firms. His outside interests include handball, golf, skiing, backpacking, and fly-fishing.



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Jennifer S. Schneider is an Assistant Professor at the University of North Georgia, Gainesville. Professor Schneider has taught principles of accounting, survey of accounting, principles of finance, accounting information systems, and auditing. She is a Florida CPA and began her career at PwC. She has 15+ years' experience with Fortune 500 companies, primarily in audit and financial/SEC reporting. Prior to coming to the University of North Georgia, Professor Schneider taught at the University of Amsterdam. Her research interests are in the Scholarship of Teaching and Learning. Professor Schneider has published several articles including an article in the Institute of Management Accountants (IMA) Educational Case Journal. She has also served as faculty advisor for Beta Alpha Psi, which is an international honors organization for financial information students and professionals. She enjoys spending time with her two sons, Luke and Graeme, both students at the University of Georgia, Athens.



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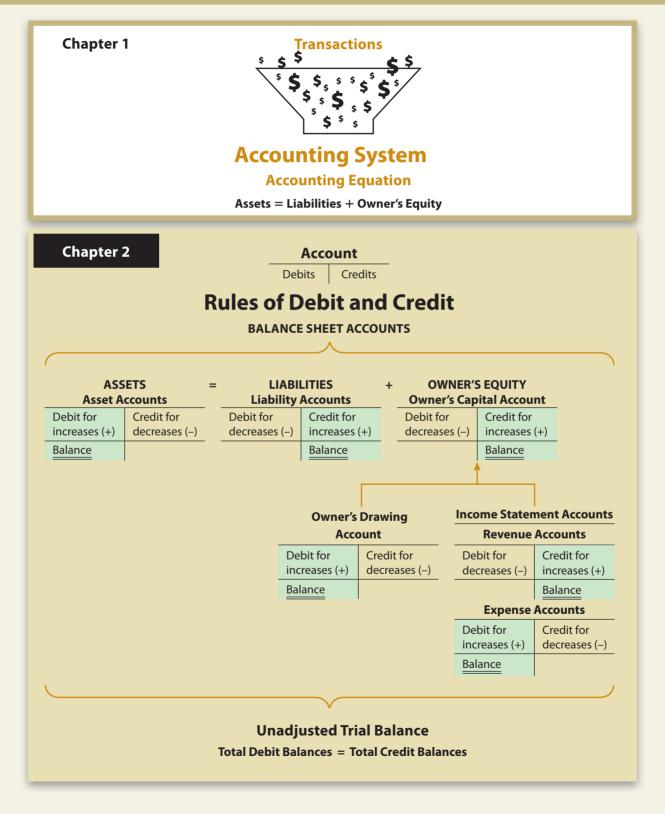
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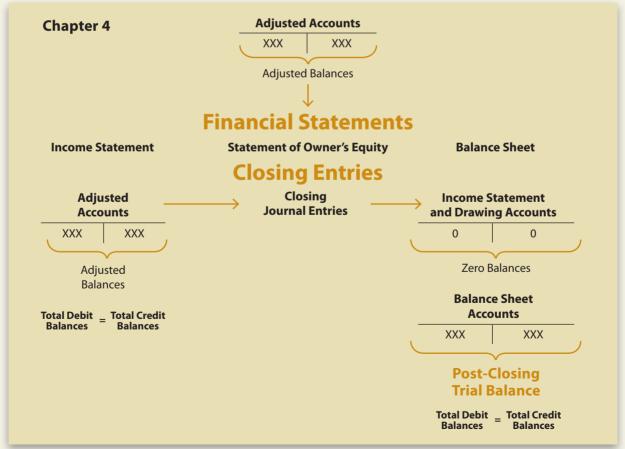
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# Introduction to Accounting and Business







When 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, Inc.** is one of the most visible companies on the Internet. It provides a real-time information network where members can post messages, called *tweets*, 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.

After studying this chapter, you should be able to:	Example Exercises (EE) are shown in <b>red.</b>
DBJ. 1 Describe the nature of 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	OBJ. 5  Describe the financial statements of a proprietorship and explain how they interrelate.  Financial Statements Income Statement Statement of Owner's Equity  EE 1-4
Opportunities for Accountants  Summarize the development of accounting principles and relate them to practice.	Balance Sheet EE 1-6 Statement of Cash Flows EE 1-7 Interrelationships Among Financial Statements
Generally Accepted Accounting Principles Business Entity Concept Time Period Concept Cost Concept EE 1-1	Describe and illustrate the use of the ratio of liabilities to owner's equity in evaluating a company's financial condition.  Financial Analysis and Interpretation:
State the accounting equation and define each element of the equation.  The Accounting Equation  Solving the Accounting Equation EE 1-2	Ratio of Liabilities to Owner's Equity  Computing and Interpreting Ratio of Liabilities to Owner's Equity  EE 1-8
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 Recording Transactions EE 1-3	At a Glance 1 Page 28

### **Nature of Business and Accounting**

OBJ. 1 Describe the nature of business and the role of accounting and ethics in business.

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 \$24 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 follow:

Service businesses provide services rather than products to customers.
 Delta Air Lines (transportation services)
 The Walt Disney Company (entertainment services)

1 A complete glossary of terms appears at the end of the text.

### Link to Twitter

**Twitter** is a service company that provides a platform for individuals to send text messages called *tweets*.

### Note

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

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

**Wal-Mart Stores, Inc.** (general merchandise) **Amazon.com** (general merchandise)

Manufacturing businesses convert 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.

**Managerial Accounting** 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**.

**Financial 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 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.

### Link to Twitter

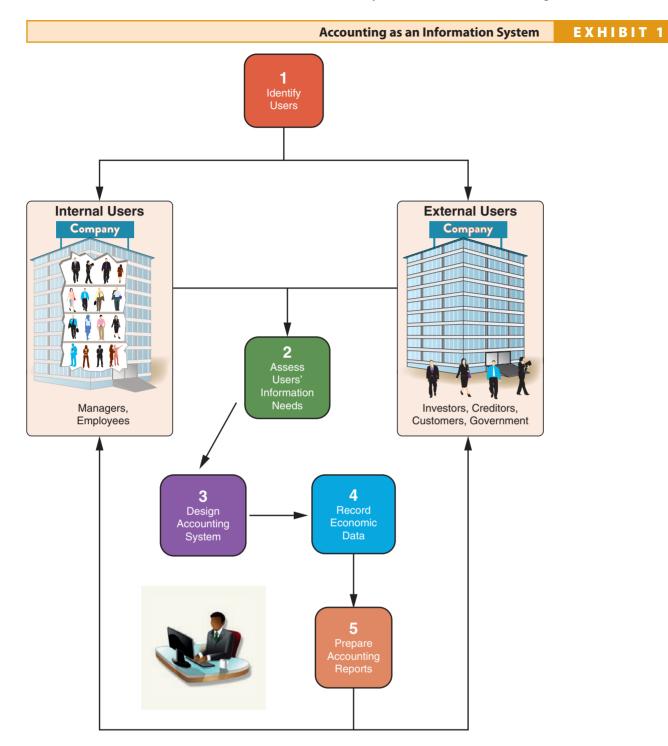
One of the ways

Twitter provides
information to its
investors is by
publishing an annual
report, which includes
general-purpose
financial statements.



### **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 reported its financial results.	CEO and senior executives indicted. Five executives pled guilty. \$225 million fine.			
Enron	Fraudulently reported its financial results.	Bankrupcty. Senior executives criminally convicted. More than \$60 billion in stock market losses.			
HealthSouth	Overstated performance by \$4 billion in false entries.	Senior executives criminally convicted.			
Qwest Communications International, Inc.	Improperly reported \$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.			

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

- Failure of Individual Character. Ethical managers and accountants are 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 laws to monitor the behavior of accounting and business. For example, the **Sarbanes-Oxley Act (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 follow:<sup>2</sup>

- 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.

<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, which can be obtained from their websites at www.imanet.org and www.aicpa.org, respectively.

### 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.

### **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 who work for 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 3 along with their starting salaries. Accountants who provide audit services, called auditors, attest to the accuracy of financial records, accounts, and systems. As shown in Exhibit 3, several private accounting careers have certification options.

#### **Accounting Career Paths and Salaries**

**EXHIBIT 3** 

Accounting Career Track	Description	Career Options	Annual Starting Salaries*	Certification
Private Accounting	Accountants employed by companies, government, and not-for-profit entities.	Bookkeeper Payroll clerk General accountant Budget analyst Cost accountant Internal auditor Information technology auditor	\$43,000 \$39,000 \$47,000 \$51,000 \$49,000 \$46,000 \$51,000	Certified Payroll Professional (CPP)  Certified Management Accountant (CMA) Certified Internal Auditor (CIA) Certified Information Systems Auditor (CISA)
Public Accounting	Accountants employed individually or within a public accounting firm in audit, tax, or management advisory services.		\$47,000	Certified Public Accountant (CPA)

<sup>\*</sup>Average salaries rounded to the nearest thousand. Salaries may vary by size of company and region.

Source: Robert Half 2019 U.S. Salary Guide (Finance and Accounting), Robert Half International, Inc. (www.roberthalf.com/workplace-research/salary-quides).

Accountants 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)**.

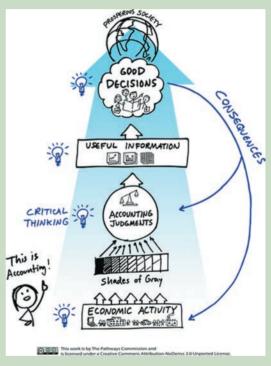
Because all functions within a business use accounting information, experience in private or public accounting provides a solid foundation for a career. Many high-level positions in industry and in government agencies are held by individuals with accounting backgrounds.

