

Accounting and the Business Environment

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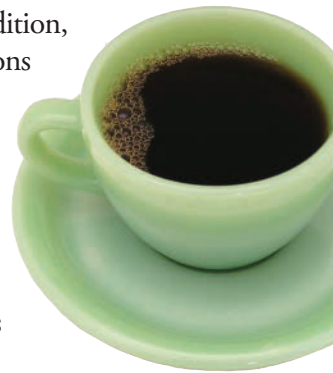
Coffee, Anyone?

Aiden Jackson stared at the list the banker had given him during their meeting. *Business plan, cash flow projections, financial statements, tax returns.* Aiden had visited with the banker because he had a dream of opening a coffee shop near campus. He knew there was a need; students were always looking for a place to study and visit with their friends. He also had the experience. He had worked for the past three years as a manager of a coffee shop in a neighboring town. Aiden needed one thing, though—money. He had saved a small amount of money from his job and received several contributions from family and friends, but he still didn't have enough to open the business. He had decided the best option was to get a loan from

his bank. After the meeting, Aiden felt overwhelmed and unsure of the future of his business.

You might think that Aiden was facing an impossible situation, but you'd be wrong. Almost every new business faces a similar situation. The owner starts with an inspiration, and then he or she needs to provide enough continuous cash flow to build the business. In addition, the owner has to make decisions such as: *Should we expand to another location? Do we have enough money to purchase a new coffee roaster? How do I know if the business made a profit?*

So how does Aiden get started? Keep reading. That's what accounting teaches you.



Why Study Accounting?

The situation that Aiden faced is similar to the situations faced in the founding of most businesses. **Starbucks Corporation**, for example, first opened its doors in Seattle, Washington, in 1971. Three partners, Jerry Baldwin, Zev Siegl, and Gordon Bowker, were inspired by a dream of selling high-quality coffee. We know their dream was successful because Starbucks currently has more than 19,000 stores in 60 countries. How did Starbucks grow from a small one-store shop to what it is today? The partners understood accounting—the language of business. They understood how to measure the activities of the business, process that information into reports (financial statements), and then use those reports to make business decisions. Your knowledge of accounting will help you better understand businesses. It will make you a better business owner, employee, or investor.





Chapter 1 Learning Objectives



- 1 Explain why accounting is important and list the users of accounting information
- 2 Describe the organizations and rules that govern accounting
- 3 Describe the accounting equation and define assets, liabilities, and equity
- 4 Use the accounting equation to analyze transactions
- 5 Prepare financial statements
- 6 Use financial statements and return on assets (ROA) to evaluate business performance

WHY IS ACCOUNTING IMPORTANT?

Learning Objective 1

Explain why accounting is important and list the users of accounting information

Accounting

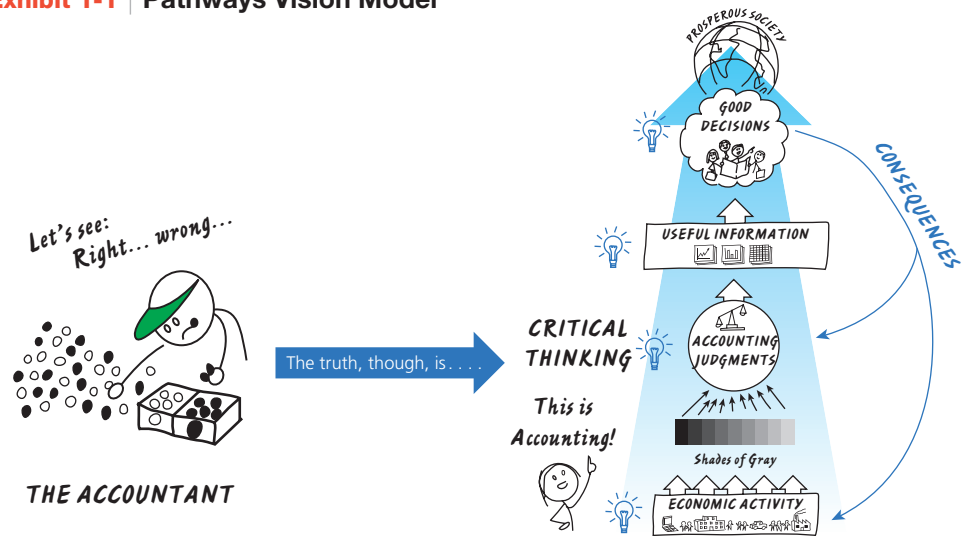
The information system that measures business activities, processes the information into reports, and communicates the results to decision makers.

You've heard the term *accounting*, but what exactly is it? **Accounting** is the information system that measures business activities, processes the information into reports, and communicates the results to decision makers. Accounting is the language of business. The better you understand the language of business, the better you can manage your own business, be a valuable employee, or make wise investments.

We tend to think of accountants as boring and dry. However, accounting is much more than simple recordkeeping or bookkeeping. Today's accountants participate in a broad range of activities such as the investigation of financial evidence, the development of computer programs to process accounting information, and the communication of financial results to interested parties. The knowledge of accounting is used every day to help make business decisions.

Recently, leaders from across the accounting community, called the Pathways Commission, came together to create a vision model (see Exhibit 1-1) to help students and

Exhibit 1-1 Pathways Vision Model



We tend to think of accountants as boring and dry.

Accountants are instrumental in helping to create a prosperous society.




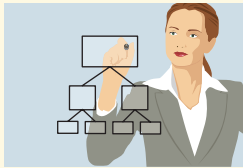
the public understand what accounting is. The model is intended to explain in a visual way what accountants really do. Accounting starts with economic activities that accountants review and evaluate using critical thinking and judgment to create useful information that helps individuals make good decisions. The model emphasizes that good decisions have an impact on accounting judgments and economic activity, thus creating a circular flow of cause and effect. Accountants are more than boring, tedious number crunchers. Instead, accountants play a critical role in supporting a prosperous society.

Decision Makers: The Users of Accounting Information

We can divide accounting into two major fields: financial accounting and managerial accounting. **Financial accounting** provides information for external decision makers, such as outside investors, lenders, customers, and the federal government. **Managerial accounting** focuses on information for internal decision makers, such as the company's managers and employees.

Exhibit 1-2 illustrates the difference between financial accounting and managerial accounting. Regardless of whether they are external or internal to the company, all decision makers need information to make the best choices. The bigger the decision, the more information decision makers need. Let's look at some ways in which various people use accounting information to make important decisions.

Exhibit 1-2 | Decision Making: Financial Versus Managerial Accounting

Financial Accounting	Managerial Accounting
	
External Decision Makers: Should I invest in the business? Is the business profitable? Should we lend money to the business? Can the business pay us back?	Internal Decision Makers: How much money should the business budget for production? Should the business expand to a new location? How do actual costs compare to budgeted costs?

Individuals

How much cash do you have? How much do you need to save each month to retire at a certain age or pay for your children's college education? Accounting can help you answer questions like these. By using accounting information, you can manage your money, evaluate a new job, and better decide whether you can afford to buy a new computer. Businesses need accounting information to make similar decisions.

Businesses

Business owners use accounting information to set goals, measure progress toward those goals, and make adjustments when needed. The financial statements give owners the information they need to help make those decisions. Financial statements are helpful when, for example, a business owner wants to know whether his or her business has enough cash to purchase another computer.

Financial Accounting

The field of accounting that focuses on providing information for external decision makers.

Managerial Accounting

The field of accounting that focuses on providing information for internal decision makers.



Accounting is alive! As businesses evolve and the type of business transactions change, so must the language of business. The most significant changes in the business world in the last decade have been the huge increases in international commerce. Because more business is conducted internationally, decision makers are looking for an international accounting language.

Look for more information about International Financial Reporting Standards (IFRS) anywhere that you see this image.



Investors

Outside investors who have some ownership interest often provide the money to get a business going. Suppose you're considering investing in a business. How would you decide whether it is a good investment? In making this decision, you might try to predict the amount of income you would earn on the investment. Also, after making an investment, investors can use a company's financial statements to analyze how their investment is performing.

You might have the opportunity to invest in the stock market through your company's retirement plan. Which investments should you pick? Understanding a company's financial statements will help you decide. You can view the financial statements of large companies that report to the SEC by logging on to <http://www.finance.yahoo.com>, <http://www.google.com/finance>, or the Security and Exchange Commission's EDGAR database (<http://www.sec.gov/edgar.shtml>).

Creditors

Any person or business to whom a business owes money is a **creditor**. Before extending credit to a business, a creditor evaluates the company's ability to make the payments by reviewing its financial statements. Creditors follow the same process when you need to borrow money for a new car or a house. The creditor reviews accounting data to determine your ability to make the loan payments. What does your financial position tell the creditor about your ability to pay the loan? Are you a good risk for the bank?

Taxing Authorities

Local, state, and federal governments levy taxes. Income tax is calculated using accounting information. Good accounting records can help individuals and businesses take advantage of lawful deductions. Without good records, the IRS can disallow tax deductions, resulting in a higher tax bill plus interest and penalties.

The Accounting Profession

What do businesses such as Amazon.com, Walmart, or even your local sandwich shop across from campus have in common? They all need accountants! That is why a degree in accounting opens so many doors upon graduation.

You've probably heard of a CPA before. **Certified Public Accountants**, or **CPAs**, are licensed professional accountants who serve the general public. CPAs work for public accounting firms, businesses, government entities, or educational institutions. What does it take to be a CPA? Although requirements vary between states, to be certified in a profession, one must meet the educational and/or experience requirements *and* pass a qualifying exam. **The American Institute of Certified Public Accountants (AICPA) Web site (<http://www.thiswaytocpa.com>) contains a wealth of information about becoming a CPA, career opportunities, and exam requirements.**

Certified Management Accountants, or **CMAs**, are certified professionals who specialize in accounting and financial management knowledge. Generally, CMAs work for a single company. **You can find information about becoming a CMA, how a CMA differs from a CPA, and why employers are recognizing the CMA certification on the Institute of Management Accountants (IMA) Web site (<http://www.imanet.org>).** It's worth spending the time and energy for accountants to get certified—certified accountants generally make 10–15% more than their noncertified colleagues when they enter the workforce.

Studying accounting and becoming certified professionally can lead to a financially secure job. According to Robert Half's *2014 Salary Guide*, the top positions in demand that rely on accounting skills are controllers, financial analysts, tax accountants, auditors, cost accountants, and business systems analysts. How much do these types of accountants make? Exhibit 1-3 provides a snapshot of the earning potential for key positions.

Creditor

Any person or business to whom a business owes money.

Certified Public Accountants (CPAs)

Licensed professional accountants who serve the general public.

What if I want more information about becoming a CPA or CMA?

Certified Management Accountants (CMAs)

Certified professionals who specialize in accounting and financial management knowledge. They typically work for a single company.


Exhibit 1-3 | Comparison of Accounting Positions

Position	Job Description	Salary Range
Controllers	Compile financial statements, interact with auditors, and oversee regulatory reporting.	\$89,000–\$216,000
Financial analysts	Review financial data and help to explain the story behind the numbers.	\$41,250–\$125,000
Business systems analysts	Use accounting knowledge to create computer systems.	\$44,250–\$107,250
Tax accountants	Help companies navigate tax laws.	\$44,000–\$190,750
Auditors	Perform reviews of companies to ensure compliance to rules and regulations.	\$44,500–\$184,750
Cost accountants	Typically work in a manufacturing business. Help analyze accounting data.	\$43,000–\$113,000
Paraprofessional/Bookkeeper	Record financial transactions and help prepare financial records.	\$39,750–\$59,250

Accountants generally work either in public, private, or governmental accounting. Public accounting involves services such as auditing and tax preparation. Well-known public accounting firms include Ernst & Young, Deloitte, PwC, and KPMG. Private accounting involves working for a single company such as Amazon.com, Walmart, or Dell. Other accountants work for the federal or state governments. Wherever accountants work, demand for their services is high. According to the U.S. Bureau of Labor Statistics, employment of accountants and auditors is expected to grow 13% from 2012–2022.



Recently, the AICPA added a certification program in international accounting for those CPAs who want to specialize in global commerce.

Try It!

Match the accounting terminology to the definitions.

- | | |
|-------------------------------------|---|
| 1. Certified management accountants | a. the information system that measures business activities, processes that information into reports, and communicates the results to decision makers |
| 2. Accounting | b. licensed professional accountants who serve the general public |
| 3. Managerial accounting | c. any person or business to whom a business owes money |
| 4. Certified public accountants | d. the field of accounting that focuses on providing information for internal decision makers |
| 5. Financial accounting | e. certified professionals who work for a single company |
| 6. Creditor | f. the field of accounting that focuses on providing information for external decision makers |

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S1-1. **MyAccountingLab**



Learning Objective 2

Describe the organizations and rules that govern accounting

Financial Accounting Standards Board (FASB)

The private organization that oversees the creation and governance of accounting standards in the United States.

Securities and Exchange Commission (SEC)

U.S. governmental agency that oversees the U.S. financial markets.

Generally Accepted Accounting Principles (GAAP)

Accounting guidelines, currently formulated by the *Financial Accounting Standards Board (FASB)*; the main U.S. accounting rule book.

Economic Entity Assumption

An organization that stands apart as a separate economic unit.

WHAT ARE THE ORGANIZATIONS AND RULES THAT GOVERN ACCOUNTING?

All professions have regulations. Let's look at the organizations and rules that govern the accounting profession.

Governing Organizations

In the United States, the **Financial Accounting Standards Board (FASB)**, a privately funded organization, oversees the creation and governance of accounting standards. The FASB works with governmental regulatory agencies like the **Securities and Exchange Commission (SEC)**. The SEC is the U.S. governmental agency that oversees the U.S. financial markets. It also oversees those organizations that set standards (like the FASB). The FASB also works with congressionally created groups like the Public Company Accounting Oversight Board (PCAOB) and private groups like the AICPA, IMA, and International Accounting Standards Board (IASB).

Generally Accepted Accounting Principles

The guidelines for accounting information are called **Generally Accepted Accounting Principles (GAAP)**. GAAP is the main U.S. accounting rule book and is currently created and governed by the FASB. In order to use and prepare financial statements, it's important that we understand GAAP. GAAP rests on a conceptual framework that identifies the objectives, characteristics, elements, and implementation of financial statements and creates the acceptable accounting practices. The primary objective of financial reporting is to provide information useful for making investment and lending decisions. To be useful, information must be relevant and have faithful representation.¹ Relevant information allows users of the information to make a decision. Information that is faithfully representative is complete, neutral, and free from error. These basic accounting assumptions and principles are part of the foundation for the financial reports that companies present.

The Economic Entity Assumption

The most basic concept in accounting is that of the **economic entity assumption**. An economic (business) entity is an organization that stands apart as a separate economic unit. We draw boundaries around each entity to keep its affairs distinct from those of other entities. An entity refers to one business, separate from its owners.