### **Business Connection**



#### **PATHWAYS COMMISSION**

The Pathways Commission issued its study titled *Charting a National Strategy for the Next Generation of Accountants*. The Commission was made up of diverse members and was jointly sponsored by the American Institute of Certified Public Accountants (AICPA) and the American Accounting Association (AAA). The Commission emphasized the importance of accounting for a prosperous society and good decision making. The Commission also emphasized that accountants must be critical thinkers who are comfortable addressing the shades of gray required by accounting judgments.



Source: Charting a National Strategy for the Next Generation of Accountants. The Pathways Commission, July 2012.

OBJ. 2 Summarize the development of accounting principles and relate them to practice.

### **Generally Accepted Accounting Principles**

If companies did not follow the same rules when reporting financial information, 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 maintains an electronic database, called the **Accounting Standards Codification**, that contains all the accounting standards that make up GAAP. Changes in the FASB Codification are made using Accounting Standards Updates.

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 accounting principles adopted by the International Accounting Standards Board (IASB). The IASB issues International Financial Reporting Standards (IFRS). Differences currently exist between FASB and IASB accounting principles. Investors and other stakeholders should be aware of these differences in analyzing financial reports of international companies. Throughout this text, International Connection boxes, such as the one at the bottom of this page, highlight many of these differences. In addition, Appendix B at the end of this text summarizes differences between U.S. GAAP and IFRS.

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.

### **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 in Exhibit 4.

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 Wal-Mart and The Home Depot are also corporations.

### Note

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

### **International Connection**





## IFRS 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.

### EXHIBIT 4

#### **Forms of Business Entities**

Forr	n of Business Entity	Characteristics	Examples
•	<b>Proprietorship</b> is owned by one individual.	<ul> <li>70% of business entities in the United States.</li> <li>Easy and inexpensive to organize.</li> <li>Resources are limited to those of the owner.</li> <li>Used by small businesses.</li> </ul>	• A & B Painting
H	<b>Partnership</b> is owned by two or more individuals.	<ul> <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>	Jones & Smith, Architects
N. COLOROGO	Corporation is organized under state or federal statutes as a separate legal taxable entity.	<ul> <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 stock.</li> <li>Can obtain large amounts of resources by issuing stock.</li> <li>Used by large businesses.</li> </ul>	<ul><li> Alphabet (Google)</li><li> Apple</li><li> Ford Motor Company</li><li> Twitter</li></ul>
***	<b>Limited liability company (LLC)</b> combines the attributes of a partnership and a corporation.	<ul> <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>	Mosel & Farmer, CPAs, LLC

### **Time Period Concept**

The **time period concept** requires a company to report its economic activities on a regular basis for a specific period. In doing so, financial condition and operating results of the company are reported periodically on a consistent basis. Financial accounting reports are often prepared monthly, quarterly, and yearly.

The annual accounting period adopted by a company is called its **fiscal year**. The fiscal year most commonly used is the calendar year beginning January 1 and ending December 31. However, other periods are not unusual, especially for companies organized as corporations.

Corporations often use a fiscal year that ends when business activities have reached the lowest point in their annual operating cycle, which allows more time to prepare financial reports. Such a fiscal year is called the **natural business year**. For example, the natural business year for most retail businesses is January 31, which is after the busy holiday season and end-of-year sales. To illustrate, **Wal-Mart Stores, Inc.** recently reported its annual financial results for the year ending January 31.

Throughout this text, we use the notation 20Y1, 20Y2, 20Y3, etc., to indicate years.<sup>3</sup> For example, a company's fiscal year could begin August 1, 20Y7, and end on July 31, 20Y8, as follows:



3 We use this notation to reduce the number of changes necessary when revising this and future editions of the text. This, in turn, reduces the cost of each revision, which helps reduce the need to increase the retail price of the text.

### Link to Twitter

**Twitter** uses an annual accounting period ending December 31.

### **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 a building on February 20, 20Y2, for \$150,000. The following additional information applies to the building:

Price listed by seller on January 1, 20Y2	\$160,000
Aaron Publishers' initial offer to buy on January 31, 20Y2	140,000
Purchase price on February 20, 20Y2	150,000
Estimated selling price on December 31, 20Y7	220,000
Assessed value for property taxes, December 31, 20Y7	190,000

Under the cost concept, Aaron Publishers records the purchase of the building on February 20, 20Y2, at the purchase price of \$150,000. The other amounts listed have no effect on the accounting records.

The fact that the building has an estimated selling price of \$220,000 on December 31, 20Y7, indicates that the building has increased in value. However, to use the \$220,000 in the accounting records would be to record a profit before selling the building. If Aaron Publishers sells the building on January 9, 20Y9, 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 unbiased 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

**OBI. 2** 

On August 25, Gallatin Repair Service extended an offer of \$400,000 for land that had been priced for sale at \$500,000. On September 3, Gallatin Repair Service accepted the seller's counteroffer of \$460,000. On October 20, the land was assessed at a value of \$300,000 for property tax purposes. On December 4, a national retail chain offered Gallatin Repair Service \$525,000 for the land. At what value should the land be recorded in Gallatin Repair Service's records?

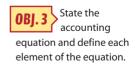
### **Follow My Example 1-1**

\$460,000. Under the cost concept, the land should be recorded at the cost to Gallatin Repair Service.

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

### 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 of a proprietorship, partnership, or limited liability company are called **owner's equity**. Since stockholders own a corporation, the rights of owners of a corporation are called **stockholders' equity**.



### Link to Twitter

**Twitter**'s accounting equation for a recent year: Assets (\$10,163 million) = Liabilities (\$3,357 million) + Stockholders' Equity (\$6,806 million)

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

#### Assets = Liabilities + Owner's Equity

This equation is called the **accounting equation**. Liabilities usually are shown before owner's 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 owner's equity is equal to \$70,000, computed as follows:

### **Business Connection**



### THE ACCOUNTING EQUATION

The accounting equation serves as the basic foundation for the accounting systems of all companies. From the smallest business, such as the local convenience store, to the largest business, such as **The Coca-Cola Company**, companies use the accounting equation. Some examples taken from recent financial reports of well-known corporations follow:

Company	Assets* = L	iabilities + St.	tockholders' Equity
Alphabet (Google)	\$232,792 =	\$55,164 +	\$177,628
The Coca-Cola Company	\$83,216 =	\$66,235 +	\$16,981
DowDuPont	\$188,030 =	\$93,459 +	\$94,571
eBay	\$22,819 =	\$16,538 +	\$6,281
Target	\$37,431 =	\$26,478 +	\$10,953
<b>Microsoft Corporation</b>	\$258,848 =	\$176,130 +	\$82,718
<b>Southwest Airlines Co.</b>	\$26,243 =	\$16,390 +	\$9,853
Wal-Mart Stores, Inc.	\$204,522 =	\$123,700 +	\$80,822
*Amounts are shown in millions of dolla	rs.		

### **EXAMPLE EXERCISE 1-2 Accounting Equation**

**OBJ. 3** 

John Joos is the owner and operator of You're A Star, a motivational consulting business. At the end of its accounting period, December 31, 20Y8, You're A Star has assets of \$800,000 and liabilities of \$350,000. Using the accounting equation, determine the following amounts:

- a. Owner's equity as of December 31, 20Y8.
- b. Owner's equity as of December 31, 20Y9, assuming that assets increased by \$130,000 and liabilities decreased by \$25,000 during 20Y9.

### Follow My Example 1-2

a. Assets = Liabilities + Owner's Equity

\$800,000 = \$350,000 + Owner's Equity

Owner's Equity = \$450,000

b. First, determine the change in owner's equity during 20Y9 as follows:

Assets = Liabilities + Owner's Equity

\$130,000 = -\$25,000 + Owner's Equity

Owner's Equity = \$155,000

Next, add the change in owner's equity during 20Y9 to the owner's equity on December 31, 20Y8, to arrive at owner's equity on December 31, 20Y9, as follows:

Owner's Equity on December 31, 20Y9 = \$450,000 (Owner's Equity on December 31, 20Y8) + \$155,000 (change in Owner's Equity) = \$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 owner's 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.

Assume that on November 1, 20Y3, Chris Clark begins a business that will be known as **NetSolutions**. The first phase of Chris's business plan is to operate NetSolutions as a service business assisting individuals and small businesses in developing web pages and installing computer software. Chris expects this initial phase of the business to last one to two years. During this period, Chris plans on gathering information on the software and hardware needs of customers. During the second phase of the business plan, Chris plans to expand NetSolutions into a personalized retailer of software and hardware for individuals and small businesses.

Each transaction during NetSolutions' first month of operations is described in the following paragraphs. The effect of each transaction on the accounting equation is then shown.

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

accounting equation.



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

Nov. 1, 20Y3 Chris Clark deposited \$25,000 in a bank account in the name of NetSolutions.

This transaction increases the asset cash (on the left side of the equation) by \$25,000. To balance the equation, the owner's equity (on the right side of the equation) increases by the same amount. The equity of the owner is identified using the owner's name and "Capital," such as "Chris Clark, Capital."

The effect of this transaction on NetSolutions' accounting equation is as follows:

Assets = Owner's Equity

Cash Chris Clark, Capital
a. 25.000 = 25.000

Since Chris Clark is the sole owner, NetSolutions is a proprietorship. Also, the preceding accounting equation is only for the business, NetSolutions. Under the business entity assumption, Chris's personal assets, such as his home, personal bank account, and personal liabilities are excluded from the equation.