A business can be organized as a sole proprietorship, partnership, corporation, or limited-liability company (LLC). Exhibit 1-4 summarizes the similarities and differences among the four types of business organizations.

Distinguishing Characteristics and Organization of a Corporation

In this book, we spend most of our time studying accounting for corporations. There are several features that distinguish a corporation from other types of business organizations. Let's look at them now.

Separate Legal Entity A corporation is a business entity formed under state law. The state grants a charter (also called *articles of incorporation*), which is the document that gives

¹ This wording was changed from relevant and reliable by the *Statement of Financial Accounting Concepts No. 8*.


Exhibit 1-4 | Business Organizations

	Sole Proprietorship	Partnership	Corporation	Limited-Liability Company (LLC)
Definition	A business with a single owner	A business with two or more owners and not organized as a corporation	A business organized under state law that is a separate legal entity	A company in which each member is only liable for his or her own actions
Number of owners	One (called the proprietor)	Two or more (called partners)	One or more (called stockholders)	One or more (called members or partners)
Life of the organization	Terminates at owner's choice or death	Terminates at a partner's choice or death	Indefinite	Indefinite
Personal liability of the owner(s) for the business's debts	Owner is personally liable	Partners are personally liable	Stockholders are not personally liable	Members are not personally liable
Taxation	Not separate taxable entities. The owner pays tax on the proprietorship's earnings.	Partnership is not taxed. Instead partners pay tax on their share of the earnings.	Separate taxable entity. Corporation pays tax.	LLC is not taxed. Instead members pay tax on their share of earnings.
Type of business	Small businesses	Professional organizations of physicians, attorneys, and accountants	Large multinational businesses	An alternative to the partnership

the state's permission to form a corporation. This is called authorization because the state "authorizes" or approves the establishment of the corporate entity.

A corporation is a distinct entity from a legal perspective. It is an entity that exists apart from its owners, who are called the **stockholders** or *shareholders*. However, the corporation has many of the rights that a person has. For example, a corporation may buy, own, and sell property; enter into contracts; sue; and be sued. Items that the business owns (its assets) and those items that the business has to pay later (its liabilities) belong to the corporation and not to the individual stockholders.

The ownership interest of a corporation is divided into shares of stock. A person becomes a stockholder by purchasing the stock of the corporation. The corporate charter specifies how much stock the corporation is authorized to issue (sell) to the public. Due to this fact, it is usually easier for corporations to raise capital.

Continuous Life and Transferability of Ownership Stockholders may transfer stock as they wish—by selling or trading the stock to another person, giving the stock away, bequeathing it in a will, or disposing of the stock in any other way. Because corporations have continuous lives regardless of changes in the ownership of their stock, the transfer of the stock has no effect on the continuity of the corporation. Sole proprietorships and partnerships, in contrast, end when their ownership changes for any reason. A corporation's life is not dependent on a specific individual's ownership.

No Mutual Agency No mutual agency means that the stockholder of a corporation cannot commit the corporation to a contract unless that stockholder is acting in a different role, such as an officer in the business. Mutual agency of the owners is not present in a corporation as it is in a partnership.

Sole Proprietorship

A business with a single owner.

Partnership

A business with two or more owners and not organized as a corporation.

Corporation

A business organized under state law that is a separate legal entity.

Limited-Liability Company (LLC)

A company in which each member is only liable for his or her own actions.

Stockholder

A person who owns stock in a corporation.



Limited Liability of Stockholders A stockholder has limited liability for the corporation's debts. The most that stockholders can lose is the amount they originally paid for the stock. (Depending on state law, this limited liability would also apply to a limited-liability company member; however, conversely, sole proprietors and partners are personally liable for the debts of their businesses.)

The combination of limited liability and no mutual agency means that persons can invest unlimited amounts in a corporation with only the fear of losing whatever amount the individual has invested if the business fails. This attractive feature enables a corporation to raise more money than proprietorships and partnerships.

Separation of Ownership and Management Stockholders own the business, but a board of directors—elected by the stockholders—appoints corporate officers to manage the business. Thus, stockholders do not have to disrupt their personal affairs to manage the business.

This separation between stockholders (owners of the corporation) and management may create problems. Corporate officers may decide to run the business for their own benefit rather than for the benefit of the company. Stockholders may find it difficult to lodge an effective protest against management because of the distance between them and the top managers.

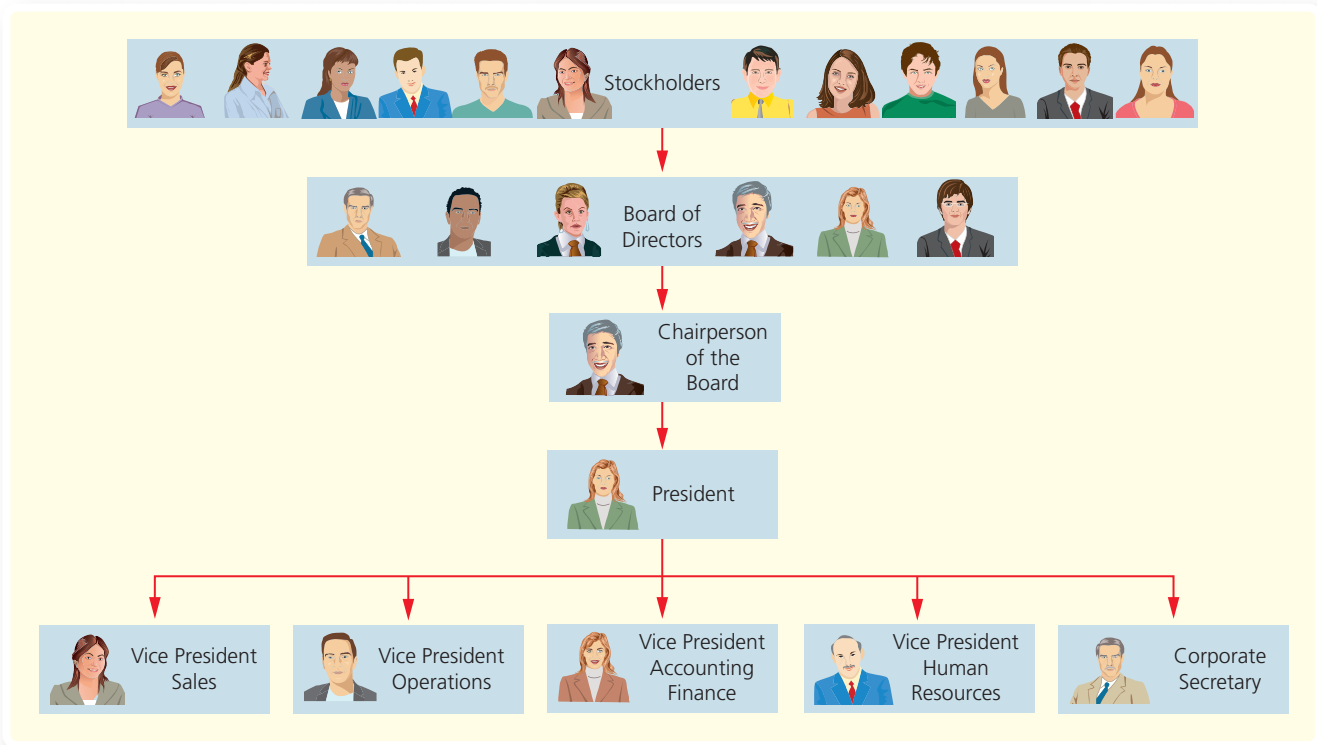
Corporate Taxation Corporations are separate taxable entities. They pay a variety of taxes not paid by sole proprietorships or partnerships. Depending on the state in which the organization incorporated and the state(s) in which the corporation operates, the taxes could include one or both of the following:

- Federal and state income taxes. Corporate earnings are subject to double taxation. First, corporations pay their own income tax on corporate income. Then, the stockholders pay personal income tax on the dividends that they receive from corporations. This is different from sole proprietorships and partnerships, which pay no business income tax. Instead, the tax falls solely on the individual owners.
- Annual franchise tax levied by the state. The franchise tax is paid to keep the corporation charter in force and enables the corporation to continue in business.

Government Regulation To protect persons who loan money to a corporation or who invest in its stock, states monitor the actions of corporations. Corporations are subjected to more governmental regulation than other forms of business, which is a disadvantage for corporations and can be expensive.

Organization of a Corporation As noted earlier, creation of a corporation begins when its organizers, called the incorporators, obtain a charter from the state. The charter includes the authorization for the corporation to issue a certain number of shares of stock, which represent the ownership in the corporation. The incorporators pay fees, sign the charter, and file the required documents with the state. Once the first share of stock is issued, the corporation comes into existence. The incorporators agree to a set of bylaws, which act as the constitution for governing the corporation. Bylaws are the rule book that guides the corporation.

The ultimate control of the corporation rests with the stockholders, who normally receive one vote for each share of stock they own. The stockholders elect the members of the board of directors, which sets policy for the corporation and appoints the officers. The board elects a chairperson, who usually is the most powerful person in the corporation. The board also designates the president, who as chief operating officer manages day-to-day operations. Most corporations also have vice presidents in charge of sales, operations, accounting and finance, and other key areas. Exhibit 1-5 shows the authority structure in a corporation.

**Exhibit 1-5** | Structure of a Corporation

In order to demonstrate the economic entity assumption and several other concepts in this chapter, we will use a fictitious corporation—Smart Touch Learning—an e-learning business that specializes in providing online courses in accounting, economics, marketing, and management. This fictitious business will be used often throughout the book.

Assume Sheena Bright started the business by organizing it as a corporation. She contributed cash of \$30,000 in exchange for stock of \$30,000. Following the economic entity assumption, the \$30,000 is recorded separately from Sheena's personal assets, such as her clothing and car. To mix the \$30,000 of business cash with Sheena's personal assets would make it difficult to measure the success or failure of Smart Touch Learning. The economic entity assumption requires that each organization be separate from other businesses and from the owners.

The Cost Principle

The **cost principle** states that acquired assets and services should be recorded at their actual cost (also called *historical cost*). The cost principle means we record a transaction at the amount shown on the receipt—the actual amount paid. Even though the purchaser may believe the price is a bargain, the item is recorded at the price actually paid and not at the “expected” cost. For example, assume our fictitious company Smart Touch Learning purchased land for \$20,000. The business might believe the land is instead worth \$25,000. The cost principle requires that Smart Touch Learning record the land at \$20,000, not \$25,000.

The cost principle also holds that the accounting records should continue reporting the historical cost of an asset over its useful life. Why? Because cost is a reliable measure. Suppose Smart Touch Learning holds the land for six months. During that time land prices rise, and the land could be sold for \$30,000. Should its accounting value—the figure on the books—be the actual cost of \$20,000 or the current market value of \$30,000? According to the cost principle, the accounting value of the land would remain at the actual cost of \$20,000.

Cost Principle

A principle that states that acquired assets and services should be recorded at their actual cost.



Under international reporting standards, the company would be allowed to restate and report the land at \$30,000. The ability to report some assets and liabilities at their current fair value each year under international standards is a significant difference from U.S. rules.



Going Concern Assumption

Assumes that the entity will remain in operation for the foreseeable future.

Monetary Unit Assumption

The assumption that requires the items on the financial statements to be measured in terms of a monetary unit.

International Financial Reporting Standards (IFRS)

A set of global accounting guidelines, formulated by the *International Accounting Standards Board (IASB)*.

International Accounting Standards Board (IASB)

The private organization that oversees the creation and governance of *International Financial Reporting Standards (IFRS)*.

Audit

An examination of a company's financial statements and records.

The Going Concern Assumption

Another reason for measuring assets at historical cost is the **going concern assumption**. This assumes that the entity will remain in operation for the foreseeable future. Under the going concern assumption, accountants assume that the business will remain in operation long enough to use existing resources for their intended purpose.

The Monetary Unit Assumption

In the United States, we record transactions in dollars because the dollar is the medium of exchange. The value of a dollar changes over time, and a rise in the price level is called *inflation*. During periods of inflation, a dollar will purchase less. But accountants assume that the dollar's purchasing power is stable. This is the basis of the **monetary unit assumption**, which requires that the items on the financial statements be measured in terms of a monetary unit.

International Financial Reporting Standards

The concepts and principles that we have discussed so far apply to businesses that follow U.S. GAAP and are traded on a U.S. stock exchange, such as the New York Stock Exchange. The SEC requires that U.S. businesses follow U.S. GAAP. Companies who are incorporated in or do significant business in another country might be required to publish financial statements using **International Financial Reporting Standards (IFRS)**, which are published by the **International Accounting Standards Board (IASB)**. IFRS is a set of global accounting standards that are used or required by more than 120 nations. They are generally less specific and based more on principle than U.S. GAAP. IFRS leaves more room for professional judgment. For example, unlike U.S. GAAP, IFRS allows periodic revaluation of certain assets and liabilities to restate them to market value, rather than keeping them at historical cost. At one point in time it was thought that the SEC would endorse IFRS. However, the SEC has backed away from this strategy and is currently considering whether a single set of global accounting standards is achievable.

Ethics in Accounting and Business

Ethical considerations affect accounting. Investors and creditors need relevant and faithfully representative information about a company that they are investing in or lending money to. Companies want to be profitable and financially strong to attract investors and attempt to present their financial statements in a manner that portrays the business in the best possible way. Sometimes these two opposing viewpoints can cause conflicts of interest. For example, imagine a company that is facing a potential million-dollar lawsuit due to a defective product. The company might not want to share this information with investors because it would potentially hurt the business's profitability. On the other hand, investors would want to know about the pending lawsuit so that they could make an informed decision about investing in the business. To handle these conflicts of interest and to provide reliable information, the SEC requires publicly held companies to have their financial statements audited by independent accountants. An **audit** is an examination of a company's financial statements and records. The independent accountants then issue an opinion that states whether the financial statements give a fair picture of the company's financial situation.

The vast majority of accountants do their jobs professionally and ethically, but we often don't hear about them. Unfortunately, only those who cheat make the headlines. In recent years, we have seen many accounting scandals.



In response to the Enron and WorldCom reporting scandals, the U.S. government took swift action. It passed the **Sarbanes-Oxley Act (SOX)**, intended to curb financial scandals. SOX requires companies to review internal control and take responsibility for the accuracy and completeness of their financial reports. In addition, SOX made it a criminal offense to falsify financial statements. The Sarbanes-Oxley Act also created a new watchdog agency, the Public Company Accounting Oversight Board (PCAOB), to monitor the work of independent accountants who audit public companies. More recent scandals, such as the Bernie Madoff scandal in which Mr. Madoff pleaded guilty to defrauding thousands of investors by filing falsified trading reports, have further undermined the public's faith in financial reporting. This may result in more legislation for future reporting.