Nov. 5, 20Y3 NetSolutions paid \$20,000 for the purchase of land as a future building site.

The land is located in a business park with access to transportation facilities. Chris Clark plans to rent office space and equipment during the first phase of the business plan. During the second phase, Chris plans to build an office and a warehouse on the land.

The purchase of the land changes the makeup of the assets, but it does not change the total assets. The items in the equation prior to this transaction and the effect of the transaction follow. The new amounts are called *balances*. Transaction A

Transaction B

	Asse	ets	=	Owner's Equity
Ca	ısh +	Land	=	Chris Clark, Capital
Bal. 25	,000			25,000
b. <u>-20</u>	,000	+20,000		
Bal. 5	,000	20,000		25,000
	25,0	00	=	25,000

**Transaction C** Nov. 10, 20Y3 NetSolutions purchased supplies for \$1,350 and agreed to pay the supplier in the near future.

You have probably used a credit card to buy clothing or other merchandise. In this type of transaction, you received clothing for a promise to pay your credit card bill in the future. That is, you received an asset and incurred a liability to pay a future bill. NetSolutions entered into a similar transaction by purchasing supplies for \$1,350 and agreeing to pay the supplier in the near future. This type of transaction is called a purchase *on account* and is often described as follows: *Purchased supplies on account*, \$1,350.

The liability created by a purchase on account is called an **account payable**. Items such as supplies that will be used in the business in the future are called **prepaid expenses**, which are assets. Thus, the effect of this transaction is to increase assets (Supplies) and liabilities (Accounts Payable) by \$1,350, as follows:

**Transaction D** Nov. 18, 20Y3 NetSolutions received cash of \$7,500 for providing services to customers.

You may have earned money by painting houses or mowing lawns. If so, you received money for rendering services to a customer. Likewise, a business earns money by selling goods or services to its customers. This amount is called **revenue**.

During its first month of operations, NetSolutions received cash of \$7,500 for providing services to customers. The receipt of cash increases NetSolutions' assets and also increases Chris Clark's equity in the business. The revenues of \$7,500 are recorded in a Fees Earned column to the right of Chris Clark, Capital. The effect of this transaction is to increase Cash and Fees Earned by \$7,500, as follows:

	Assets		=	Liabilities	+	Owner's	Ec	luity
				Accounts	=	Chris Clark,		Fees
Cash	+ Supplies +	⊢ Land	=	Payable	+	Capital	+	Earned
Bal. 5,000	1,350	20,000		1,350		25,000		
d. <u>+7,500</u>								+7,500
Bal. 12,500	1,350	20,000		1,350		25,000		7,500
	33,850		=			33,850		

Different terms are used for the various types of revenues. As illustrated for NetSolutions, revenue from providing services is recorded as **fees earned**. Revenue from the sale of merchandise is recorded as **sales**. Other examples of revenue include rent, which is recorded as **rent revenue**, and interest, which is recorded as **interest revenue**.

Instead of receiving cash at the time services are provided or goods are sold, a business may accept payment at a later date. Such revenues are described as *fees* 

earned on account or sales on account. For example, if NetSolutions had provided services on account instead of for cash, transaction (d) would have been described as follows: Fees earned on account, \$7,500.

In such cases, the firm has an asset, called an **account receivable**, which is a claim against the customer. Fees earned on account are recorded as increases in Accounts Receivable and Fees Earned. When customers pay their accounts, Cash increases, and Accounts Receivable decreases.

Nov. 30, 20Y3 NetSolutions paid the following expenses during the month: wages, \$2,125; rent, \$800; utilities, \$450; and miscellaneous, \$275.

Transaction E

During the month, NetSolutions spent cash or used up other assets in earning revenue. Assets used in this process of earning revenue are called **expenses**. Expenses include supplies used and payments for employee wages, utilities, and other services.

NetSolutions paid the following expenses during the month: wages, \$2,125; rent, \$800; utilities, \$450; and miscellaneous, \$275. Miscellaneous expenses include small amounts paid for such items as postage, coffee, and newspapers. The effect of expenses is the opposite of revenues in that expenses reduce assets and owner's equity. Like fees earned, the expenses are recorded in columns to the right of Chris Clark, Capital. However, since expenses reduce owner's equity, the expenses are entered as negative amounts. The effect of this transaction is as follows:

		Assets		=	Liabilities -	Owner's Equity					
					Accounts	Chris Clark,	Fees	Wages	Rent	Utilities	Misc.
	Cash	+ Supplies -	+ Land	=	Payable -	⊢ Capital	+ Earned -	Exp.	- Exp.	– Exp.	<ul><li>Exp.</li></ul>
Bal.	12,500	1,350	20,000		1,350	25,000	7,500				
e	-3,650							-2,125	-800	-450	-275
Bal.	8,850	1,350	20,000		1,350	25,000	7,500	<del>-2,125</del>	<del>-800</del>	<del>-450</del>	-275
		~									
		30,200		=			30,	,200			

Businesses usually record each revenue and expense transaction as it occurs. However, to simplify, NetSolutions' revenues and expenses are summarized for the month in transactions (d) and (e).

Nov. 30, 20Y3 NetSolutions paid creditors on account, \$950.

Transaction F

When you pay your monthly credit card bill, you decrease the cash and decrease the amount you owe to the credit card company. Likewise, when NetSolutions pays \$950 to creditors during the month, it reduces assets and liabilities, as follows:

		Assets		=	Liabilities +	Owner's Equity					
					Accounts	Chris Clark,	Fees	Wages	Rent	Utilities	Misc.
	Cash	+ Supplies	+ Land	=	Payable +	Capital	+ Earned -	Exp.	<ul> <li>Exp</li> </ul>	- Exp.	<ul><li>Exp.</li></ul>
Bal.	8,850	1,350	20,000		1,350	25,000	7,500	-2,125	-800	-450	-275
f.	<del>-950</del>				<del>-950</del>						
Bal.	7,900	1,350	20,000		400	25,000	7,500	-2,125	-800	-450	-275
,											
		29,250		=			29,2	250			

Paying an amount on account is different from paying an expense. The paying of an expense reduces owner's equity, as illustrated in transaction (e). Paying an amount on account reduces the amount owed on a liability.

Nov. 30, 20Y3 Chris Clark determined that the cost of supplies on hand at the end of the month was \$550.

Transaction G

The cost of the supplies on hand (not yet used) at the end of the month is \$550. Thus, \$800 (\$1,350 - \$550) of supplies must have been used during the month. This decrease in supplies is recorded as an expense, as follows:

Assets = Liabilitie					Owner's Equity							
Cash Bal. 7,900	+ Supplies + 1,350	Land 20,000	=	Accounts Payable + 400	Chris Clark, Capital 25,000		Wages - Exp2.125	Rent - Exp. -800	Supplies – Exp	Utilities - Exp450	Misc. – Exp. –275	
g	<u>-800</u>								<u>-800</u>			
Bal. 7,900	550	20,000		400	25,000	7,500	-2,125	-800	-800	-450	<b>−275</b>	
	<b>Y</b> 28,450		=				28,450					

Transaction H Nov. 30, 20Y3 Chris Clark withdrew \$2,000 from NetSolutions for personal use.

At the end of the month, Chris Clark withdrew \$2,000 in cash from the business for personal use. This transaction is the opposite of an investment in the business by the owner. Withdrawals by the owner should not be confused with expenses. Withdrawals *do not* represent assets or services used in the process of earning revenues. Instead, withdrawals are a distribution of capital to the owner. Owner withdrawals are identified by the owner's name and *Drawing*. For example, Chris's withdrawal is identified as Chris Clark, Drawing. Like expenses, withdrawals are recorded in a column to the right of Chris Clark, Capital. The effect of the \$2,000 withdrawal is as follows:

	Assets			= Liabilitie	s +	Owner's Equity													
				Accounts	;	Chris Clark,	C	hris Clark,		Fees		Wages		Rent	S	upplies	Utili	ties	Misc.
Ca	ash + Sup	рр. +	Land	= Payable	+	Capital	_	Drawing	+	Earned	_	Exp.	_	Exp.	_	Exp.	– Ex	р.	– Exp.
Bal. 7,9	900 55	50	20,000	400		25,000				7,500		-2,125		-800		-800	-45	50	-275
h. <u>-2,</u>	000							<del>-2,000</del>										_	
Bal. 5,9	900 55	50	20,000	400		25,000		-2,000		7,500		-2,125		-800		-800	-4	50	-275
		<u> </u>									~								
	26,450 =									26	5,45	50							

### **Summary**

The transactions of **NetSolutions** are summarized in Exhibit 5. Each transaction is identified by letter, and the balance of each accounting equation element is shown after every transaction.