Sarbanes-Oxley Act (SOX)

Requires companies to review internal control and take responsibility for the accuracy and completeness of their financial reports.

Try It!

Match the accounting terminology to the definitions.

- | | |
|--------------------------------|--|
| 7. Cost principle | a. oversees the creation and governance of accounting standards in the United States |
| 8. GAAP | b. requires an organization to be a separate economic unit |
| 9. Faithful representation | c. oversees U.S. financial markets |
| 10. SEC | d. states that acquired assets and services should be recorded at their actual cost |
| 11. FASB | e. creates International Financial Reporting Standards |
| 12. Monetary unit assumption | f. the main U.S. accounting rule book |
| 13. Economic entity assumption | g. assumes that an entity will remain in operation for the foreseeable future |
| 14. Going concern assumption | h. assumes that items on the financial statements are recorded in a monetary unit |
| 15. IASB | i. requires information to be complete, neutral, and free from material error |

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S1-2 through S1-5. **MyAccountingLab**

WHAT IS THE ACCOUNTING EQUATION?

The basic tool of accounting is the **accounting equation**. It measures the resources of a business (what the business owns or has control of) and the claims to those resources (what the business owes to creditors and to the owners). The accounting equation is made up of three parts—assets, liabilities, and equity—and shows how these three parts are related. Assets appear on the left side of the equation, and the liabilities and equity appear on the right side.

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

Remember, the accounting equation is an equation—so the left side of the equation always equals the right side of the equation.

Learning Objective 3

Describe the accounting equation, and define assets, liabilities, and equity

Accounting Equation

The basic tool of accounting, measuring the resources of the business (what the business owns or has control of) and the claims to those resources (what the business owes to creditors and to the owners).
Assets = Liabilities + Equity.



Example: If a business has assets of \$230,000 and liabilities of \$120,000, its equity must be \$110,000 (\$230,000 – \$120,000).

Assets	=	Liabilities	+	Equity
\$230,000	=	\$120,000	+	?
\$230,000	=	\$120,000	+	\$110,000

Assets

Assets

Economic resources that are expected to benefit the business in the future. Something the business owns or has control of.

An **asset** is an economic resource that is expected to benefit the business in the future. Assets are something of value that the business owns or has control of. Cash, merchandise inventory, furniture, and land are examples of assets.

Liabilities

Debts that are owed to *creditors*.

Liabilities

Claims to those assets come from two sources: liabilities and equity. **Liabilities** are debts that are owed to creditors. Liabilities are something the business owes and represent the creditors' claims on the business's assets. For example, a creditor who has loaned money to a business has a claim to some of the business's assets until the business pays the debt. Many liabilities have the word *payable* in their titles. Examples include accounts payable, notes payable, and salaries payable.

Equity

Equity

The owners' claims to the assets of the business.

The owners of a corporation are referred to as stockholders (also called *shareholders*). The owners' claims to the assets of the business are called **equity** (also called *stockholders' equity*). Equity represents the amount of assets that are left over after the company has paid its liabilities. It is the company's net worth.

Contributed Capital

Owner contributions to a corporation.

Equity increases with owner contributions and revenues. Owner contributions to a corporation are referred to as **contributed capital**. A stockholder can contribute cash or other assets (such as equipment) to the business and receive capital. Equity is also increased by revenues. **Revenues** are earnings that result from delivering goods or services to customers. Examples of revenues are sales revenue, service revenue, and rent revenue.

Revenues

Amounts earned from delivering goods or services to customers.

Equity decreases with expenses and distributions to owners. **Expenses** are the cost of selling goods or services. Expenses are the opposite of revenues and, therefore, decrease equity. Examples of expenses are rent expense, salaries expense, advertising expense, and utilities expense.

Expenses

The cost of selling goods or services.

Dividend

A distribution of a corporation's earnings to stockholders.

A profitable corporation may make distributions to stockholders in the form of **dividends**. Dividends can be paid in the form of cash, stock, or other property. Dividends are not expenses. A corporation may or may not make dividend payments to the stockholders. Dividends are the opposite of owner contributions and, therefore, decrease equity.

Equity consists of two main components: contributed capital and retained earnings. Contributed capital (also called *paid-in capital*) is the amount invested in the corporation by its owners, the stockholders. The basic element of contributed capital is stock, which the corporation issues to the stockholders as evidence of their ownership. **Common stock** represents the basic ownership of every corporation.

Common Stock

Represents the basic ownership of a corporation.

Retained Earnings

Equity earned by profitable operations of a corporation that is not distributed to stockholders.

Retained earnings is the equity earned by profitable operations that is not distributed to stockholders. There are three types of events that affect retained earnings: dividends, revenues, and expenses. Dividends represent decreases in retained earnings through the distribution of cash, stock, or other property to stockholders. Revenues are increases in



retained earnings from delivering goods or services to customers. Revenues are earnings. For example, if Smart Touch Learning provided e-learning services and earned \$5,500 of revenue, the business's retained earnings increased by \$5,500. Expenses are the decreases in retained earnings that result from operations. For example, Smart Touch Learning paid salaries of \$1,200 to its employees, and that is an expense that decreases retained earnings.

The accounting equation can now be expanded to show the components of equity.

$$\begin{array}{l} \text{ASSETS} \\ \hline \end{array} \left. \vphantom{\begin{array}{l} \text{ASSETS} \\ \hline \end{array}} \right\} = \left\{ \begin{array}{l} \text{LIABILITIES} + \text{EQUITY} \\ \hline \text{Contributed} \\ \text{Capital} + \text{Retained Earnings} \\ \hline \text{Common} - \text{Dividends} + \text{Revenues} - \text{Expenses} \\ \text{Stock} \end{array} \right.$$

Net Income

The result of operations that occurs when total revenues are greater than total expenses.

Net Loss

The result of operations that occurs when total expenses are greater than total revenues.

Businesses strive for net income. When revenues are greater than expenses, the result of operations is a profit or **net income**. When expenses are greater than revenues, the result is a **net loss**.

Try It!

16. Using the expanded accounting equation, solve for the missing amount.

Assets	\$ 71,288
Liabilities	2,260
Common Stock	?
Dividends	14,420
Revenues	53,085
Expenses	28,675

Check your answer online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S1-6 through S1-8. [MyAccountingLab](#)

HOW DO YOU ANALYZE A TRANSACTION?

Accounting is based on actual transactions. A **transaction** is any event that affects the financial position of the business *and* can be measured with faithful representation. Transactions affect what the company has or owes or its net worth. Many events affect a company, including economic booms and recessions. Accountants, however, do not record the effects of those events. An accountant records only those events that have dollar amounts that can be measured reliably, such as the purchase of a building, a sale of merchandise, and the payment of rent.

Transaction Analysis for Smart Touch Learning

To illustrate accounting for a business, we'll use Smart Touch Learning, the business introduced earlier. We'll account for the transactions of Smart Touch Learning during November 2016 and show how each transaction affects the accounting equation.

Learning Objective 4

Use the accounting equation to analyze transactions

Transaction

An event that affects the financial position of the business and can be measured with faithful representation



Transaction 1—Owner Contribution

Assume Sheena Bright contributes \$30,000 cash to Smart Touch Learning, a corporation, in exchange for stock. The e-learning business receives \$30,000 cash and issues common stock to Sheena Bright. The effect of this transaction on the accounting equation of the business is as follows:

ASSETS	}	=	{	LIABILITIES + EQUITY
Cash				<div style="border-bottom: 1px solid black; display: inline-block; width: 100%;">Contributed Capital</div>
(1) +30,000				<div style="border-bottom: 1px solid black; display: inline-block; width: 100%;">Common Stock</div> +30,000

Let's take a close look at the transaction above following these steps:

Step 1: Identify the accounts and the account type. Each transaction must have at least two accounts but could have more. *The two accounts involved are Cash (Asset) and Common Stock (Equity).*

Step 2: Decide if each account increases or decreases. Remember to always view this from the *business's* perspective, not from the stockholders' or customers' perspective. *Cash increases.* The business has more cash than it had before. *Common Stock increases.* The business received a \$30,000 contribution and issued stock.

Step 3: Determine if the accounting equation is in balance. For each transaction, the amount on the left side of the equation must equal the amount on the right side. $\$30,000 = \$30,000$

Transaction 2—Purchase of Land for Cash

The business purchases land for an office location, paying cash of \$20,000. This transaction affects the accounting equation of Smart Touch Learning as follows:

ASSETS		}	=	{	LIABILITIES + EQUITY
Cash	+ Land				<div style="border-bottom: 1px solid black; display: inline-block; width: 100%;">Contributed Capital</div>
Bal. \$30,000					+ <div style="border-bottom: 1px solid black; display: inline-block; width: 100%;">Common Stock</div> \$30,000
(2) <u>-20,000</u>	<u>+20,000</u>				<div style="border-bottom: 1px solid black; display: inline-block; width: 100%;">\$30,000</div>
Bal. \$10,000	+ \$20,000				\$30,000

Let's review the transaction using the steps we learned:

Step 1: Identify the accounts and the account type. *The two accounts involved are Cash (Asset) and Land (Asset).*

Step 2: Decide if each account increases or decreases. *Cash decreases.* The business paid cash. *Land increases.* The business now has land.

Step 3: Determine if the accounting equation is in balance. $\$10,000 + \$20,000 = \$30,000$

Transaction 3—Purchase of Office Supplies on Account

Smart Touch Learning buys office supplies on account (credit), agreeing to pay \$500 within 30 days. This transaction increases both the assets and the liabilities of the business as follows:



ASSETS				}	=	{	LIABILITIES	+	EQUITY
Cash	+	Office Supplies	+				Accounts Payable	+	Contributed Capital
Bal. \$10,000									Common Stock \$30,000
(3)		+500					+500		
Bal. \$10,000	+	\$500	+				\$500	+	\$30,000

Step 1: Identify the accounts and the account type. *The two accounts involved are Office Supplies (Asset) and Accounts Payable (Liability).* Office Supplies is an asset, not an expense, because the supplies aren't used up yet but will be in the future. The liability created by purchasing "on account" is an **accounts payable**, which is a short-term liability that will be paid in the future. A payable is always a liability.

Accounts Payable

A short-term liability that will be paid in the future.

Step 2: Decide if each account increases or decreases. *Office Supplies increases.* The business now has more office supplies than it had before. *Accounts Payable increases.* The business now owes more debt than it did before.

Step 3: Determine if the accounting equation is in balance. $\$10,000 + \$500 + \$20,000 = \$500 + \$30,000$

Notice how the steps help when analyzing transactions. It's important that, as you are learning, you use the steps to complete the transactions. Moving forward, try writing the steps out yourself before looking at the transaction analysis.

Transaction 4—Earning of Service Revenue for Cash

Smart Touch Learning earns service revenue by providing training services for clients. The business earns \$5,500 of revenue and collects this amount in cash. The effect on the accounting equation is an increase in Cash and an increase in Service Revenue as follows:

ASSETS				}	=	{	LIABILITIES	+	EQUITY		
Cash	+	Office Supplies	+				Accounts Payable	+	Contributed Capital	+	Retained Earnings
Bal. \$10,000		\$500					\$500		\$30,000		
(4)		+5,500					\$500		\$30,000		+5,500
Bal. \$15,500	+	\$500	+				\$500	+	\$30,000	+	\$5,500

A revenue transaction grows the business, as shown by the increases in assets and equity.

Transaction 5—Earning of Service Revenue on Account

Smart Touch Learning performs a service for clients who do not pay immediately. The business receives the clients' promise to pay \$3,000 within one month. This promise is an asset, an **accounts receivable**, because the business expects to collect the cash in the future. In accounting, we say that Smart Touch Learning performed this service *on account*. It is in performing the service (doing the work), not collecting the cash, that the company *earns*

Accounts Receivable

The right to receive cash in the future from customers for goods sold or for services performed.



the revenue. As in Transaction 4, increasing revenue increases equity. Smart Touch Learning records the earning of \$3,000 of revenue on account as follows:

ASSETS				}	=	LIABILITIES +	EQUITY		
Cash	+ Accounts Receivable	+ Office Supplies	+ Land			Accounts Payable	+ Contributed Capital	+ Retained Earnings	
Bal. \$15,500		+ \$500	+ \$20,000			\$500	+ \$30,000	+ \$5,500	
(5)	+3,000							+3,000	
Bal. \$15,500	+ \$3,000	+ \$500	+ \$20,000			\$500	+ \$30,000	+ \$8,500	

The term "on account" can be used to represent either Accounts Receivable or Accounts Payable. If the business will be receiving cash in the future, the company will record an Accounts Receivable. If the business will be paying cash in the future, the company will record an Accounts Payable.

Transaction 6—Payment of Expenses with Cash

The business pays \$3,200 in cash expenses: \$2,000 for office rent and \$1,200 for employee salaries. The effects on the accounting equation are as follows:

ASSETS				}	=	LIABILITIES +	EQUITY			
Cash	+ Accounts Receivable	+ Office Supplies	+ Land			Accounts Payable	+ Contributed Capital	+ Retained Earnings	- Rent Expense	- Salaries Expense
Bal. \$15,500	+ \$3,000	+ \$500	+ \$20,000			\$500	+ \$30,000	+ \$8,500		
(6) -3,200									-2,000	-1,200
Bal. \$12,300	+ \$3,000	+ \$500	+ \$20,000			\$500	+ \$30,000	+ \$8,500	- \$2,000	- \$1,200

Expenses have the opposite effect of revenues. Expenses shrink the business, as shown by the decreased balances of assets and equity. Each expense is recorded separately. We record the cash payment in a single amount for the sum of the expenses: \$3,200 (\$2,000 + \$1,200). Notice that the accounting equation remains in balance (\$12,300 + \$3,000 + \$500 + \$20,000 = \$500 + \$30,000 + \$8,500 - \$2,000 - \$1,200).

Transaction 7—Payment on Account (Accounts Payable)

The business pays \$300 to the store from which it purchased office supplies in Transaction 3. In accounting, we say that the business pays \$300 *on account*. The effect on the accounting equation is a decrease in Cash and a decrease in Accounts Payable as shown here:

ASSETS				}	=	LIABILITIES +	EQUITY			
Cash	+ Accounts Receivable	+ Office Supplies	+ Land			Accounts Payable	+ Contributed Capital	+ Retained Earnings	- Rent Expense	- Salaries Expense
Bal. \$12,300	+ \$3,000	+ \$500	+ \$20,000			\$500	+ \$30,000	+ \$8,500	- \$2,000	- \$1,200
(7) -300						-300				
Bal. \$12,000	+ \$3,000	+ \$500	+ \$20,000			\$200	+ \$30,000	+ \$8,500	- \$2,000	- \$1,200



The payment of cash on account has no effect on the amount of Office Supplies (Asset). Smart Touch Learning has not increased the amount of its office supplies; instead, it is paying off a liability (Accounts Payable decreased \$300) with cash (Cash decreased \$300). **To record an increase to Office Supplies, in this transaction, would be accounting for the purchase of office supplies twice.** We have already recorded the purchase of office supplies in Transaction 3; in this transaction, we are now ready to record only the payment on account.

Transaction 8—Collection on Account (Accounts Receivable)

In Transaction 5, the business performed services for clients on account. Smart Touch Learning now collects \$2,000 from a client. We say that Smart Touch Learning collects the cash *on account*. The business will record an increase in the asset Cash. Should it also record an increase in Service Revenue? No, because the business already recorded the revenue when it earned the revenue in Transaction 5. The phrase “collect cash on account” means to record an increase in Cash and a decrease in Accounts Receivable. Accounts Receivable is decreased because the \$2,000 that the business was to collect at some point in the future is being collected today. The effect on the accounting equation is as follows:

ASSETS				}	=	LIABILITIES +	EQUITY				
							Contributed Capital	+	Retained Earnings		
Cash	+ Accounts Receivable	+ Office Supplies	+ Land			Accounts Payable	+ Common Stock	+	Service Revenue	- Rent Expense	- Salaries Expense
Bal. \$12,000	+ \$3,000	+ \$500	+ \$20,000			\$200	+ \$30,000	+	\$8,500	- \$2,000	- \$1,200
(8) +2,000	-2,000										
Bal. \$14,000	+ \$1,000	+ \$500	+ \$20,000			\$200	+ \$30,000	+	\$8,500	- \$2,000	- \$1,200

This transaction is recorded as an increase in one asset (Cash) and a decrease in another asset (Accounts Receivable). Is the accounting equation still in balance? Yes. **As long as you record an increase and decrease of the same amount on one side of the accounting equation, the accounting equation remains in balance.** In other words, total assets, liabilities, and equity are all unchanged from the preceding total. Why? Because Smart Touch Learning exchanged one asset (Cash) for another (Accounts Receivable), causing a zero effect on the total amount of assets in the accounting equation (+\$2,000 - \$2,000 = \$0).

Transaction 9—Payment of Cash Dividend

Smart Touch Learning distributes a \$5,000 cash dividend to the stockholder, Sheena Bright. The effect on the accounting equation is:

ASSETS				}	=	LIABILITIES +	EQUITY					
							Contributed Capital	+	Retained Earnings			
Cash	+ Accounts Receivable	+ Office Supplies	+ Land			Accounts Payable	+ Common Stock	-	Dividends	+ Service Revenue	- Rent Expense	- Salaries Expense
Bal. \$14,000	+ \$1,000	+ \$500	+ \$20,000			\$200	+ \$30,000			+ \$8,500	- \$2,000	- \$1,200
(9) -5,000									-5,000			
Bal. \$ 9,000	+ \$1,000	+ \$500	+ \$20,000			\$200	+ \$30,000	-	\$5,000	+ \$8,500	- \$2,000	- \$1,200

The dividend decreases the business’s cash and equity. *Dividends do not represent an expense because they are not related to the earning of revenue. Therefore, dividends do not affect the business’s net income or net loss.*

Why didn't we record an increase to Office Supplies? We are making a payment for the supplies; wouldn't we increase Office Supplies and decrease Cash?



Don't I have to put an amount on the left side of the accounting equation and an amount on the right side of the accounting equation for the equation to balance?





A summary of all nine transactions for Smart Touch Learning is presented in Exhibit 1-6.

Exhibit 1-6 | Analysis of Transactions, Smart Touch Learning

1. Smart Touch Learning received \$30,000 cash and issued common stock to Sheena Bright, stockholder.
 2. Paid \$20,000 cash for land.
 3. Bought \$500 of office supplies on account.
 4. Received \$5,500 cash from clients for service revenue earned.
 5. Performed services for clients on account, \$3,000.
 6. Paid cash expenses: office rent, \$2,000; employee salaries, \$1,200.
 7. Paid \$300 on the accounts payable created in Transaction 3.
 8. Collected \$2,000 on the accounts receivable created in Transaction 5.
 9. Paid cash dividends of \$5,000 to stockholder, Sheena Bright.

ASSETS				LIABILITIES		EQUITY			
Cash	Accounts Receivable	Office Supplies	Land	Accounts Payable	Contributed Capital	Dividends	Service Revenue	Rent Expense	Salaries Expense
(1) +30,000					+30,000				
(2) -20,000			+20,000						
Bal. \$10,000			+ \$20,000						
(3)		+500		+500					
Bal. \$10,000		+ \$500	+ \$20,000	\$500	+ \$30,000				
(4) +5,500							+5,500		
Bal. \$15,500		+ \$500	+ \$20,000	\$500	+ \$30,000		+ \$5,500		
(5)	+3,000						+3,000		
Bal. \$15,500	+ \$3,000	+ \$500	+ \$20,000	\$500	+ \$30,000		+ \$8,500		
(6) -3,200								-2,000	-1,200
Bal. \$12,300	+ \$3,000	+ \$500	+ \$20,000	\$500	+ \$30,000		+ \$8,500	- \$2,000	- \$1,200
(7) -300				-300					
Bal. \$12,000	+ \$3,000	+ \$500	+ \$20,000	\$200	+ \$30,000		+ \$8,500	- \$2,000	- \$1,200
(8) +2,000	-2,000								
Bal. \$14,000	+ \$1,000	+ \$500	+ \$20,000	\$200	+ \$30,000		+ \$8,500	- \$2,000	- \$1,200
(9) -5,000						-5,000			
Bal. \$ 9,000	+ \$1,000	+ \$500	+ \$20,000	\$200	+ \$30,000	- \$5,000	+ \$8,500	- \$2,000	- \$1,200
\$30,500				\$30,500					

Try It!

17. Using the information provided, analyze the effects of Lawlor Lawn Service's transactions on the accounting equation.

May 1	Received \$1,700 and issued common stock.
May 3	Purchased a mower on account, \$1,440.
May 5	Performed lawn services for client on account, \$200.
May 17	Paid \$60 cash for gas used in mower.
May 28	Paid cash dividends of \$300.

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.



HOW DO YOU PREPARE FINANCIAL STATEMENTS?

We have now recorded Smart Touch Learning's transactions, and they are summarized in Exhibit 1-6. Notice how total assets equal total liabilities plus equity ($\$30,500 = \$30,500$).

But a basic question remains: How will people actually use this information? The information in Exhibit 1-6 does not tell a lender whether Smart Touch Learning can pay off a loan. The exhibit does not tell whether the business is profitable.

To address these important questions, we need financial statements. **Financial statements** are business documents that are used to communicate information needed to make business decisions. There are four financial statements prepared. These statements are prepared in the order listed in Exhibit 1-7.

Learning Objective 5

Prepare financial statements

Financial Statements

Business documents that are used to communicate information needed to make business decisions.

Exhibit 1-7 | Financial Statements

Financial Statement	Information Provided and Purpose	How Is It Prepared?
Income Statement	Provides information about profitability for a particular period for the company.	Revenues – Expenses = Net Income or Net Loss
Statement of Retained Earnings	Informs users about how much of the earnings were kept and reinvested in the company.	Retained Earnings, Beginning + Net income or – Net loss for the period – Dividends for the period = Retained Earnings, Ending
Balance Sheet	Provides valuable information to financial statement users about economic resources the company has (assets) as well as debts the company owes (liabilities). Allows decision makers to determine their opinion about the financial position of the company.	Assets = Liabilities + Stockholders' Equity
Statement of Cash Flows	Reports on a business's cash receipts and cash payments for a period of time.	Cash flows from operating activities Cash flows from investing activities Cash flows from financing activities

Income Statement

Let's start by reviewing the **income statement**. The income statement (also called the *statement of earnings*) presents a summary of a business entity's revenues and expenses for a period of time, such as a month, quarter, or year. The income statement tells us whether the business enjoyed net income or suffered a net loss. Remember:

- Net income means total revenues are greater than total expenses.
- Net loss means total expenses are greater than total revenues.

It's important to remember that the only two types of accounts that are reported on the income statement are revenues and expenses. Exhibit 1-8 (on the next page) shows the income statement for Smart Touch Learning. Every income statement contains similar information.

Income Statement

Reports the *net income* or *net loss* of the business for a specific period.

**Exhibit 1-8 | Income Statement**

SMART TOUCH LEARNING	
Income Statement	
Month Ended November 30, 2016	
Revenues:	
Service Revenue	\$ 8,500
Expenses:	
Rent Expense	\$ 2,000
Salaries Expense	1,200
Total Expenses	<u>3,200</u>
Net Income	<u>\$ 5,300</u>

The header includes the name of the business, the title of the statement, and the time period. An income statement always represents a period of time, for example, a month or year.

The revenue accounts are always listed first and then subtotaled if necessary.

Net income is calculated as total revenues minus total expenses.

Each expense account is listed separately from largest to smallest and then subtotaled if necessary.

Statement of Retained Earnings

Statement of Retained Earnings

Reports how the company's retained earnings balance changed from the beginning to the end of the period.

The next statement prepared is the **statement of retained earnings**. The statement of retained earnings shows the changes in retained earnings for a business entity during a time period, such as a month, quarter, or year.

Review the statement of retained earnings for Smart Touch Learning in Exhibit 1-9. Notice that the net income for the month is the net income that was calculated on the income statement. This is the main reason why the income statement is prepared before

Exhibit 1-9 | Statement of Retained Earnings

SMART TOUCH LEARNING	
Statement of Retained Earnings	
Month Ended November 30, 2016	
Retained Earnings, November 1, 2016	\$ 0
Net income for the month	5,300
	<u>5,300</u>
Dividends	(5,000)
Retained Earnings, November 30, 2016	<u>\$ 300</u>

The header includes the name of the business, the title of the statement, and the time period. A statement of retained earnings always represents a period of time.

The beginning retained earnings is \$0 because Smart Touch Learning began this month; therefore, it had no beginning retained earnings. The beginning retained earnings will always be the ending retained earnings from the previous time period.

Net income is transferred from the income statement.

The dividends are subtracted from retained earnings. If there had been a net loss rather than a net income, this would also be subtracted.



the statement of retained earnings. The net income must first be calculated on the income statement and then carried to the statement of retained earnings.

Balance Sheet

The **balance sheet** (also called the *statement of financial position*) lists a business entity's assets, liabilities, and stockholders' equity as of a specific date, usually the end of a month, quarter, or year. **The balance sheet is a snapshot of the entity. An investor or creditor can quickly assess the overall health of a business by viewing the balance sheet.**

Review the balance sheet for Smart Touch Learning in Exhibit 1-10. Every balance sheet is prepared in a similar manner.

Balance Sheet

Reports on the assets, liabilities, and stockholders' equity of the business as of a specific date.

What does the balance sheet tell an investor or creditor?



Exhibit 1-10 | Balance Sheet

SMART TOUCH LEARNING Balance Sheet November 30, 2016			
Assets		Liabilities	
Cash	\$ 9,000	Accounts Payable	\$ 200
Accounts Receivable	1,000		
Office Supplies	500	Stockholders' Equity	
Land	20,000	Common Stock	30,000
		Retained Earnings	300
		Total Stockholders' Equity	30,300
Total Assets	\$ 30,500	Total Liabilities and Stockholders' Equity	\$ 30,500

The heading again shows the name of the business and the title of the financial statement. Notice that the date is different. The balance sheet shows the date as a specific date, not a period of time.

Liabilities are listed separately and then totaled. Liabilities that are to be paid first are listed first.

Each asset account is listed separately and then totaled. Cash is always listed first.

The balance sheet must always balance. $Assets = Liabilities + Stockholders' Equity$

Retained Earnings is taken directly from the statement of retained earnings.

When you are preparing the financial statements, start by identifying which account goes on which statement. Each account will only go on one statement, except for Retained Earnings and Cash. For example, Service Revenue is only reported on the income statement. Liabilities, such as Accounts Payable, are only reported on the balance sheet. Cash and Retained Earnings appear on two statements. Cash is reported on the balance sheet and statement of cash flows, and Retained Earnings is reported on the statement of retained earnings and balance sheet.



ETHICS

What constitutes manipulating financial statements?

The board of directors of Xiaping Trading Company is meeting to discuss the past year's results before releasing financial statements to the bank. Wai Lee, the company's sole stockholder, comments, "This has not been a good year! Revenue is down, and expenses are way up. If we are not careful, we will report a loss for the third year in a row. I can temporarily transfer some land that I own into the company's name, and that will beef up our balance sheet. Brent, as accountant, can you shave \$500,000 from expenses? Then we can probably get the bank loan that we need." What should Brent do? What would you do if you were Brent?

Solution

Brent should remind Wai Lee that the intent of the financial statements is to tell the truth about the company's performance and financial position. If Wai Lee does not intend to leave the land in the business, then she should not transfer it to the business for the sole intent of increasing the assets and equity of the business.

It is possible that Brent could "shave expenses" legally, if it meant reducing the amount of expenses that the business had. But if Wai Lee meant that Brent should reclassify expenses or delay the recognition of expenses in an effort to boost net income, then this would be false and dishonest.

Statement of Cash Flows

Reports on a business's cash receipts and cash payments for a specific period.



Would the purchase of land with a mortgage be reported on the statement of cash flows?

Statement of Cash Flows

The **statement of cash flows** reports the cash coming in (positive amounts) and the cash going out (negative amounts) during a period. It only reports transactions that involve cash because it reports the net increase or decrease in *cash* during the period and the ending *cash* balance. **If a transaction does not involve cash, such as the purchase of land with a mortgage, it will not be reported on the statement of cash flows.**

The statement of cash flows is divided into three distinct sections: operating, investing, and financing. *Operating activities* involve cash receipts for services and cash payments for expenses. *Investing activities* include the purchase and sale of land and equipment for cash. The third section, *financing activities*, includes cash contributions by stockholders and cash dividends paid to the stockholders.

Take a look at the statement of cash flows for Smart Touch Learning (Exhibit 1-11). Notice the important items that every statement of cash flows contains.


Exhibit 1-11 | Statement of Cash Flows

SMART TOUCH LEARNING		
Statement of Cash Flows		
Month Ended November 30, 2016		
Cash flows from operating activities:		
Receipts:		
Collections from customers		\$ 7,500
Payments:		
For rent	\$ (2,000)	
For salaries	(1,200)	
For office supplies	(300)	(3,500)
Net cash provided by operating activities		4,000
Cash flows from investing activities:		
Acquisition of land	(20,000)	
Net cash used by investing activities		(20,000)
Cash flows from financing activities:		
Issued common stock	30,000	
Payment of cash dividends	(5,000)	
Net cash provided by financing activities		25,000
Net increase in cash		9,000
Cash balance, November 1, 2016		0
Cash balance, November 30, 2016		\$ 9,000

The header includes the name of the business, the title of the statement, and the time period. A statement of cash flows always represents a period of time.