### **EXHIBIT 5** Summary of Transactions for NetSolutions

	Assets			= Liabilities	Owner's Equity											
				Accounts	Chris Clark,	Chris Clark,	Fees	Wages	Rent	Supplies	Utilities	Misc				
	Cash	+ Supp. +	Land =	Payable	+ Capital	<ul> <li>Drawing</li> </ul>	+ Earned -	- Exp.	– Exp	- Exp.	- Exp.	<ul><li>Exp.</li></ul>				
a.	+25,000				+25,000											
b.	-20,000		+20,000													
Bal.	5,000		20,000		25,000											
c.		+1,350		+1,350												
Bal.	5,000	+1,350	20,000	+1,350	25,000											
d.	+7,500						+7,500									
Bal.	12,500	1,350	20,000	1,350	25,000		7,500									
e.	3,650							-2,125	<u>-800</u>		<u>-450</u>	-275				
Bal.	8,850	1,350	20,000	1,350	25,000		7,500	-2,125	-800		-450	-275				
f.	950			950												
Bal.	7,900	1,350	20,000	400	25,000		7,500	-2,125	-800		-450	-275				
g.		_800			<u></u> _					<del>-800</del>						
Bal.	7,900	550	20,000	400	25,000		7,500	-2,125	-800	-800	-450	-275				
h.			/ <u></u>			<u>-2,000</u>										
Bal.	5,900	550	20,000	400	25,000	_2,000	7,500	-2,125	-800	-800	-450	<del>-275</del>				
	26.450 = 26.450															

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You should note the following:

- The effect of every transaction is an increase or a decrease in one or more of the accounting equation elements.
- The two sides of the accounting equation are *always equal*.
- The owner's equity is increased by amounts invested by the owner and is decreased by withdrawals by the owner. In addition, the owner's equity is increased by revenues and is decreased by expenses.

The four types of transactions affecting owner's equity are illustrated in Exhibit 6.



**EXHIBIT 6** Types of **Transactions Affecting Owner's Equity** 

### **EXAMPLE EXERCISE 1-3 Transactions**

**OBI.** 4

Salvo Delivery Service is owned and operated by Joel Salvo. The following selected transactions were completed by Salvo Delivery Service during February:

- 1. Received cash from owner as additional investment, \$35,000.
- 2. Paid creditors on account, \$1,800.
- 3. Billed customers for delivery services on account, \$11,250.
- 4. Received cash from customers on account, \$6,740.
- Paid cash to owner for personal use, \$1,000.

Indicate the effect of each transaction on the accounting equation elements (Assets, Liabilities, Owner's Equity, Drawing, Revenue, and Expense). Also indicate the specific item within the accounting equation element that is affected. To illustrate, the answer to (1) follows:

(1) Asset (Cash) increases by \$35,000; Owner's Equity (Joel Salvo, Capital) increases by \$35,000.

### Follow My Example 1-3

- (2) Asset (Cash) decreases by \$1,800; Liability (Accounts Payable) decreases by \$1,800.
- (3) Asset (Accounts Receivable) increases by \$11,250; Revenue (Delivery Service Fees) increases by \$11,250.
- (4) Asset (Cash) increases by \$6,740; Asset (Accounts Receivable) decreases by \$6,740.
- (5) Asset (Cash) decreases by \$1,000; Drawing (Joel Salvo, Drawing) increases by \$1,000.

Practice Exercises: PE 1-3A, PE 1-3B

## **Financial Statements**

Describe the financial

how they interrelate.

proprietorship and explain

statements of a

After transactions have been recorded and summarized, reports are prepared for users. The accounting reports providing this information are called **financial statements**. The primary financial statements of a proprietorship are the income statement, the statement of owner's equity, the balance sheet, and the statement of cash flows. The order in which the financial statements are prepared and the nature of each statement are described in Exhibit 7.

The four financial statements and their interrelationships are illustrated later in this chapter. The data for the statements are taken from the summary of NetSolutions' transactions in Exhibit 5.

All financial statements are identified by the name of the business, the title of the

statement, and the date or period of time. The data presented in the income statement,

### **EXHIBIT 7**

Financial Statements

Order Prepared	Financial Statement	Description of Statement
1.	Income statement	A summary of the revenue and expenses for a specific period of time, such as a month or a year.
2.	Statement of owner's equity	A summary of the changes in the owner's equity that have occurred <i>during a specific period of time</i> , such as a month or a year.
3.	Balance sheet	A list of the assets, liabilities, and owner's equity as of a specific date, usually at the close of the last day of a month or a year.
4.	Statement of cash flows	A summary of the cash receipts and cash payments for a specific period of time, such as a month or a year.

the statement of owner's equity, and the statement of cash flows are for a period of time. The data presented in the balance sheet are for a specific date.

### Note

When revenues exceed expenses, it is referred to as net income, net profit, or earnings. When expenses exceed revenues, it is referred to as net loss.

### Link to Twitter

For a recent year, **Twitter** reported net income of \$1.2 billion.

### **Income Statement**

The income statement reports the revenues and expenses for a *period of time*, based on the **matching concept**. This concept is applied by *matching* the expenses incurred during a period with the revenue that those expenses generated. The excess of the revenue over the expenses is called **net income**, **net profit**, or **earnings**. If the expenses exceed the revenue, the excess is a **net loss**.

The revenue and expenses for **NetSolutions** were shown in the accounting equation as separate increases and decreases. Net income for a period increases the owner's equity (capital) for the period. A net loss decreases the owner's equity (capital) for the period.

The revenue, the expenses, and the net income of \$3,050 for NetSolutions are reported in the income statement in Exhibit 8. The order in which the expenses are listed in the income statement varies among businesses. Most businesses list expenses in order of size, beginning with the larger items. Miscellaneous expense is usually shown as the last item, regardless of the amount.

#### **EXAMPLE EXERCISE 1-4 Income Statement OBJ.** 5 The revenues and expenses of Chickadee Travel Service for the year ended December 31, 20Y9, follow: Fees earned \$263,200 Miscellaneous expense 12,950 Office expense 63.000 Wages expense 131,700 Prepare an income statement for the year ended December 31, 20Y9. Follow My Example 1-4 **Chickadee Travel Service Income Statement** For the Year Ended December 31, 20Y9 \$263,200 **Expenses:** \$131,700 Office expense..... 63,000 12,950 Total expenses..... 207,650 \$ 55,550 Net income ...... Practice Exercises: PE 1-4A, PE 1-4B

### **Statement of Owner's Equity**

The statement of owner's equity reports the changes in the owner's equity for a period of time. It is prepared *after* the income statement because the net income or net loss for the period must be reported in this statement. Similarly, it is prepared *before* the balance sheet because the amount of owner's equity at the end of the period must be reported on the balance sheet. As a result, the statement of owner's equity is often viewed as the connecting link between the income statement and balance sheet.

Three types of transactions affected owner's equity of **NetSolutions** during November:

- the original investment of \$25,000,
- the revenue of \$7,500 and expenses of \$4,450 that resulted in net income of \$3,050 for the month, and
- a withdrawal of \$2,000 by the owner.

The preceding information is summarized in the statement of owner's equity in Exhibit 8.

### **EXAMPLE EXERCISE 1-5** Statement of Owner's Equity **OBI. 5** Using the income statement for Chickadee Travel Service shown in Example Exercise 1-4, prepare a statement of owner's equity for the year ended December 31, 20Y9. Adam Cellini, the owner, invested an additional \$50,000 in the business and withdrew cash of \$30,000 for personal use during the year. The capital of Adam Cellini was \$80,000 on January 1, 20Y9. Follow My Example 1-5 **Chickadee Travel Service** Statement of Owner's Equity For the Year Ended December 31, 20Y9 Adam Cellini, capital, January 1, 20Y9..... \$ 80,000 Additional investment by owner during year..... \$ 50,000 Net income for the year ..... 55,550 (30,000)Withdrawals..... Increase in owner's equity..... 75,550 Adam Cellini, capital, December 31, 20Y9..... \$155,550 Practice Exercises: PE 1-5A, PE 1-5B

### **Balance Sheet**

The balance sheet in Exhibit 8 reports the amounts of **NetSolutions**' assets, liabilities, and owner's equity as of November 30, 20Y3. The asset and liability amounts are taken from the last line of the summary of transactions in Exhibit 5. Chris Clark, Capital as of November 30, 20Y3, is taken from the statement of owner's equity. The form of balance sheet shown in Exhibit 8 is called the **account form**. This is because it resembles the basic format of the accounting equation, with assets on the left side and the liabilities and owner's equity sections on the right side.

The Assets section of the balance sheet presents assets in the order that they will be converted into cash or used in operations. Cash is presented first, followed by receivables, supplies, prepaid insurance, and other assets. The assets of a more permanent nature are shown next, such as land, buildings, and equipment.

In the Liabilities section of the balance sheet in Exhibit 8, accounts payable is the only liability. When there are two or more liabilities, each should be listed and the total amount of liabilities presented as follows:

#### Liabilities

\$15,470

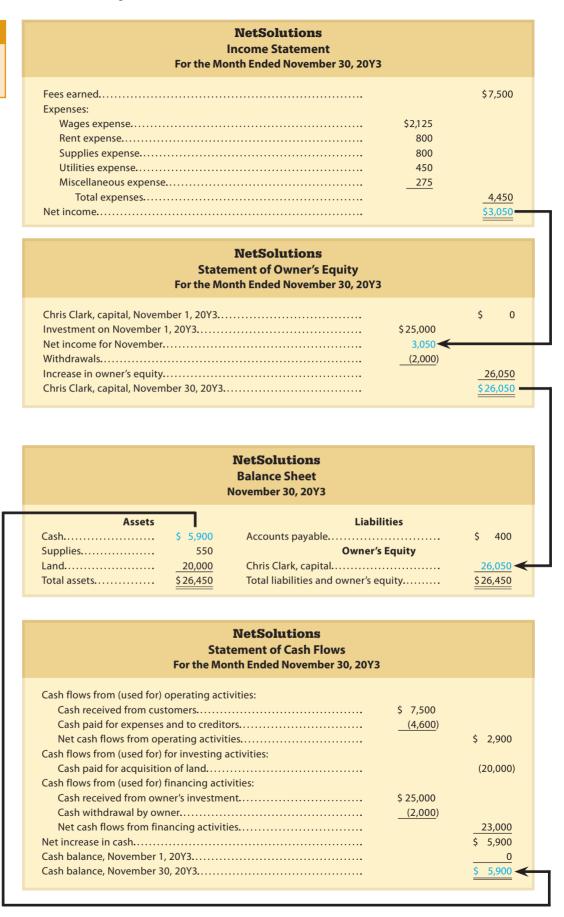


Bank loan officers use a business's

statements in deciding whether to grant a loan to the business. Once the loan is granted, the borrower may be required to maintain a certain level of assets in excess of liabilities. The business's financial statements are used to monitor this level.