Each dollar amount is calculated by evaluating the cash column on Exhibit 1-6. For example, collections from customers is calculated by adding the cash received from customers in Transaction 4 (\$5,500) plus Transaction 8 (\$2,000).

Operating activities involve cash receipts for services provided and cash payments for expenses paid.

Investing activities include the purchase and sale of land and equipment for cash.

Financing activities include issuance of stock to stockholders and payment of cash dividends.

The ending cash balance must match the cash balance on the balance sheet.

Try It!

18. Using the following information, complete the income statement, statement of retained earnings, and balance sheet for DR Painting for the month of March 2016. The business began operations on March 1, 2016.

Accounts Receivable	\$ 1,400	Salaries Expense	800
Accounts Payable	1,000	Service Revenue	7,000
Cash	22,300	Office Supplies	1,800
Stock issued during March	40,000	Truck	20,000
Dividends paid during March	1,500	Utilities Expense	200

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.



HOW DO YOU USE FINANCIAL STATEMENTS TO EVALUATE BUSINESS PERFORMANCE?

Learning Objective 6

Use financial statements and return on assets (ROA) to evaluate business performance

Each of the financial statements provides different information about the company to the users of the financial statements. Review Exhibit 1-7 for the information provided and the purpose of each financial statement.

Green Mountain Coffee Roasters, Inc.

In this chapter, we have reviewed the transactions and financial statements of Smart Touch Learning, a fictitious company. Now it's time to apply what we have learned to a real-world company. In each chapter, we will review the financial statements of **Green Mountain Coffee Roasters, Inc.** You will learn how to analyze its financial statements and apply the concepts presented in the chapter.

Take a moment to review the 2013 financial statements for Green Mountain in Appendix A, located at the end of your book, or online at <http://investor.gmcr.com>. Let's start by identifying the financial statements that we've discussed in this chapter. The income statement is presented on page A-5 of the Annual Report and is called the Consolidated Statements of Operations. Notice that the income statement calculates net income (revenue minus expenses). Green Mountain's net income for the year ending September 28, 2013, was \$483,232,000.

Next the balance sheet is presented on page A-4 of the Annual Report. Can you find assets, liabilities, and equity? As we have learned in this chapter, Green Mountain's assets of \$3,761,548,000 are equal to its liabilities and equity, \$3,761,548,000.

Return on Assets (ROA)

Measures how profitably a company uses its assets. $\text{Net income} / \text{Average total assets}$.

Return on Assets (ROA)

One of the many tools that users of financial statements can use to determine how well a company is performing is the company's **return on assets (ROA)**. Return on assets measures

DECISIONS

How can individuals make decisions about investing in the stock market?

Lori Cummings just inherited \$10,000 from her grandmother. She has decided that she will invest the money in the stock market. She is thinking about investing in one of her favorite clothing stores. The problem is she can't decide between Urban Outfitters or The Gap.

How should Lori decide between the companies? What resources should she use?

Solution

Lori should begin by reviewing the financial statements of each business. She can locate them on the companies' Web sites or on the Securities and Exchange Commission's Web site (<http://www.sec.gov/edgar.shtml>). She should review the income statements and compare net income. Which business was more profitable?

She should look at the balance sheets, carefully reviewing each part of the accounting equation. What was the dollar amount of assets? How much debt does the business have? In addition, she could go online and research the individual companies using a Web site such as Yahoo! Finance. These Web sites provide news and information about the company, such as current headlines, key statistics, and industry comparisons.

Lori should also consider diversifying her investment. Diversifying involves investing in more than one company and in a variety of industries and companies of different sizes. Diversification reduces the risk of an investment. Lori should consider investing half of the \$10,000 in a company in a different industry, such as her favorite restaurant or food manufacturer.



how profitably a company uses its assets. Return on assets is calculated by dividing net income by average total assets. Average total assets is calculated by adding the beginning and ending total assets for the time period and then dividing by two.

$$\begin{aligned}\text{Return on assets} &= \text{Net income} / \text{Average total assets} \\ \text{Average total assets} &= (\text{Beginning total assets} + \text{Ending total assets}) / 2\end{aligned}$$

Let's take a moment to calculate Green Mountain's ROA and measure how profitably it uses its assets. On its 2013 income statement, Green Mountain reported net income of \$483,232 (in thousands). The corporation reported beginning total assets (found on the balance sheet) of \$3,615,789 (in thousands) and ending total assets of \$3,761,548 (in thousands). Green Mountain's return on assets for 2013 is:

$$\begin{aligned}\text{Return on assets} &= \$483,232 / ((\$3,615,789 + \$3,761,548) / 2) \\ &= \$483,232 / \$3,688,669^* \\ &= 0.131 = 13.1\%^*\end{aligned}$$

*rounded

How do we as an investor know if 13.1% is good or bad? We have to compare the return on assets of competing companies such as Caribou Coffee Company, Inc., **Starbucks Corporation**, and Dunkin' Brands Group, Inc. What if we told you that Dunkin' Brands Group, Inc.'s return on assets was 4.5%? Due to Green Mountain's higher ROA, we now know that Green Mountain has a stronger return on its assets than does Dunkin'. What does this mean? It means that Green Mountain produces more profit per every dollar of assets than Dunkin' does. As you learn more about accounting, you will explore more financial tools that are available to help investors evaluate a company's performance. Only after an investor looks at the big picture of a company will he or she have a good sense of the company's investment potential.

Try It!

19. Using the following information, calculate the return on assets (ROA).

Net income for November, 2016	\$ 5,000
Total assets, November 1, 2016	76,000
Total assets, November 30, 2016	80,250

Check your answer online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S1-16. **MyAccountingLab**

REVIEW

> Things You Should Know

1. Why is accounting important?

- It's the language of business.
- Accounting is used by decision makers including individuals, businesses, investors, creditors, and taxing authorities.
- Accounting can be divided into two major fields: financial accounting and managerial accounting.
- Financial accounting is used by external decision makers, and managerial accounting is used by internal decision makers.
- All businesses need accountants. Accountants work in private, public, and governmental jobs.
- Accountants can be licensed as either a certified public accountant (CPA) or certified management accountant (CMA).

2. What are the organizations and rules that govern accounting?

- Generally Accepted Accounting Principles (GAAP) are the rules that govern accounting in the United States.
- The Financial Accounting Standards Board (FASB) is responsible for the creation and governance of accounting standards (GAAP).
- Economic entity assumption: Requires an organization to be a separate economic unit such as a sole proprietorship, partnership, corporation, or limited-liability company.
- Cost principle: Acquired assets and services should be recorded at their actual cost.
- Going concern assumption: Assumes that an entity will remain in operation for the foreseeable future.
- Monetary unit assumption: Assumes financial transactions are recorded in a monetary unit.

3. What is the accounting equation?

- $\text{Assets} = \text{Liabilities} + \text{Equity}$
 - Assets: Items the business owns or controls (examples: cash, furniture, land)
 - Liabilities: Items the business owes (examples: accounts payable, notes payable, salaries payable)
 - Equity: Stockholders' claims to the assets through contributed capital and retained earnings (examples: common stock, dividends, revenues, expenses)

4. How do you analyze a transaction?

- A transaction affects the financial position of a business and can be measured with faithful representation.
- Transactions are analyzed using three steps:
 - Step 1:** Identify the accounts and account type (Asset, Liability, or Equity).
 - Step 2:** Decide whether each account increases or decreases.
 - Step 3:** Determine whether the accounting equation is in balance.

5. How do you prepare financial statements?

- Financial statements are prepared in the following order:
 1. Income Statement:
 - Reports the net income or net loss of a business for a specific period.
 - $\text{Revenues} - \text{Expenses} = \text{Net Income or Net Loss}$
 2. Statement of Retained Earnings:
 - Reports on the changes in retained earnings for a specific period.
 - $\text{Beginning Retained Earnings} + \text{Net Income (or} - \text{Net Loss)} - \text{Dividends} = \text{Ending Retained Earnings}$
 3. Balance Sheet:
 - Reports on an entity's assets, liabilities, and stockholders' equity as of a specific date.
 - $\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$
 4. Statement of Cash Flows:
 - Reports on a business's cash receipts and cash payments for a specific period.
 - Includes three sections:
 - Cash flows from operating activities: Involves cash receipts for services and cash payments for expenses.
 - Cash flows from investing activities: Includes the purchase and sale of land and equipment for cash.
 - Cash flows from financing activities: Includes cash contributions by stockholders and cash dividends paid to the stockholders.

6. How do you use financial statements to evaluate business performance?

- Income statement evaluates profitability.
- Statement of retained earnings shows the amount of earnings that were kept and reinvested in the company.
- Balance sheet details the economic resources the company owns as well as debts the company owes.
- Statement of cash flows shows the change in cash.
- $\text{Return on assets (ROA)} = \text{Net income} / \text{Average total assets}$.

> Summary Problem

Ron Smith opens an apartment-locator business near a college campus. The company will be named Campus Apartment Locators. During the first month of operations, July 2016, the business completes the following transactions:

- a. Smith contributes \$35,000 to the business. The business issues common stock to Smith.
- b. Purchases \$350 of office supplies on account.
- c. Pays cash of \$30,000 to acquire a lot next to campus.
- d. Locates apartments for clients and receives cash of \$1,900.
- e. Pays \$100 on the accounts payable the business created in Transaction (b).
- f. Pays cash expenses for office rent, \$400, and utilities, \$100.
- g. Pays cash dividends of \$1,200 to stockholders.

Requirements

1. Analyze the preceding transactions in terms of their effects on the accounting equation of Campus Apartment Locators. Use Exhibit 1-6 as a guide.
2. Prepare the income statement, statement of retained earnings, and balance sheet of the business after recording the transactions.
3. Calculate the return on assets (ROA).

> Solution

Requirement 1

ASSETS				=	LIABILITIES	+	EQUITY			
Cash	Office Supplies	Land	Accounts Payable		Contributed Capital	+	Retained Earnings			
(a) +35,000					Common Stock		Dividends	Service Revenue	Rent Expense	Utilities Expense
(b) <u> </u>	+ 350			+ 350	+ 35,000					
Bal. \$35,000	+ \$350			\$350	+ \$35,000					
(c) <u>−30,000</u>		+ 30,000		\$350	+ \$35,000					
Bal. \$5,000	+ \$350	+ \$30,000		\$350	+ \$35,000					
(d) <u>+1,900</u>				\$350	+ \$35,000			+ 1,900		
Bal. \$6,900	+ \$350	+ \$30,000		\$350	+ \$35,000			+ \$1,900		
(e) <u>−100</u>				−100	+ \$35,000					
Bal. \$6,800	+ \$350	+ \$30,000		\$250	+ \$35,000			+ \$1,900		
(f) <u>−500</u>				\$250	+ \$35,000				−400	−100
Bal. \$6,300	+ \$350	+ \$30,000		\$250	+ \$35,000			+ \$1,900	− \$400	− \$100
(g) <u>−1,200</u>				\$250	+ \$35,000		−1,200			
Bal. \$5,100	+ \$350	+ \$30,000		\$250	+ \$35,000	−	\$1,200	+ \$1,900	− \$400	− \$100
\$35,450					\$35,450					

Requirement 2

CAMPUS APARTMENT LOCATORS Income Statement Month Ended July 31, 2016	
Revenues:	
Service Revenue	\$ 1,900
Expenses:	
Rent Expense	\$ 400
Utilities Expense	100
Total Expenses	<u>500</u>
Net Income	<u>\$ 1,400</u>

CAMPUS APARTMENT LOCATORS Statement of Retained Earnings Month Ended July 31, 2016	
Retained Earnings July 1, 2016	\$ 0
Net income for the month	1,400
	<u>1,400</u>
Dividends	(1,200)
Retained Earnings, July 31, 2016	<u><u>\$ 200</u></u>

CAMPUS APARTMENT LOCATORS Balance Sheet July 31, 2016			
Assets		Liabilities	
Cash	\$ 5,100	Accounts Payable	\$ 250
Office Supplies	350		
Land	30,000	Stockholders' Equity	
		Common Stock	35,000
		Retained Earnings	200
		Total Stockholders' Equity	<u>35,200</u>
Total Assets	<u><u>\$ 35,450</u></u>	Total Liabilities and Stockholders' Equity	<u><u>\$ 35,450</u></u>

Requirement 3

$$\begin{aligned} \text{ROA} &= \text{Net income} / \text{Average total assets} \\ \text{Average total assets} &= (\text{Beginning total assets} + \text{Ending total assets}) / 2 \\ \text{Average total assets} &= (\$0 + \$35,450) / 2 = \$17,725 \\ \text{ROA} &= \$1,400 / \$17,725 = 0.079 = 7.9\%* \end{aligned}$$

*rounded

> Key Terms

Accounting (p. 26)

Accounting Equation (p. 35)

Accounts Payable (p. 39)

Accounts Receivable (p. 39)

Assets (p. 36)

Audit (p. 34)

Balance Sheet (p. 45)

Certified Management Accountants (CMAs) (p. 28)

Certified Public Accountants (CPAs) (p. 28)

Common Stock (p. 36)

Contributed Capital (p. 36)

Corporation (p. 31)

Cost Principle (p. 33)

Creditor (p. 28)

Dividend (p. 36)

Economic Entity Assumption (p. 30)

Equity (p. 36)

Expenses (p. 36)

Financial Accounting (p. 27)

Financial Accounting Standards Board (FASB) (p. 30)

Financial Statements (p. 43)

Generally Accepted Accounting Principles (GAAP) (p. 30)

Going Concern Assumption (p. 34)

Income Statement (p. 43)
 International Accounting Standards Board (IASB) (p. 34)
 International Financial Reporting Standards (IFRS) (p. 34)
 Liabilities (p. 36)
 Limited-Liability Company (LLC) (p. 31)
 Managerial Accounting (p. 27)

Monetary Unit Assumption (p. 34)
 Net Income (p. 37)
 Net Loss (p. 37)
 Partnership (p. 31)
 Retained Earnings (p. 36)
 Return on Assets (ROA) (p. 48)
 Revenues (p. 36)
 Sarbanes-Oxley Act (SOX) (p. 35)

Securities and Exchange Commission (SEC) (p. 30)
 Sole Proprietorship (p. 31)
 Statement of Cash Flows (p. 46)
 Statement of Retained Earnings (p. 44)
 Stockholder (p. 31)
 Transaction (p. 37)

> Quick Check

.....
Learning Objective 1

1. Accounting is the information system that
 - a. measures business activities.
 - b. communicates the results to decision makers.
 - c. processes information into reports.
 - d. All of the above.

.....
Learning Objective 1

2. Which of the following is not an external user of a business's financial information?

a. Taxing authorities	c. Employees
b. Customers	d. Investors

.....
Learning Objective 2

3. Generally Accepted Accounting Principles (GAAP) are currently formulated by the
 - a. Financial Accounting Standards Board (FASB).
 - b. Securities and Exchange Commission (SEC).
 - c. Institute of Management Accountants (IMA).
 - d. American Institute of Certified Public Accountants (AICPA).

.....
Learning Objective 2

4. Which type of business organization is owned by only one owner?

a. Corporation	c. Sole proprietorship
b. Partnership	d. Items a, b, and c are all correct.

.....
Learning Objective 2

5. Which of the following characteristics best describes a corporation?
 - a. A business with a single owner
 - b. Is not taxed
 - c. Stockholders not personally liable for entity's debts
 - d. Not a separate taxable entity

.....
Learning Objective 2

6. Which of the following requires accounting information to be complete, neutral, and free from material error?

a. Faithful representation concept	c. Economic entity assumption
b. Cost principle	d. Going concern assumption

7. Describe the similarities and differences among the four different types of business entities discussed in the chapter.
8. A business purchases an acre of land for \$5,000. The current market value is \$5,550, and the land was assessed for property tax purposes at \$5,250. What value should the land be recorded at, and which accounting principle supports your answer?
9. What does the going concern assumption mean for a business?
10. Which concept states that accounting information should be complete, neutral, and free from material error?
11. Financial statements in the United States are reported in U.S. dollars. What assumption supports this statement?
12. Explain the role of the International Accounting Standards Board (IASB) in relation to International Financial Reporting Standards (IFRS).
13. What is the accounting equation? Briefly explain each of the three parts.
14. How does retained earnings increase? What are the two ways that retained earnings decreases?
15. How is net income calculated? Define *revenues* and *expenses*.
16. What are the steps used when analyzing a business transaction?
17. List the four financial statements. Briefly describe each statement.
18. What is the calculation for return on assets (ROA)? Explain what ROA measures.

> Short Exercises

Learning Objective 1

S1-1 Identifying users of accounting information

For each user of accounting information, identify if the user would use financial accounting (FA) or managerial accounting (MA).

- | | |
|-----------------------------|-----------------------------|
| a. investor | e. controller |
| b. banker | f. stockholder |
| c. Internal Revenue Service | g. human resources director |
| d. manager of the business | h. creditor |

Learning Objective 2

S1-2 Determining organizations that govern accounting

Suppose you are starting a business, Wholly Shirts, to imprint logos on T-shirts. In organizing the business and setting up its accounting records, you take your information to a CPA to prepare financial statements for the bank. Name the organization that governs the majority of the guidelines that the CPA will use to prepare financial statements for Wholly Shirts. What are those guidelines called?

Learning Objective 2

S1-3 Identifying types of business organizations

Chloe Michaels plans on opening Chloe Michaels Floral Designs. She is considering the various types of business organizations and wishes to organize her business with unlimited life and wants owners of the business to not be held personally liable for the business's debts. Additionally, Chloe wants the business to be a separate taxable entity. Which type of business organization will meet Chloe's needs best?

Learning Objective 2

S1-4 Identifying types of business organizations

You would like to start a cellular telephone equipment service business. You are considering organizing the business as a sole proprietorship. Identify the advantages and disadvantages of owning a sole proprietorship.

S1-5 Applying accounting assumptions and principles

Michael McNamee is the proprietor of a property management company, Apartment Exchange, near the campus of Pensacola State College. The business has cash of \$8,000 and furniture that cost \$9,000 and has a market value of \$13,000. The business debts include accounts payable of \$6,000. Michael's personal home is valued at \$400,000, and his personal bank account has a balance of \$1,200. Consider the accounting principles and assumptions discussed in the chapter, and identify the principle or assumption that best matches the situation:

- Michael's personal assets are not recorded on the Apartment Exchange's balance sheet.
- The Apartment Exchange records furniture at its cost of \$9,000, not its market value of \$13,000.
- The Apartment Exchange reports its financial statements in U.S. dollars.
- Michael expects the Apartment Exchange to remain in operation for the foreseeable future.

Learning Objective 2**S1-6 Using the accounting equation**

Seal Away Handyman Services has total assets for the year of \$18,400 and total liabilities of \$9,050.

Requirements

- Use the accounting equation to solve for equity.
- If next year assets increased by \$4,000 and equity decreased by \$2,940, what would be the amount of total liabilities for Seal Away Handyman Services?

Learning Objective 3**S1-7 Using the accounting equation**

Roland's Overhead Doors reports the following financial information:

Assets	\$ 42,600
Liabilities	17,220
Common Stock	26,240
Dividends	8,500
Revenues	12,080
Expenses	?

Requirements

- Use the accounting equation to solve for the missing information.
- Did Roland's Overhead Doors report net income or net loss?

Learning Objective 3**S1-8 Identifying accounts**

Consider the following accounts:

- | | |
|------------------------|---------------------|
| a. Accounts Payable | f. Service Revenue |
| b. Cash | g. Office Supplies |
| c. Common Stock | h. Dividends |
| d. Accounts Receivable | i. Land |
| e. Rent Expense | j. Salaries Expense |

Identify each account as Asset (A), Liability (L), or Equity (E).

Learning Objective 3

Learning Objective 4**S1-9 Using the accounting equation to analyze transactions**

Tiny Town Kennel earns service revenue by caring for the pets of customers. Tiny Town Kennel is organized as a corporation. During the past month, Tiny Town Kennel has the following transactions:

- a. Received \$520 cash for service revenue earned.
- b. Paid \$325 cash for salaries expense.
- c. Investors contributed \$1,000 to the corporation in exchange for common stock.
- d. Earned \$640 for service revenue, but the customer has not paid Tiny Town Kennel yet.
- e. Received utility bill of \$85, which will be paid next month.
- f. Cash dividends of \$100 were paid to stockholders.

Indicate the effects of the business transactions on the accounting equation for Tiny Town Kennel. Transaction (a) is answered as a guide.

a. Increase asset (Cash); Increase equity (Service Revenue)

Learning Objective 4**S1-10 Using the accounting equation to analyze transactions**

Elaine's Inflatables earns service revenue by providing party planning services and inflatable playscapes. Elaine's Inflatables is organized as a corporation. During the past month, Elaine's Inflatables had the following transactions:

- a. Investors contributed \$10,000 to the corporation in exchange for common stock.
- b. Purchased equipment for \$5,000 on account.
- c. Paid \$400 for office supplies.
- d. Earned and received \$2,500 cash for service revenue.
- e. Paid \$400 for wages to employees.
- f. Cash dividends of \$1,000 were paid to stockholders.
- g. Earned \$1,000 for services provided. Customer has not yet paid.
- h. Paid \$1,000 for rent.
- i. Received a bill for \$250 for the monthly utilities. The bill has not yet been paid.

Indicate the effects of the business transactions on the accounting equation for Elaine's Inflatables. Transaction (a) is answered as a guide.

a. Increase asset (Cash); Increase equity (Common Stock)

Learning Objective 5**S1-11 Identifying accounts on the financial statements**

Consider the following accounts:

- | | |
|------------------------|---------------------|
| a. Accounts Payable | f. Service Revenue |
| b. Cash | g. Office Supplies |
| c. Common Stock | h. Dividends |
| d. Accounts Receivable | i. Land |
| e. Rent Expense | j. Salaries Expense |

Identify the financial statement (or statements) that each account would appear on. Use I for Income Statement, RE for Statement of Retained Earnings, and B for Balance Sheet.

Use the following information to answer Short Exercises S1-12 through S1-14.

Decorating Arrangements has just completed operations for the year ended December 31, 2016. This is the third year of operations for the company. The following data have been assembled for the business:

Insurance Expense	\$ 2,000	Salaries Expense	\$ 37,000
Service Revenue	80,000	Accounts Payable	4,300
Utilities Expense	500	Office Supplies	1,500
Rent Expense	11,000	Dividends	4,500
Common Stock	8,500	Accounts Receivable	7,500
Cash	7,000	Equipment	26,600
Retained Earnings, Jan. 1, 2016	4,800		

S1-12 Preparing the income statement

Prepare the income statement of Decorating Arrangements for the year ended December 31, 2016.

.....
Learning Objective 5
.....

S1-13 Preparing the statement of retained earnings

Prepare the statement of retained earnings of Decorating Arrangements for the year ended December 31, 2016.

.....
Learning Objective 5
.....

S1-14 Preparing the balance sheet

Prepare the balance sheet of Decorating Arrangements as of December 31, 2016.

.....
Learning Objective 5
.....

S1-15 Preparing the statement of cash flows

Pushing Daisies Homes had the following cash transactions for the month ended July 31, 2016.

.....
Learning Objective 5
.....

Cash receipts:	
Collections from customers	\$ 24,000
Issued common stock	12,000
Cash payments:	
Rent	3,000
Utilities	900
Salaries	1,600
Purchase of equipment	18,000
Payment of cash dividends	3,500
Cash balance, July 1, 2016	11,000
Cash balance, July 31, 2016	20,000

Prepare the statement of cash flows for Pushing Daisies Homes for the month ended July 31, 2016.

Learning Objective 6**S1-16 Calculating Return on Assets (ROA)**

Advanced Water Services had net income for the month of October of \$34,400. Assets as of the beginning and end of the month totaled \$325,000, and \$535,000, respectively. Calculate Advanced Water Services' return on assets (ROA) for the month of October.

> Exercises**Learning Objective 1****E1-17 Identifying users of accounting information**

For each of the users of accounting information, identify whether the user is an external decision maker (E) or an internal decision maker (I):

- | | |
|-----------------------------|--------------------|
| a. customer | e. investor |
| b. company manager | f. controller |
| c. Internal Revenue Service | g. cost accountant |
| d. lender | h. SEC |

Learning Objective 2**E1-18 Using accounting vocabulary**

Consider the following accounting terms and definitions, and match each term to the definition:

- | | |
|----------------------------|---|
| 1. Sole proprietorship | a. Set of global accounting guidelines, formulated by the IASB |
| 2. Faithful representation | b. Holds that fair market value should not be used over actual costs |
| 3. Partnership | c. Stands for Financial Accounting Standards Board |
| 4. IFRS | d. Owner is referred to as a proprietor |
| 5. Corporation | e. Asserts that accounting information should be complete, neutral, and free from material error |
| 6. Audit | f. An examination of a company's financial statements and records |
| 7. Cost principle | g. Has two or more owners (called partners) |
| 8. FASB | h. U.S. governmental agency that oversees the U.S. financial markets |
| 9. Creditors | i. Type of entity that is designed to limit personal liability exposure of owners to the entity's debts |
| 10. SEC | j. Person or business lending money |

Learning Objectives 3, 5

E1-19 Using accounting vocabulary

Consider the following accounting terms and definitions, and match each term to the definition:

- | | |
|------------------------------------|--|
| 1. Accounting equation | a. An economic resource that is expected to be of benefit in the future |
| 2. Asset | b. Debts that are owed to creditors |
| 3. Balance sheet | c. Excess of total expenses over total revenues |
| 4. Expense | d. Excess of total revenues over total expenses |
| 5. Income statement | e. The basic tool of accounting, stated as
$\text{Assets} = \text{Liabilities} + \text{Equity}$ |
| 6. Liability | f. Decreases in equity that occur in the course of selling goods or services |
| 7. Net income | g. Increases in equity that occur in the course of selling goods or services |
| 8. Net loss | h. Reports on a business's cash receipts and cash payments during a period |
| 9. Revenue | i. Reports on an entity's assets, liabilities, and stockholders' equity as of a specific date |
| 10. Statement of cash flows | j. Reports on an entity's revenues, expenses, and net income or loss for the period |
| 11. Statement of retained earnings | k. Reports how the company's retained earnings balance changed from the beginning to the end of the period |

E1-20 Using the accounting equation

Compute the missing amount in the accounting equation for each entity from the financial information presented:

	Assets	Liabilities	Equity
Newton Gas	\$?	\$ 64,000	\$ 80,000
Vegas Video Rentals	65,000	?	25,000
Cline's Grocery	200,000	43,000	?

Learning Objective 3

E1-21 Using the accounting equation

Alan Lightworks' balance sheet data at May 31, 2016, and June 30, 2016, follow:

	May 31, 2016	June 30, 2016
Total assets	\$ 188,000	\$ 244,000
Total liabilities	122,000	88,000

Learning Objective 3

For each of the following situations with regard to common stock and dividends of a corporation, compute the amount of net income or net loss during June 2016.

- The company issued \$12,500 of common stock and paid no dividends.
- The company issued no common stock. It paid cash dividends of \$8,000.
- The company issued \$35,000 of common stock and paid cash dividends of \$30,000.

Learning Objective 3**E1-22 Using the accounting equation**

Morton Carpets started 2016 with total assets of \$19,000 and total liabilities of \$7,000. At the end of 2016, Morton total assets stood at \$23,000 and total liabilities were \$12,000.

Requirements

1. Did the stockholders' equity of Morton Carpets increase or decrease during 2016? By how much?
2. Identify the four possible reasons that stockholders' equity can change.

Learning Objective 3**E1-23 Using the accounting equation**

During 2016, Peaceful River Spa reported revenue of \$40,000. Total expenses for the year were \$35,000. Peaceful River Spa ended the year with total assets of \$23,000, and it owed debts totaling \$9,000. At year-end 2015, the business reported total assets of \$18,000 and total liabilities of \$9,000.

Requirements

1. Compute Peaceful River Spa's net income for 2016.
2. Did Peaceful River Spa's stockholders' equity increase or decrease during 2016? By how much?

Learning Objective 3**E1-24 Using the accounting equation**

The records of Meehan Company show the following at December 31, 2016:

Beginning:		Equity:	
Assets	\$ 64,000	Common Stock	\$ 13,000
Liabilities	44,000	Dividends	4,000
Ending:		Revenues	257,000
Assets	\$ 54,000	Expenses	?
Liabilities	39,000	Retained Earnings, Jan. 1, 2016	7,000

Requirements

1. Compute the missing amount for Meehan Company. You will need to determine Retained Earnings, December 31, 2016, and total stockholders' equity.
2. Did Meehan earn a net income or suffer a net loss for the year? Compute the amount.

Learning Objective 4

E1-25 Using the accounting equation to analyze transactions

As the manager of a Papa Sean's restaurant, you must deal with a variety of business transactions. Give an example of a transaction that has each of the following effects on the accounting equation:

- Increase one asset and decrease another asset.
- Decrease an asset and decrease equity.
- Decrease an asset and decrease a liability.
- Increase an asset and increase equity.
- Increase an asset and increase a liability.

Learning Objective 4

E1-26 Using the accounting equation to analyze business transactions

Indicate the effects of the following business transactions on the accounting equation of Vivian's Online Video store. Transaction (a) is answered as a guide.