### **EXHIBIT 8**

Financial Statements for NetSolutions



The form of balance sheet shown in Exhibit 9 is called the **report form**. It lists the assets, liabilities, and owner's equity in a downward sequence. The report form is the most common form of reporting the balance sheet and for that reason is used in the remainder of this text.

NetSolutions  Balance Sheet  November 30, 20Y3		
Assets		
Cash	\$ 5,900	
Supplies	550	
Land	20,000	
Total assets	\$26,450	
Liabilities		
Accounts payable	\$ 400	
Owner's Equity		
Chris Clark, capital	26,050	
Total liabilities and owner's equity	\$26,450	

### **EXHIBIT 9**

Report Form of Balance Sheet

EXAMPLE EXERCISE I	-6 Balance Sheet OBJ.					
Using the following data for Chickadee Travel Service as well as the statement of owner's equity shown in Example Exercise 1-5, prepare a balance sheet as of December 31, 20Y9.						
	Accounts payable       \$12,200         Accounts receivable       31,350         Cash       53,050         Land       80,000         Supplies       3,350					
Follow My Examp	le 1-6					
	Chickadee Travel Service Balance Sheet December 31, 20Y9					
Accounts r Supplies Land	Assets \$ 53,050 seceivable 31,350 seceivable 33,350 seceivable 30,000 s. \$ 167,750					
Accounts p	Liabilities					
	Owner's Equity           ini, capital.         155,550           ities and owner's equity.         \$167,750					
	Practice Exercises: PE 1-6A, PE 1-6B					

### **Statement of Cash Flows**

The statement of cash flows consists of the following three sections, as shown in Exhibit 8:

- 1. operating activities
- 2. investing activities
- 3. financing activities

Each of these sections is briefly described in this section.

**Cash Flows from (Used for) Operating Activities** This section reports a summary of cash receipts and cash payments from operations. The net cash flows from operating activities normally differs from the amount of net income for the period. In Exhibit 8, **NetSolutions** reported net cash flows from operating activities of \$2,900 and net income of \$3,050. This difference occurs because revenues and expenses may not be recorded at the same time that cash is received from customers or paid to creditors.

**Cash Flows from (Used for) Investing Activities** This section reports the cash transactions for the acquisition and sale of relatively permanent assets such as land, buildings, and equipment. Exhibit 8 reports that **NetSolutions** paid \$20,000 for the purchase of land during November.

**Cash Flows from (Used for) Financing Activities** This section reports the cash transactions related to cash investments by the owner, borrowings, and withdrawals by the owner. Exhibit 8 shows that Chris Clark invested \$25,000 in **NetSolutions** and withdrew \$2,000 during November.

**Preparing NetSolutions' Statement of Cash Flows** Preparing the statement of cash flows requires that each of the November cash transactions for **NetSolutions** be classified as an operating, investing, or financing activity. Using the summary of transactions shown in Exhibit 5, the November cash transactions for NetSolutions are classified as follows:

Transaction	Amount	Cash Flow Activity
a.	\$25,000	Financing (Investment by Chris Clark)
b.	-20,000	Investing (Purchase of land)
d.	7,500	Operating (Fees earned)
e.	-3,650	Operating (Payment of expenses)
f.	-950	Operating (Payment of account payable)
h.	-2,000	Financing (Withdrawal by Chris Clark)

Transactions (c) and (g) are not listed since they did not involve a cash receipt or payment. In addition, the payment of accounts payable in transaction (f) is classified as an operating activity because the account payable arose from the purchase of supplies, which are used in operations. Using the preceding classifications of November cash transactions, the statement of cash flows is prepared as shown in Exhibit 8.<sup>4</sup>

The ending cash balance shown on the statement of cash flows is also reported on the balance sheet as of the end of the period. To illustrate, the ending cash of \$5,900 reported on the November statement of cash flows in Exhibit 8 is also reported as the amount of cash on hand in the November 30, 20Y3, balance sheet.

Since November is NetSolutions' first period of operations, the increase in cash for November and the November 30, 20Y3, cash balance are the same amount, \$5,900, as shown in Exhibit 8. In later periods, NetSolutions will report in its statement of cash flows a beginning cash balance, an increase or a decrease in cash for the period, and an ending cash balance. For example, assume that for December NetSolutions has

### Link to Twitter

For a recent year,

Twitter reported

\$1,340 million of cash inflows from operating activities, \$2,056 million of cash used for investing activities, \$978 million of cash from financing activities, and net increase in cash of \$262 million.

<sup>4</sup> This method of preparing the statement of cash flows is called the "direct method." This method and the indirect method are discussed further in Chapter 16.

a decrease in cash of \$3,835. The last three lines of NetSolutions' statement of cash flows for December would be as follows:

 Net decrease in cash
 \$(3,835)

 Cash balance, December 1, 20Y3
 5,900

 Cash balance, December 31, 20Y3
 \$2,065

EXAMPLE EXERCISE 1-7 Statement of Cash Flows	OBJ.5			
A summary of cash flows for Chickadee Travel Service for the year ended December 31, 20Y9, follows:				
Cash receipts: Cash received from customers. Cash received from additional investment of owner  Cash payments: Cash paid for expenses. Cash paid for land. Cash paid to owner for personal use.  The cash balance as of January 1, 20Y9, was \$72,050. Prepare a statement of cash flows for Chiyear ended December 31, 20Y9.	. 50,000 . 210,000 . 80,000 . 30,000			
Follow My Example 1-7				
Chickadee Travel Service Statement of Cash Flows For the Year Ended December 31, 20Y9				
Cash flows from (used for) operating activities:  Cash received from customers. \$ 251,000 Cash paid for expenses. (210,000 Net cash flows from operating activities Cash flows from (used for) investing activities: Cash payments for purchase of land. Cash flows from (used for) financing activities: Cash received from owner as investment \$ 50,000 Cash withdrawals by owner (30,000 Net cash flows from financing activities. Net decrease in cash Cash balance, January 1, 20Y9 Cash balance, December 31, 20Y9	\$ 41,000 (80,000)			
Practi	ce Exercises: PE 1-7A, PE 1-7B			

## **Interrelationships Among Financial Statements**

Financial statements are prepared in the order of the income statement, statement of owner's equity, balance sheet, and statement of cash flows. This order is important because the financial statements are interrelated. These interrelationships for **NetSolutions** are shown in Exhibit 8 and are described in Exhibit 10.<sup>5</sup>

The preceding interrelationships are important in analyzing financial statements and the impact of transactions on a business. In addition, these interrelationships serve as a check on whether the financial statements are prepared correctly. For example, if the ending cash on the statement of cash flows does not agree with the balance sheet cash, then an error has occurred.

<sup>5</sup> Depending on the method of preparing the Cash Flows from (Used for) Operating Activities section of the statement of cash flows, net income (or net loss) may also appear on the statement of cash flows. This interrelationship or method of preparing the statement of cash flows, called the "indirect method," is described and illustrated in Chapter 16.

### **EXHIBIT 10**

### **Financial Statement Interrelationships**

Financial Statements	Interrelationship	NetSolutions Example (Exhibit 8)
Income Statement <i>and</i> Statement of Owner's Equity	Net income or net loss reported on the income statement is also reported on the statement of owner's equity as either an addition (net income) to or deduction (net loss) from the beginning owner's equity and any additional investments by the owner during the period.	NetSolutions' net income of \$3,050 for November is added to Chris Clark's investment of \$25,000 on the statement of owner's equity.
Statement of Owner's Equity <i>and</i> Balance Sheet	Owner's capital at the end of the period reported on the statement of owner's equity is also reported on the balance sheet as owner's capital.	Chris Clark, Capital of \$26,050 as of November 30, 20Y3, on the statement of owner's equity also appears on the November 30, 20Y3, balance sheet as Chris Clark, Capital.
Balance Sheet <i>and</i> Statement of Cash Flows	The cash reported on the balance sheet is also reported as the end-of-period cash on the statement of cash flows.	Cash of \$5,900 reported on the balance sheet as of November 30, 20Y3, is also reported on the November statement of cash flows as the end-of-period cash.

OBJ. 6 Describe and illustrate the use of the ratio of liabilities to owner's equity in evaluating a company's financial condition.



## Financial Analysis and Interpretation: Ratio of Liabilities to Owner's Equity

The basic financial statements illustrated in this chapter are useful to bankers, creditors, owners, and others in analyzing and interpreting the financial performance and condition of a company. Throughout this text, various tools and techniques that are often used to analyze and interpret a company's financial performance and condition are described and illustrated. The first such tool that is discussed is useful in analyzing the ability of a company to pay its creditors.