- Received cash of \$10,000 from issuance of common stock.
Answer: Increase asset (Cash); Increase equity (Common Stock)
- Earned video rental revenue on account, \$2,800.
- Purchased office furniture on account, \$300.
- Received cash on account, \$400.
- Paid cash on account, \$100.
- Rented videos and received cash of \$200.
- Paid monthly office rent of \$1,000.
- Paid \$100 cash to purchase office supplies.

Learning Objective 4

E1-27 Using the accounting equation to analyze business transactions

Indicate the effects of the following business transactions on the accounting equation for Sam's Snack Foods, a supplier of snack foods. Transaction (a) is answered as a guide.

- Sam's Snack Foods received cash from issuance of common stock to stockholders.
Answer: Increase asset (Cash); Increase equity (Common Stock)
- Cash purchase of land for a building site.
- Paid cash on accounts payable.
- Purchased equipment; signed a note payable.
- Performed service for a customer on account.
- Employees worked for the week but will be paid next Tuesday.
- Received cash from a customer on accounts receivable.
- Borrowed money from the bank.
- Cash dividends paid to stockholders.
- Incurred utilities expense on account.

E1-30 Preparing the financial statements

Estella Osage publishes an online travel magazine. In need of cash, the business applies for a loan with National Bank. The bank requires borrowers to submit financial statements. With little knowledge of accounting, Estella Osage, a stockholder, does not know how to proceed.

Requirements

1. What are the four financial statements that the business will need to prepare?
2. Is there a specific order in which the financial statements must be prepared?
3. Explain how to prepare each statement.

Use the following information to answer Exercises E1-31 through E1-33.

The account balances of Wilford Towing Service at June 30, 2016, follow:

Equipment	\$ 17,500	Service Revenue	\$ 13,000
Office Supplies	1,300	Accounts Receivable	8,200
Notes Payable	6,900	Accounts Payable	6,000
Rent Expense	800	Retained Earnings, June 1, 2016	3,700
Cash	1,900	Salaries Expense	1,900
Dividends	2,000	Common Stock	4,000

E1-31 Preparing the income statement**Requirements**

1. Prepare the income statement for Wilford Towing Service for the month ending June 30, 2016.
2. What does the income statement report?

E1-32 Preparing the statement of retained earnings**Requirements**

1. Prepare the statement of retained earnings for Wilford Towing Service for the month ending June 30, 2016.
2. What does the statement of retained earnings report?

E1-33 Preparing the balance sheet**Requirements**

1. Prepare the balance sheet for Wilford Towing Service as of June 30, 2016.
2. What does the balance sheet report?

Learning Objective 5**Learning Objective 5**

Net Income \$10,300

Learning Objective 5

Ending Retained Earnings \$12,000

Learning Objective 5

Total Assets \$28,900

Use the following information to answer Exercises E1-34 through E1-36.

The assets, liabilities, and equities of Drought Design Studio have the following balances at December 31, 2016. The retained earnings was \$31,000 at the beginning of the year with common stock of \$20,000 and dividends of \$55,000 at year end.

Notes Payable	\$ 9,800	Office Furniture	\$ 55,200
Rent Expense	22,000	Utilities Expense	6,500
Cash	3,100	Accounts Payable	3,700
Office Supplies	4,500	Service Revenue	159,200
Salaries Expense	62,000	Accounts Receivable	10,200
Property Tax Expense	1,200	Miscellaneous Expense	4,000

Learning Objective 5

Net Income \$63,500

Learning Objective 5

Ending Retained Earnings \$39,500

Learning Objective 5

Total Assets \$73,000

Learning Objective 5**E1-34 Preparing the income statement**

Prepare the income statement for Drought Design Studio for the year ending December 31, 2016.

E1-35 Preparing the statement of retained earnings

Prepare the statement of retained earnings for Drought Design Studio for the year ending December 31, 2016.

E1-36 Preparing the balance sheet

Prepare the balance sheet for Drought Design Studio as of December 31, 2016.

E1-37 Preparing the statement of cash flows

For each transaction, identify the appropriate section on the statement of cash flows to report the transaction. Choose from: Cash flows from operating activities (O), Cash flows from investing activities (I), Cash flows from financing activities (F), or Is not reported on the statement of cash flows (X). If reported on the statement, decide whether the transaction should be shown as a positive cash flow (+) or a negative cash flow (-):

- The business received cash from the issuance of common stock.
- Paid cash on accounts payable for office supplies purchased.
- Performed services for a customer on account.
- Cash dividends were paid to stockholders.
- Received cash from a customer for services performed.
- Purchased equipment with cash.
- Paid rent for the month.
- Purchased land; signed a note payable.
- Paid employees wages for the week.
- Incurred utility expense on account.

During September 2016, the business completed the following transactions:

- a. Missy Mansion contributed \$8,000 cash in exchange for common stock.
- b. Performed service for a client and received cash of \$1,300.
- c. Paid off the beginning balance of accounts payable.
- d. Purchased office supplies from OfficeMax on account, \$400.
- e. Collected cash from a customer on account, \$2,200.
- f. Cash dividends of \$1,800 were paid to stockholders.
- g. Consulted for a new band and billed the client for services rendered, \$6,500.
- h. Recorded the following business expenses for the month:
 - Paid office rent: \$1,400.
 - Paid advertising: \$350.

Analyze the effects of the transactions on the accounting equation of Solid Gold using the format presented on page 67.

Learning Objective 4

Cash \$18,550

P1-41A Using the accounting equation for transaction analysis

Cameron Turnbull started a new business, Turnbull Gymnastics, and completed the following transactions during December:

Dec. 1	Cameron contributed \$21,000 cash in exchange for common stock.
2	Received \$2,400 cash from customers for services performed.
5	Paid \$350 cash for office supplies.
9	Performed services for a customer and billed the customer for services rendered, \$1,500.
10	Received \$100 invoice for utilities due in two weeks.
15	Paid for advertising in the local paper, \$300.
20	Paid utility invoice received on Dec. 10.
25	Collected cash in full from customer billed on Dec. 9.
28	Paid rent for the month, \$2,800.
28	Paid \$1,100 to assistant for wages.
30	Received \$2,800 cash from customers for services performed.
31	Cash dividends of \$4,500 were paid to stockholders.

Analyze the effects of the transactions on the accounting equation of Turnbull Gymnastics using a format similar to Exhibit 1-6.

P1-42A Preparing financial statements

Presented here are the accounts of Golden City Barbershop for the year ended December 31, 2016.

Land	\$ 5,000	Common Stock	\$ 25,000
Notes Payable	37,000	Accounts Payable	17,000
Property Tax Expense	2,700	Accounts Receivable	900
Dividends	32,000	Advertising Expense	13,000
Rent Expense	11,000	Building	157,000
Salaries Expense	61,000	Cash	3,800
Salaries Payable	900	Equipment	19,000
Service Revenue	195,000	Insurance Expense	2,500
Office Supplies	9,000	Interest Expense	7,000
Retained Earnings, 12/31/15	49,000		

Requirements

1. Prepare Golden City Barbershop's income statement.
2. Prepare the statement of retained earnings.
3. Prepare the balance sheet.

P1-43A Preparing financial statements

Click a Pix Photography works weddings and prom-type parties. The balance of retained earnings was \$26,000 at December 31, 2015. At December 31, 2016, the business's accounting records show these balances:

Insurance Expense	\$ 11,000	Accounts Receivable	\$ 12,000
Cash	40,000	Notes Payable	9,000
Accounts Payable	6,000	Retained Earnings, Dec. 31, 2016	?
Advertising Expense	3,200	Salaries Expense	20,000
Service Revenue	95,000	Equipment	73,800
Dividends	10,000	Common Stock	34,000

Prepare the following financial statements for Click a Pix Photography for the year ended December 31, 2016:

- a. Income statement.
- b. Statement of retained earnings.
- c. Balance sheet.

Learning Objective 5

1. Net Income \$97,800

Learning Objective 5

- b. Ending Retained Earnings \$76,800

Learning Objective 5

Total Assets \$47,100

P1-44A Preparing financial statements

The bookkeeper of Juniper Landscaping prepared the company's balance sheet while the accountant was ill. The balance sheet contains numerous errors. In particular, the bookkeeper knew that the balance sheet should balance, so he plugged in the retained earnings amount needed to achieve this balance. The retained earnings is incorrect. All other amounts are right, but some are out of place or not included in this statement. Prepare a corrected balance sheet.

JUNIPER LANDSCAPING			
Balance Sheet			
Month Ended September 30, 2016			
Assets		Liabilities	
Cash	\$ 4,500	Accounts Receivables	\$ 2,500
Office Supplies	1,000	Dividends	13,000
Land	34,000	Service Revenue	43,000
Salaries Expense	2,600	Property Tax Expense	3,100
Office Furniture	6,300	Accounts Payable	3,400
Notes Payable	24,300	Retained Earnings	(75)
Rent Expense	225	Stockholders' Equity	
		Common Stock	8,000
Total Assets	\$ 72,925	Total Liabilities	\$ 72,925

Learning Objectives 4, 52b. Ending Retained Earnings
\$6,900**P1-45A Using the accounting equation for transaction analysis and preparing financial statements**

Alfonso Sheen recently opened his own accounting firm, which he operates as a corporation. The name of the new entity is Alfonso Sheen, CPA. Sheen experienced the following events during the organizing phase of the new business and its first month of operations in 2016:

-
- | | |
|--------|---|
| Feb. 5 | Sheen deposited \$70,000 in a new business bank account titled Alfonso Sheen, CPA. The business issued common stock to Sheen. |
| 6 | Paid \$350 cash for letterhead stationery for new office. |
| 7 | Purchased office furniture for the office on account, \$7,000. |
| 10 | Consulted with tax client and received \$1,800 for services rendered. |
| 11 | Paid utilities, \$400. |
| 12 | Finished tax hearings on behalf of a client and submitted a bill for accounting services, \$11,000. |
| 18 | Paid office rent, \$1,000. |
| 25 | Received amount due from client that was billed on February 12. |
| 27 | Paid full amount of accounts payable created on February 7. |
| 29 | Cash dividends of \$4,500 were paid to stockholders. |
-

Requirements

1. Analyze the effects of the events on the accounting equation of Alfonso Sheen, CPA. Use a format similar to Exhibit 1-6.
2. Prepare the following financial statements:
 - a. Income statement.
 - b. Statement of retained earnings.
 - c. Balance sheet.

P1-46A Using the accounting equation for transaction analysis and preparing financial statements

Angela Petrillo recently opened her own law office, which she operates as a corporation. The name of the new entity is Angela Petrillo, Attorney. Petrillo experienced the following events during the organizing phase of the new business and its first month of operation, March 2016. Some of the events were personal and did not affect the law practice. Others were business transactions and should be accounted for by the business.

Mar. 1	Sold personal investment in Amazon stock, which she had owned for several years, receiving \$31,000 cash.
2	Deposited the \$31,000 cash from the sale of the Amazon stock in her personal bank account.
3	Deposited \$72,000 cash in a new business bank account titled Angela Petrillo, Attorney. The business issued common stock to Petrillo.
5	Paid \$350 cash for ink cartridges for the printer.
7	Purchased computer for the law office, agreeing to pay the account, \$5,500, within three months.
9	Received \$2,500 cash from customers for services rendered.
15	Received bill from <i>The Lawyer</i> for magazine subscription, \$340. (Use Miscellaneous Expense account.)
23	Finished court hearings on behalf of a client and submitted a bill for legal services, \$18,000, on account.
28	Paid bill from <i>The Lawyer</i> .
30	Paid utilities, \$1,300.
31	Received \$1,800 cash from clients billed on Mar. 23.
31	Cash dividends of \$2,000 were paid to stockholders.

Requirements

1. Analyze the effects of the preceding events on the accounting equation of Angela Petrillo, Attorney. Use a format similar to Exhibit 1-6.
2. Prepare the following financial statements:
 - a. Income statement.
 - b. Statement of retained earnings.
 - c. Balance sheet.

Learning Objectives 4, 5

2c. Total Assets \$94,360

> Problems Group B

Learning Objective 4

Cash \$8,150

P1-47B Using the accounting equation for transaction analysis

Meg Clifford opened a public relations firm called Dance Fever on August 1, 2016. The following amounts summarize her business on August 31, 2016:

ASSETS				LIABILITIES +	EQUITY				
				Contributed Capital	+	Retained Earnings			
Cash	+ Accounts Receivable	+ Office Supplies	+ Land	Accounts Payable	+ Common Stock	- Dividends	+ Service Revenue	- Rent Expense	- Advertising Expense
Bal. \$2,100	+ \$2,500	+ \$0	+ \$11,000	\$6,000	+ \$7,100		+ \$2,500		

During September 2016, the business completed the following transactions:

- a. Meg Clifford contributed \$13,000 cash in exchange for common stock.
- b. Performed service for a client and received cash of \$1,200.
- c. Paid off the beginning balance of accounts payable.
- d. Purchased office supplies from OfficeMax on account, \$1,000.
- e. Collected cash from a customer on account, \$1,500.
- f. Cash dividends of \$1,900 were paid to stockholders.
- g. Consulted for a new band and billed the client for services rendered, \$6,000.
- h. Recorded the following business expenses for the month:
 - Paid office rent: \$1,400.
 - Paid advertising: \$350.

Analyze the effects of the transactions on the accounting equation of Dance Fever using the format presented above.

Learning Objective 4

Cash \$19,775

P1-48B Using the accounting equation for transaction analysis

Cosmo Timmins started a new business, Timmins Gymnastics, and completed the following transactions during December:

- | | |
|--------|---|
| Dec. 1 | Cosmo contributed \$20,000 cash in exchange for common stock. |
| 2 | Received \$2,200 cash from customers for services performed. |
| 5 | Paid \$350 cash for office supplies. |
| 9 | Performed services for a customer and billed the customer for services rendered, \$4,500. |
| 10 | Received \$100 invoice for utilities due in two weeks. |
| 15 | Paid for advertising in the local paper, \$475. |
| 20 | Paid utility invoice received on Dec. 10. |
| 25 | Collected cash in full from customer billed on Dec. 9. |
| 28 | Paid rent for the month, \$3,000. |
| 28 | Paid \$1,500 to assistant for wages. |
| 30 | Received \$2,000 cash from customers for services performed. |
| 31 | Cash dividends of \$3,500 were paid to stockholders. |

Analyze the effects of the transactions on the accounting equation of Timmins Gymnastics using a format similar to Exhibit 1-6.

P1-49B Preparing financial statements

Presented here are the accounts of Town and Country Realty for the year ended December 31, 2016:

Land	\$ 5,000	Common Stock	\$ 28,000
Notes Payable	36,000	Accounts Payable	14,000
Property Tax Expense	3,400	Accounts Receivable	1,000
Dividends	32,000	Advertising Expense	14,000
Rent Expense	10,000	Building	144,600
Salaries Expense	69,000	Cash	3,800
Salaries Payable	1,500	Equipment	13,000
Service Revenue	180,000	Insurance Expense	2,200
Office Supplies	12,000	Interest Expense	6,500
Retained Earnings, 12/31/15	57,000		

Requirements

1. Prepare Town and Country Realty's income statement.
2. Prepare the statement of retained earnings.
3. Prepare the balance sheet.