The relationship between liabilities and owner's equity, expressed as a ratio of liabilities to owner's equity, is computed as follows:

Ratio of Liabilities to Owner's Equity 
$$= \frac{\text{Total Liabilities}}{\text{Total Owner's Equity (or Total Stockholders' Equity)}}$$

**NetSolutions**' ratio of liabilities to owner's equity at the end of November is 0.015, computed as follows:

Ratio of Liabilities to Owner's Equity 
$$=$$
  $\frac{$400}{$26,050} = 0.015$  (Rounded)

Corporations refer to total owner's equity as total stockholders' equity. Thus, total stockholders' equity is substituted for total owner's equity when computing this ratio.

To illustrate, recent balance sheet data (in millions) for **Alphabet (Google) Inc.** and **Amazon.com, Inc.** follow:

	Recent	Prior
	Year	Year
Alphabet Inc.		
Total liabilities	\$ 55,164	\$ 44,793
Total stockholders' equity	177,628	152,502
Amazon.com, Inc.		
Total liabilities	\$119,099	\$103,601
Total stockholders' equity	43,549	27,709

The ratio of liabilities to stockholders' equity for Alphabet and Amazon.com for a recent year and the prior year is computed as follows:

	Recent	Prior
	Year*	Year*
Alphabet Inc.		
Ratio of liabilities to stockholders' equity	0.31	0.29
	(\$55,164 ÷ \$177,628)	(\$44,793 ÷ \$152,502)
Amazon.com, Inc.		
Ratio of liabilities to stockholders' equity	2.73	3.74
	(\$119,099 ÷ \$43,549)	(\$103,601 ÷ \$27,709)
*Rounded to two decimal places.		

The rights of creditors to a business's assets come before the rights of the owners or stockholders. Thus, the lower the ratio of liabilities to owner's equity, the better able the company is to withstand poor business conditions and to pay its obligations to creditors.

Alphabet is unusual in that it has a very low amount of liabilities. Its ratio of liabilities to stockholders' equity of 0.31 in the recent year and 0.29 in the prior year is low. In contrast, Amazon.com, Inc. has more liabilities; its ratio of liabilities to stockholders' equity is 2.73 in the recent year and 3.74 in the prior year. Because Amazon.com, Inc.'s ratio of liabilities to stockholders' equity decreased, its creditors are less at risk at the end of the recent year. However, Amazon.com, Inc.'s creditors are more at risk than are Alphabet's creditors.

EXAMPLE EXERCISE 1-8 Rati	o of Liabilities to (	Owner's Equity			OBJ. 6	
The following data were taken from	Hawthorne Company's ba	lance sheet:				
		Dec. 31, 20Y5	Dec. 31, 20Y4			
Total liabi	lities	\$120,000	\$105,000			
Total own	er's equity	80,000	75,000			
a. Compute the ratio of liabilities to	o owner's equity.					
b. Has the creditors' risk increased of	or decreased from Decemb	ner 31 20Y4 to December	r 31 20Y57			
b. Has the creditors' risk increased or decreased from December 31, 20Y4, to December 31, 20Y5?						
Follow My Example 1-8						
Follow My Example 1-8						
Follow My Example 1-8	Dec. 31, 20Y5	Dec. 31, 20Y4				
		•				
a.	20Y5	20Y4 ´				
a. Total liabilities	<b>20Y5</b> \$120,000 80,000	<b>20Y4</b> \$105,000				
a.  Total liabilities  Total owner's equity	\$120,000 80,000 uity 1.50	<b>20Y4</b> \$105,000 75,000				
a.  Total liabilities  Total owner's equity  Ratio of liabilities to owner's equ	\$120,000 80,000 uity 1.50	<b>20Y4</b> \$105,000 75,000 1.40				
a.  Total liabilities  Total owner's equity	\$120,000 80,000 uity 1.50	<b>20Y4</b> \$105,000 75,000 1.40				

# At a Glance 1

### **OBJ.** 1

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

**Key Points** A business provides goods or services (outputs) to customers with the objective of earning a profit. Three types of businesses include service, merchandising, and manufacturing businesses.

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

Ethics are moral principles that guide the conduct of individuals. Good ethical conduct depends on individual character and firm culture.

Accountants are engaged in private accounting or public accounting.

Learning Outcomes	Example Exercises	Practice Exercises
<ul> <li>Distinguish among service, merchandising, and manufacturing businesses.</li> </ul>		
• Describe the role of accounting in business and explain why accounting is called the "language of business."		
• Define ethics and list two factors affecting ethical conduct.		
Differentiate between private and public accounting.		

### OBJ. 2

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

**Key Points** Generally accepted accounting principles (GAAP) are used in preparing financial statements. Accounting principles and assumptions develop from research, practice, and pronouncements of authoritative bodies.

The business entity assumption views the business as an entity separate from its owners, creditors, or other businesses. Businesses may be organized as proprietorships, partnerships, corporations, and limited liability companies. The time period concept requires businesses to report their financial condition and results on a regular basis for a specific period of time. The cost concept requires that purchases by a business be recorded in terms of actual cost. The objectivity concept requires that the accounting records and reports be based on unbiased evidence. The unit of measure concept requires that economic data be recorded in dollars.

Learning Outcomes	Example Exercises	Practice Exercises
<ul> <li>Explain what is meant by generally accepted accounting principles.</li> </ul>		
<ul> <li>Describe how generally accepted accounting principles are developed.</li> </ul>		
<ul> <li>Describe and give an example of what is meant by the business entity concept.</li> </ul>		
<ul> <li>Describe the characteristics of a proprietorship, partnership, corporation, and limited liability company.</li> </ul>		
Describe and give an example of the time period concept.		
<ul> <li>Describe and give an example of what is meant by the cost concept.</li> </ul>	EE1-1	PE1-1A, 1-1B
<ul> <li>Describe and give an example of what is meant by the objectivity concept.</li> </ul>		
Describe and give an example of what is meant by the unit of measure concept.		

### **OBJ.3**

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

**Key Points** The resources owned by a business and the rights or claims to these resources may be stated in the form of an equation, as follows: Assets = Liabilities + Owner's Equity

Learning Outcomes	Example Exercises	Practice Exercises
State the accounting equation.		
Define assets, liabilities, and owner's equity.		
<ul> <li>Given two elements of the accounting equation, solve for the third element.</li> </ul>	EE1-2	PE1-2A, 1-2B

### OBJ.4

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

**Key Points** All business transactions can be stated in terms of the change in one or more of the three elements of the accounting equation.

Learning Outcomes	Example Exercises	Practice Exercises
Define a business transaction.		
• Using the accounting equation as a framework, record transactions.	EE1-3	PE1-3A, 1-3B

### **OBJ. 5** Describe the financial statements of a proprietorship and explain how they interrelate.

**Key Points** The primary financial statements of a proprietorship are the income statement, the statement of owner's equity, the balance sheet, and the statement of cash flows. The income statement reports a period's net income or net loss, which is also reported on the statement of owner's equity. The ending owner's capital reported on the statement of owner's equity is also reported on the balance sheet. The ending cash balance is reported on the balance sheet and the statement of cash flows.

Learning Outcomes	Example Exercises	Practice Exercises
• List and describe the financial statements of a proprietorship.		
Prepare an income statement.	EE1-4	PE1-4A, 1-4B
• Prepare a statement of owner's equity.	EE1-5	PE1-5A, 1-5B
Prepare a balance sheet.	EE1-6	PE1-6A, 1-6B
• Prepare a statement of cash flows.	EE1-7	PE1-7A, 1-7B
• Explain how the financial statements of a proprietorship are interrelated.		

### OBJ. 6

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

**Key Points** A ratio useful in analyzing the ability of a business to pay its creditors is the ratio of liabilities to owner's (stockholders') equity. The lower the ratio of liabilities to owner's equity, the better able the company is to withstand poor business conditions and to pay its obligations to creditors.

Learning Outcomes	Example Exercises	Practice Exercises
<ul> <li>Describe the usefulness of the ratio of liabilities to owner's (stockholders') equity.</li> </ul>		
• Compute the ratio of liabilities to owner's (stockholders') equity.	EE1-8	PE1-8A, 1-8B

## **Illustrative Problem**

Cecil Jameson, Attorney-at-Law, is a proprietorship owned and operated by Cecil Jameson. On July 1, 20Y5, the company has the following assets and liabilities: cash, \$1,000; accounts receivable, \$3,200; supplies, \$850; land, \$10,000; accounts payable, \$1,530. Office space and office equipment are currently being rented, pending the construction of an office complex on land purchased last year. Business transactions during July are summarized as follows:

- a. Received cash from clients for services, \$3,928.
- b. Paid creditors on account, \$1,055.
- c. Received cash from Cecil Jameson as an additional investment, \$3,700.
- d. Paid office rent for the month, \$1,200.
- e. Charged clients for legal services on account, \$2,025.
- f. Purchased supplies on account, \$245.
- g. Received cash from clients on account, \$3,000.
- h. Received invoice for paralegal services from Legal Aid Inc. for July (to be paid on August 10), \$1,635.
- i. Paid the following: wages expense, \$850; utilities expense, \$325; answering service expense, \$250; and miscellaneous expense, \$75.
- j. Determined that the cost of supplies on hand was \$980; therefore, the cost of supplies used during the month was \$115.
- k. Jameson withdrew \$1,000 in cash from the business for personal use.

### **Instructions**

- 1. Determine the amount of owner's equity (Cecil Jameson's capital) as of July 1, 20Y5.
- 2. State the assets, liabilities, and owner's equity as of July 1 in equation form similar to that shown in this chapter. In tabular form below the equation, indicate the increases and decreases resulting from each transaction and the new balances after each transaction.
- 3. Prepare an income statement for July, a statement of owner's equity for July, and a balance sheet as of July 31, 20Y5.
- 4. (Optional) Prepare a statement of cash flows for July.

#### Solution

1.

```
Assets – Liabilities = Owner's Equity (Cecil Jameson, capital)  (\$1,000 + \$3,200 + \$850 + \$10,000) - \$1,530 = Owner's Equity (Cecil Jameson, capital) \\ \$15,050 - \$1,530 = Owner's Equity (Cecil Jameson, capital) \\ \$13,520 = Owner's Equity (Cecil Jameson, capital)
```

	Assets		=	Liabiliti	ies +			Owner's Equity				
					Cecil	Cecil				Answering		
	Accts.			Accts.	Jameson,	Jameson, Fees	Paralegal			Service	Supp.	Misc.
Cash +	Rec. +	• •		Pay	+ Capital	<ul> <li>Drawing + Earned</li> </ul>	<ul><li>Exp.</li></ul>	– Exp. – Exp. –	- Exp	- Exp.	– Exp	- Exp.
Bal. 1,000	3,200	850	10,000	1,530	13,520							
a. +3,928						3,928						
Bal. 4,928	3,200	850	10,000	1,530	13,520	3,928						
b. <u>-1,055</u>				<u>-1,055</u>			•					
Bal. 3,873	3,200	850	10,000	475	13,520	3,928						
c. +3,700					+3,700							
Bal. 7,573	3,200	850	10,000	475	17,220	3,928						
d. <u>-1,200</u>								<u>-1,200</u>				
Bal. 6,373	3,200	850	10,000	475	17,220	3,928		-1,200				
e	+ 2,025					+ 2,025						
Bal. 6,373	5,225	850	10,000	475	17,220	5,953		-1,200				
f		+245		+245								
Bal. 6,373	5,225	1,095	10,000	720	17,220	5,953		-1,200				
g. <u>+3,000</u>	_3,000											
Bal. 9,373	2,225	1,095	10,000	720	17,220	5,953		-1,200				
h.				+1,635			-1,635					
Bal. 9,373	2,225	1,095	10,000	2,355	17,220	5,953	-1,635	<del>-1,200</del>				
i1,500								-850	-325	-250		-75
Bal. 7,873	2,225	1,095	10,000	2,355	17,220	5,953	-1,635	-1,200 <del>-850</del>	<del>-325</del>	<del>-250</del>		<del>-75</del>
j.		-115									<u>-115</u>	
Bal. 7,873	2,225	980	10,000	2,355	17,220	5,953	-1,635	-1,200 <del>-</del> 850	<del>-325</del>	-250	<del>-115</del>	<del>-75</del>
k1,000						-1,000						
Bal. 6,873	2,225	980	10,000	2,355	17,220	-1,000 5,953	-1,635	<del>-1,200</del> <del>-850</del>	<del>-325</del>	-250	<u>-115</u>	<del>-75</del>

3.

<b>Cecil Jameson, Attorney-at-Law</b> Income Statement For the Month Ended July 31, 20Y5				
Fees earned		\$5,953		
Paralegal expense	\$1,635			
Rent expense	1,200			
Wages expense	850			
Utilities expense	325			
Answering service expense	250			
Supplies expense	115			
Miscellaneous expense	75			
Total expenses		4,450		
Net income		\$1,503		

<b>Cecil Jameson, Attorney-at-Law</b> Statement of Owner's Equity For the Month Ended July 31, 20Y5		
Cecil Jameson, capital, July 1, 20Y5 Additional investment by owner Net income for the month Withdrawals	\$ 3,700 1,503 (1,000)	\$13,520
Increase in owner's equity  Cecil Jameson, capital, July 31, 20Y5		4,203 \$17,723

(Continued)

<b>Cecil Jameson, Attorney-at-Law</b> Balance Sheet  July 31, 20Y5			
Assets			
Cash	\$ 6,873		
Accounts receivable	2,225		
Supplies	980		
Land	10,000		
Total assets	\$20,078		
Liabilities			
Accounts payable	\$ 2,355		
Owner's Equity			
Cecil Jameson, capital	17,723		
Total liabilities and owner's equity	\$20,078		

### 4. (Optional)

<b>Cecil Jameson, Attorney-at-Law</b> Statement of Cash Flows For the Month Ended July 31, 20Y5		
Cash flows from (used for) operating activities:  Cash received from customers  Cash paid for operating expenses  Net cash flows from operating activities  Cash flows from (used for) investing activities  Cash flows from (used for) financing activities:	\$ 6,928* _(3,755)**	\$ 3,173 —
Cash received from owner as investment Cash withdrawal by owner. Net cash flows from financing activities. Net increase in cash Cash balance, July 1, 20Y5 Cash balance, July 31, 20Y5.	\$ 3,700 _(1,000)	2,700 \$ 5,873 1,000 \$ 6,873
* $\$6,928 = \$3,928 + \$3,000$ (from Cash column in Part 2) ** $\$3,755 = \$1,055 + \$1,200 + \$1,500$ (from Cash column in Part 2)		

## **Key Terms**

account form (21)
account payable (16)
account receivable (17)
accounting (6)
accounting equation (14)
Accounting Standards
Codification (11)
Accounting Standards Updates (11)
assets (13)
balance sheet (20)
business (5)
business entity concept (11)

business transaction (15)
Certified Public Accountant (CPA) (10)
corporation (12)
cost concept (13)
earnings (20)
ethics (7)
expenses (17)
fees earned (16)
financial accounting (6)
Financial Accounting
Standards Board (FASB) (11)
financial statements (19)

fiscal year (12)
generally accepted accounting
principles (GAAP) (10)
general-purpose financial
statements (6)
income statement (20)
interest revenue (16)
International Accounting
Standards Board (IASB) (11)
liabilities (13)
limited liability
company (LLC) (11)

management (or managerial)
accounting (6)
manufacturing business (6)
matching concept (20)
merchandising business (6)
natural business year (12)
net income (or net profit) (20)
net loss (20)
objectivity concept (13)
owner's equity (13)
partnership (12)

prepaid expenses (16)
private accounting (6)
profit (5)
proprietorship (12)
public accounting (10)
Public Company Accounting
Oversight Board (PCAOB) (8)
ratio of liabilities to owner's
(stockholders') equity (26)
rent revenue (16)
report form (23)

revenue (16)
sales (16)
Sarbanes-Oxley Act (SOX) (8)
Securities and Exchange
Commission (SEC) (11)
service business (5)
statement of cash flows (20)
statement of owner's equity (20)
stockholders' equity (13)
time period concept (12)
unit of measure concept (13)

## **Discussion Questions**

- 1. Name some users of accounting information.
- 2. What is the role of accounting in business?
- Why are most large companies like **Microsoft**, **PepsiCo**, **Caterpillar**, and **AutoZone** organized as corporations?
- 4. Josh Reilly is the owner of Dispatch Delivery Service. Recently, Josh paid interest of \$4,500 on a personal loan of \$75,000 that he used to begin the business. Should Dispatch Delivery Service record the interest payment? Explain.
- 5. On July 12, Reliable Repair Service extended an offer of \$150,000 for land that had been priced for sale at \$185,000. On September 3, Reliable Repair Service accepted the seller's counteroffer of \$167,500. Describe how Reliable Repair Service should record the land.
- 6. a. Land with an assessed value of \$750,000 for property tax purposes is acquired by a business for \$900,000. Ten years later, the plot of land has an assessed value of \$1,200,000 and the business receives an offer of \$2,000,000 for

- it. Should the monetary amount assigned to the land in the business records now be increased?
- b. Assuming that the land acquired in (a) was sold for \$2,125,000, how would the various elements of the accounting equation be affected?
- 7. Describe the difference between an account receivable and an account payable.
- 8. A business had revenues of \$679,000 and operating expenses of \$588,000. Did the business (a) incur a net loss or (b) realize net income?
- 9. A business had revenues of \$640,000 and operating expenses of \$715,000. Did the business (a) incur a net loss or (b) realize net income?
- 10. The financial statements are interrelated. (a) What item of financial or operating data appears on both the income statement and the statement of owner's equity? (b) What item appears on both the balance sheet and the statement of owner's equity? (c) What item appears on both the balance sheet and the statement of cash flows?

## **Practice Exercises**

#### **Example Exercises**



### PE 1-1A Cost concept

OBJ. 2

On February 3, Boulder Repair Service extended an offer of \$566,000 for land that had been priced for sale at \$629,000. On February 28, Boulder Repair Service accepted the seller's counteroffer of \$597,000. On October 23, the land was assessed at a value of \$613,000 for property tax purposes. On January 15 of the next year, Boulder Repair Service was offered \$708,000 for the land by a national retail chain. At what value should the land be recorded in Boulder Repair Service's records?



### PE 1-1B Cost concept

OBJ. 2

On March 31, Clementine Repair Service extended an offer of \$350,500 for land that had been priced for sale at \$388,500. On April 15, Clementine Repair Service accepted the seller's counteroffer of \$369,500. On September 9, the land was assessed at a value

(Continued)

of \$316,700 for property tax purposes. On December 8, Clementine Repair Service was offered \$401,200 for the land by a national retail chain. At what value should the land be recorded in Clementine Repair Service's records?



#### PE 1-2A Accounting equation **EE 1-2** p. 14

Patrick Miller is the owner and operator of Chicopee LLC, a motivational consulting business. At the end of its accounting period, December 31, 20Y8, Chicopee has assets of \$518,000 and liabilities of \$165,000. Using the accounting equation, determine the following amounts:

- a. Owner's equity as of December 31, 20Y8.
- b. Owner's equity as of December 31, 20Y9, assuming that assets increased by \$86,200 and liabilities increased by \$25,000 during 20Y9.



### PE 1-2B Accounting equation

OBJ. 3

Pauline Emm is the owner and operator of Power Thoughts, a motivational consulting business. At the end of its accounting period, December 31, 20Y8, Power Thoughts has assets of \$382,000 and liabilities of \$94,000. Using the accounting equation, determine the following amounts:

- a. Owner's equity as of December 31, 20Y8.
- b. Owner's equity as of December 31, 20Y9, assuming that assets decreased by \$63,000 and liabilities increased by \$35,000 during 20Y9.



### EE 1-3 p. 19 PE 1-3A Transactions

OBJ. 4

Peachtree Delivery Service is owned and operated by Terry Young. The following selected transactions were completed by Peachtree Delivery Service during February:

- 1. Received cash from owner as additional investment, \$65,200.
- 2. Billed customers for delivery services on account, \$22,400.
- 3. Paid creditors on account, \$4,100.
- 4. Received cash from customers on account, \$14,700.
- 5. Paid cash to owner for personal use, \$1,600.

Indicate the effect of each transaction on the accounting equation elements (Assets, Liabilities, and Owner's Equity). Also indicate the specific item within the accounting equation element that is affected. To illustrate, the answer to (1) follows:

(1) Asset (Cash) increases by \$65,200; Owner's Equity (Terry Young, Capital) increases by \$65,200.



### EE 1-3 p. 19 PE 1-3B Transactions

Cross Country Delivery Service is owned and operated by Pedro Gonzalez. The following selected transactions were completed by Cross Country Delivery Service during May:

- 1. Received cash from owner as additional investment, \$25,050.
- 2. Paid advertising expense, \$6,750.
- 3. Purchased supplies on account, \$2,920.
- 4. Billed customers for delivery services on account, \$20,460.
- 5. Received cash from customers on account, \$11,410.

Indicate the effect of each transaction on the accounting equation elements (Assets, Liabilities, and Owner's Equity). Also indicate the specific item within the accounting equation element that is affected. To illustrate, the answer to (1) follows:

(1) Asset (Cash) increases by \$25,050; Owner's Equity (Pedro Gonzalez, Capital) increases by \$25,050.



### EE 1-4 p. 20 PE 1-4A Income statement

OBJ. 5

The revenues and expenses of Up-in-the-Air Travel Service for the year ended April 30, 20Y7, follow:

Fees earned	\$1,870,000
Office expense	343,000
Miscellaneous expense	21,000
Wages expense	1,115,000

Prepare an income statement for the year ended April 30, 20Y7.



### EE 1-4 p. 20 PE 1-4B Income statement

OBJ. 5

The revenues and expenses of Zenith Travel Service for the year ended August 31, 20Y4, follow:

Fees earned	\$899,600
Office expense	353,800
Miscellaneous expense	14,400
Wages expense	539,800

Prepare an income statement for the year ended August 31, 20Y4.



### EE 1-5 p. 21 PE 1-5A Statement of owner's equity

OBJ. 5

Using the income statement for Up-in-the-Air Travel Service shown in Practice Exercise 1-4A, prepare a statement of owner's equity for the year ended April 30, 20Y7. Jerome Foley, the owner, invested an additional \$52,000 in the business during the year and withdrew cash of \$34,000 for personal use. Jerome Foley, capital as of May 1, 20Y6, was \$876,000.



### EE 1-5 p. 21 PE 1-5B Statement of owner's equity

OBJ. 5

Using the income statement for Zenith Travel Service shown in Practice Exercise 1-4B, prepare a statement of owner's equity for the year ended August 31, 20Y4. Megan Cox, the owner, invested an additional \$43,200 in the business during the year and withdrew cash of \$21,600 for personal use. Megan Cox, capital as of September 1, 20Y3, was \$456,000.



### EE 1-6 p. 23 PE 1-6A Balance sheet

OBJ. 5

Using the following data for Up-in-the-Air Travel Service as well as the statement of own-er's equity shown in Practice Exercise 1-5A, prepare a report form balance sheet as of April 30, 20Y7:

Accounts payable	\$ 90,000
Accounts receivable	417,000
Cash	170,000
Land	772,000
Supplies	16,000



### EE 1-6 p. 23 PE 1-6B Balance sheet

OBJ. 5

Using the following data for Zenith Travel Service as well as the statement of owner's equity shown in Practice Exercise 1-5B, prepare a report form balance sheet as of August 31, 20Y4:

Accounts payable	\$ 53,500
Accounts receivable	90,600
Cash	54,500
Land	372,000
Supplies	5 600



### EE 1-7 p. 25 PE 1-7A Statement of cash flows

OBJ. 5

A summary of cash flows for Up-in-the-Air Travel Service for the year ended April 30, 20Y7, follows:

Cash receipts:

Cash received from customers	\$1,803,000
Cash received from additional investment of owner	52,000
Cash payments:	
Cash paid for operating expenses	1,479,000
Cash paid for land	347,000
Cash paid to owner for personal use	34,000

The cash balance as of May 1, 20Y6, was \$175,000.

Prepare a statement of cash flows for Up-in-the-Air Travel Service for the year ended April 30, 20Y7.



#### EE 1-7 p. 25 PE 1-7B Statement of cash flows

OBJ. 5

A summary of cash flows for Zenith Travel Service for the year ended August 31, 20Y4, follows:

Cash receipts:

Cash received from customers	\$881,000
Cash received from additional investment of owner	43,200
Cash payments:	
Cash paid for operating expenses	895,000
Cash paid for land	60,000
Cash paid to owner for personal use	21,600

The cash balance as of September 1, 20Y3, was \$106,900.

Prepare a statement of cash flows for Zenith Travel Service for the year ended August 31, 20Y4.



### EE 1-8 p. 27 PE 1-8A Ratio of liabilities to owner's equity

**OBJ. 6** 

The following data were taken from Nakajima Company's balance sheet:



	Dec. 31, 20Y6	Dec. 31, 20Y5
Total liabilities	\$598,000	\$569,900
Total owner's equity	460,000	410,000

- a. Compute the ratio of liabilities to owner's equity.
- b. Has the creditor's risk increased or decreased from December 31, 20Y5, to December 31, 20Y6?



### EE 1-8 p. 27 PE 1-8B Ratio of liabilities to owner's equity

OBJ. 6

The following data were taken from McClean Company's balance sheet:



	Dec. 31, 20Y6	Dec. 31, 20Y5
Total liabilities	\$4,042,000	\$3,096,000
Total owner's equity	4,300,000	3,600,000

- a. Compute the ratio of liabilities to owner's equity.
- b. Has the creditor's risk increased or decreased from December 31, 20Y5, to December 31, 20Y6?

### **Exercises**



#### EX 1-1 Types of businesses

OBJ. 1

The following is a list of well-known companies:

- Alcoa Inc.
   Boeing
   Gap Inc.
- 3. Caterpillar 11. H&R Block
- 4. Citigroup Inc. 12. Hilton Hospitality, Inc.
- 5. CVS 13. Procter & Gamble
- 6. Delta Air Lines 14. SunTrust
- 7. eBay Inc. 15. Wal-Mart Stores, Inc.
- a. Indicate whether each of these companies is primarily a service, merchandise, or manufacturing business. If you are unfamiliar with the company, use the Internet to locate the company's home page or use the finance website of **Yahoo** (finance.yahoo.com).
- b. For which of the preceding companies is the accounting equation relevant?



#### EX 1-2 Professional ethics

8. FedEx

OBJ. 1

A fertilizer manufacturing company wants to relocate to Lakeside County. A report from a fired researcher at the company indicates the company's product is releasing toxic by-products. The company suppressed that report. A later report commissioned by the company shows there is no problem with the fertilizer.

Should the company's chief executive officer reveal the content of the unfavorable report in discussions with Lakeside County representatives? Discuss.

### **EX 1-3** Business entity assumption

OBJ. 2

Big Sky Sports sells hunting and fishing equipment and provides guided hunting and fishing trips. Big Sky Sports is owned and operated by Joe Flannery, a well-known sports enthusiast and hunter. Joe's wife, Pam, owns and operates Glacier Boutique, a women's clothing store. Joe and Pam have established a trust fund to finance their children's college education. The trust fund is maintained by Kalispell State Bank in the name of the children, Trey and Brooke.

a. For each of the following transactions, identify which of the entities listed should record the transaction in its records:

Entities	
G	Glacier Boutique
K	Kalispell State Bank
В	Big Sky Sports
Χ	None of the above

- 1. Pam deposited a \$2,000 personal check in the trust fund at Kalispell State Bank.
- 2. Pam purchased two dozen spring dresses from a Spokane designer for a special spring sale.
- 3. Joe paid a breeder's fee for an English Springer Spaniel to be used as a hunting guide dog.
- 4. Pam authorized the trust fund to purchase mutual fund shares.
- 5. Joe paid a local doctor for his annual physical, which was required by the workmen's compensation insurance policy carried by Big Sky Sports.
- 6. Received a cash advance from customers for a guided hunting trip.
- 7. Pam paid her dues to the YWCA.
- 8. Pam donated several dresses from inventory for a local charity auction for the benefit of a women's abuse shelter.

(Continued)