Learning Objective 5

1. Net Income \$74,900

P1-50B Preparing financial statements

Precision Pics works weddings and prom-type parties. The balance of Retained Earnings was \$26,000 at December 31, 2015. At December 31, 2016, the business's accounting records show these balances:

Insurance Expense	\$ 14,000	Accounts Receivable	\$ 7,000
Cash	38,000	Notes Payable	9,000
Accounts Payable	13,000	Retained Earnings, Dec. 31, 2016	?
Advertising Expense	3,500	Salaries Expense	21,000
Service Revenue	110,000	Equipment	96,500
Dividends	11,000	Common Stock	33,000

Prepare the following financial statements for Precision Pics for the year ended December 31, 2016:

- a. Income statement.
- b. Statement of retained earnings.
- c. Balance sheet.

Learning Objective 5

- b. Ending Retained Earnings \$86,500

Learning Objective 5

Total Assets \$47,400

P1-51B Preparing financial statements

The bookkeeper of Outdoor Life Landscaping prepared the company's balance sheet while the accountant was ill. The balance sheet contains numerous errors. In particular, the bookkeeper knew that the balance sheet should balance, so he plugged in the retained earnings amount needed to achieve this balance. The retained earnings is incorrect. All other amounts are right, but some are out of place or not included in this statement. Prepare a corrected balance sheet.

OUTDOOR LIFE LANDSCAPING			
Balance Sheet			
Month Ended March 31, 2016			
Assets		Liabilities	
Cash	\$ 4,800	Accounts Receivables	\$ 2,300
Office Supplies	1,100	Dividends	16,000
Land	33,500	Service Revenue	43,000
Salaries Expense	2,500	Property Tax Expense	3,000
Office Furniture	6,200	Accounts Payable	3,100
Notes Payable	24,400	Retained Earnings	(5,550)
Rent Expense	350	Stockholders' Equity	
		Common Stock	11,000
Total Assets	<u><u>\$ 72,850</u></u>	Total Liabilities	<u><u>\$ 72,850</u></u>

Learning Objectives 4, 5

2c. Total Assets \$76,700

P1-52B Using the accounting equation for transaction analysis and preparing financial statements

Andre Simmon recently opened his own accounting firm, which he operates as a corporation. The name of the new entity is Andre Simmon, CPA. Simmon experienced the following events during the organizing phase of the new business and its first month of operations in 2016.

Feb. 5	Simmon deposited \$65,000 in a new business bank account titled Andre Simmon, CPA. The business issued common stock to Simmon.
6	Paid \$300 cash for letterhead stationery for new office.
7	Purchased office furniture for the office on account, \$6,800.
10	Consulted with tax client and received \$3,300 for services rendered.
11	Paid utilities, \$100.
12	Finished tax hearings on behalf of a client and submitted a bill for accounting services, \$12,500.
18	Paid office rent, \$1,000.
25	Received amount due from client that was billed on February 12.
27	Paid full amount of accounts payable created on February 7.
29	Cash dividends of \$3,000 were paid to stockholders.

Requirements

1. Analyze the effects of the events on the accounting equation of Andre Simmon, CPA. Use a format similar to Exhibit 1-6.
2. Prepare the following financial statements:
 - a. Income statement.
 - b. Statement of retained earnings.
 - c. Balance sheet.

P1-53B Using the accounting equation for transaction analysis and preparing financial statements

Ariana Peterson recently opened her own law office, which she operates as a corporation. The name of the new entity is Ariana Peterson, Attorney. Peterson experienced the following events during the organizing phase of the new business and its first month of operation, December 2016. Some of the events were personal and did not affect the law practice. Others were business transactions and should be accounted for by the business.

Dec. 1	Sold personal investment in Nike stock, which she had owned for several years, receiving \$25,000 cash.
2	Deposited the \$25,000 cash from the sale of the Nike stock in her personal bank account.
3	Deposited \$65,000 cash in a new business bank account titled Ariana Peterson, Attorney. The business issued common stock to Peterson.
5	Paid \$400 cash for ink cartridges for the printer.
7	Purchased computer for the law office, agreeing to pay the account, \$6,800, within three months.
9	Received \$2,900 cash from customers for services rendered.
15	Received bill from <i>The Lawyer</i> for magazine subscription, \$300. (Use Miscellaneous Expense account.)
23	Finished court hearings on behalf of a client and submitted a bill for legal services, \$18,000, on account.
28	Paid bill from <i>The Lawyer</i> .
30	Paid utilities, \$840.
31	Received \$2,800 cash from clients billed on Dec. 23.
31	Cash dividends of \$2,500 were paid to stockholders.

Requirements

1. Analyze the effects of the preceding events on the accounting equation of Ariana Peterson, Attorney. Use a format similar to Exhibit 1-6.
2. Prepare the following financial statements:
 - a. Income statement.
 - b. Statement of retained earnings.
 - c. Balance sheet.

Learning Objectives 4, 5

2c. Total Assets \$89,060

> Continuing Problem

Problem P1-54 is the first problem in a sequence that begins an accounting cycle. The cycle is continued in Chapter 2 and completed in Chapter 5.

P1-54 Using the accounting equation for transaction analysis, preparing financial statements, and calculating return on assets (ROA)

Daniels Consulting began operations and completed the following transactions during December 2016:

Dec. 2	Stockholders contributed \$20,000 cash in exchange for common stock.
2	Paid monthly office rent, \$2,000.
3	Paid cash for a computer, \$3,600. This equipment is expected to remain in service for five years.
4	Purchased office furniture on account, \$3,000. The furniture should last for five years.
5	Purchased office supplies on account, \$800.
9	Performed consulting service for a client on account, \$2,500.
12	Paid utilities expenses, \$150.
18	Performed service for a client and received cash of \$2,100.
21	Received \$2,400 in advance for client service to be performed in the future. (This increases the Unearned Revenue account, which is a liability. This account will be explained in more detail in Chapter 2.)
21	Hired an administrative assistant to be paid \$2,055 on the 20th day of each month. The secretary begins work immediately.
26	Paid \$200 on account.
28	Collected \$400 on account.
30	Cash dividends of \$1,000 were paid to stockholders.

Requirements

1. Analyze the effects of Daniels Consulting's transactions on the accounting equation. Use the format of Exhibit 1-6, and include these headings: Cash; Accounts Receivable; Office Supplies; Equipment; Furniture; Accounts Payable; Unearned Revenue; Common Stock; Dividends; Service Revenue; Rent Expense; and Utilities Expense.
2. Prepare the income statement of Daniels Consulting for the month ended December 31, 2016.
3. Prepare the statement of retained earnings for the month ended December 31, 2016.
4. Prepare the balance sheet as of December 31, 2016.
5. Calculate the return on assets for Daniels Consulting for December, 2016.

CRITICAL THINKING

> Decision Case 1-1

Let's examine a case using Greg's Tunes and Sal's Silly Songs. It is now the end of the first year of operations, and the stockholders want to know how well each business came out at the end of the year. Neither business kept complete accounting records, and no dividends were paid. The businesses throw together the following data at year-end:

Sal's Silly Songs:	
Total assets	\$ 23,000
Common Stock	8,000
Total revenues	35,000
Total expenses	22,000
Greg's Tunes:	
Total liabilities	\$ 10,000
Common Stock	6,000
Total expenses	44,000
Net income	9,000

To gain information for evaluating the businesses, the stockholders ask you several questions. For each answer, you must show your work to convince the stockholders that you know what you are talking about.

Requirements

1. Which business has more assets?
2. Which business owes more to creditors?
3. Which business has more stockholders' equity at the end of the year?
4. Which business brought in more revenue?
5. Which business is more profitable?
6. Which of the foregoing questions do you think is most important for evaluating these two businesses? Why?
7. Which business looks better from a financial standpoint?

> Ethical Issue 1-1

The tobacco companies have paid billions because of smoking-related illnesses. In particular, Philip Morris, a leading cigarette manufacturer, paid more than \$3,000,000,000 in settlement payments in one year.

Requirements

1. Suppose you are the chief financial officer (CFO) responsible for the financial statements of Philip Morris. What ethical issue would you face as you consider what to report in your company's annual report about the cash payments? What is the ethical course of action for you to take in this situation?
2. What are some of the negative consequences to Philip Morris for not telling the truth? What are some of the negative consequences to Philip Morris for telling the truth?

> Fraud Case 1-1

Exeter is a building contractor on the Gulf Coast. After losing a number of big lawsuits, it was facing its first annual net loss as the end of the year approached. The owner, Hank Snow, was under intense pressure from the company's creditors to report positive net income for the year. However, he knew that the controller, Alice Li, had arranged a short-term bank loan of \$10,000 to cover a temporary shortfall of cash. He told Alice to record the incoming cash as "construction revenue" instead of a loan. That would nudge the company's income into positive territory for the year, and then, he said, the entry could be corrected in January when the loan was repaid.

Requirements

1. How would this action affect the year-end income statement? How would it affect the year-end balance sheet?
2. If you were one of the company's creditors, how would this fraudulent action affect you?

> Financial Statement Case 1-1

This and similar cases in later chapters focus on the financial statements of a real company—**Starbucks Corporation**, a premier roaster and retailer of specialty coffee. As you work each case, you will gain confidence in your ability to use the financial statements of real companies.

Visit <http://www.pearsonglobaleditions.com/Horngren> to view a link to the Starbucks Corporation Fiscal 2013 Annual Report.

Requirements

1. How much in cash (including cash equivalents) did Starbucks Corporation have on September 29, 2013?
2. What were the company's total assets at September 29, 2013? At September 30, 2012?
3. Write the company's accounting equation at September 29, 2013, by filling in the dollar amounts:

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

4. Identify total net sales (revenues) for the year ended September 29, 2013. How much did total revenue increase or decrease from 2012 to 2013?
5. How much net income (net earnings) or net loss did Starbucks earn for 2013 and for 2012? Based on net income, was 2013 better or worse than 2012?
6. Calculate Starbucks Corporation's return on assets for the year ending September 29, 2013.
7. How did Starbucks Corporation's return on assets compare to **Green Mountain Coffee Roasters, Inc.**'s return on assets?

MyAccountingLab

For a wealth of online resources, including exercises, problems, media, and immediate tutorial help, please visit <http://www.myaccountinglab.com>.

> Quick Check Answers

1. d 2. c 3. a 4. c 5. c 6. a 7. c 8. a 9. b 10. a 11. c

Recording Business Transactions

2



Where's the Money?

Rachel Long scoured through the stacks of printouts. She had been hired to work on an embezzlement (stealing cash or assets of an entity) case for a local school district. The chief financial officer had called her because he suspected one of his employees was stealing money from the Parent Teacher Association (PTA). Rachel loved working on embezzlement cases. She enjoyed searching through the financial statements, identifying a problem, and then finding the transactions that documented the embezzlement. Rachel knew that if she looked deeply enough she would find the evidence that money was stolen. She always treated these cases as a puzzle that needed to be solved.

Sometimes businesses are unfortunate enough to have employees steal from them, and they need help in identifying the thief and providing enough evidence to turn the matter over to a law enforcement agency. Businesses often turn to an

accountant, such as Rachel, who specializes in fraud, often called a certified fraud examiner. In addition, businesses hire accountants to help protect their assets by identifying potential problems in their recordkeeping and control of cash and assets.

Where will Rachel start looking when she begins searching for the stolen money? She'll start at the source, by reviewing documents such as invoices, sales receipts, and bank deposit slips. She will then review the transactions that were recorded (or not recorded) from those documents. These two pieces will help Rachel determine whether money was stolen from the school district and how the embezzlement occurred. It's important to Rachel that she not only catches the thief but also helps the school district prevent losses in the future. She will use her knowledge and experience in accounting to help her.



Why Is Recording Business Transactions Important?

Accounting is based on transactions. The recording of those transactions is based on source documents that provide the proof of the financial position of the business. The lack of that proof can lead to discoveries of stolen money and fictitious financial statements. As an example, when an employee at WorldCom, Inc., a long distance telephone company, found a \$500 million accounting entry without any evidence to support it, it led to the discovery of a \$3.8 billion fraud. The recording of transactions from source documents is the first step in the accounting process—and one of the most important. In this chapter, you learn about source documents and how to record transactions.



Chapter 2 Learning Objectives



- 1 Explain accounts as they relate to the accounting equation and describe common accounts
- 2 Define debits, credits, and normal account balances using double-entry accounting and T-accounts
- 3 Record transactions in a journal and post journal entries to the ledger
- 4 Prepare the trial balance and illustrate how to use the trial balance to prepare financial statements
- 5 Use the debt ratio to evaluate business performance

Smart Touch Learning started out by recording the company's business transactions in terms of the accounting equation. That procedure works well when learning how to analyze transactions, but it's not a method in which a real-world business actually records transactions. In this chapter, you learn a more efficient way to capture business transactions. First, we need to start with a review of the accounting equation.

WHAT IS AN ACCOUNT?

Recall that the basic tool of accounting is the accounting equation:

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

The accounting equation is made up of three parts or categories: assets, liabilities, and equity. Each category contains accounts. An **account** is the detailed record of all increases and decreases that have occurred in an individual asset, liability, or equity during a specified period.

Assets

Assets are economic resources that are expected to benefit the business in the future—something the business owns or has control of that has value. Exhibit 2-1 contains a list of asset accounts that most businesses use.

Liabilities

Recall that a *liability* is a debt—that is, something the business owes. A business generally has fewer liability accounts than asset accounts. Exhibit 2-2 contains examples of common liability accounts.

You might be confused by the difference between the asset account, Accounts Receivable, and the liability account, Accounts Payable. An easy way to remember the distinction between these two accounts involves the words *Receivable* and *Payable*. A *receivable* involves a future receipt of cash. A *payable* involves a future payment of cash.

Learning Objective 1

Explain accounts as they relate to the accounting equation and describe common accounts

Account

A detailed record of all increases and decreases that have occurred in an individual asset, liability, or equity during a specific period.

I get confused by the difference between Accounts Receivable and Accounts Payable. Is there an easy way to remember these two accounts?




Exhibit 2-1 | Asset Accounts

Account Name	Explanation
Cash	A business's money. Includes bank balances, bills, coins, and checks.
Accounts Receivable	A customer's promise to pay in the future for services or goods sold. Often described as "On Account."
Notes Receivable	A <i>written</i> promise that a customer will pay a fixed amount of money and <i>interest</i> by a certain date in the future. Usually more formal than an Accounts Receivable.
Prepaid Expense	A payment of an expense in advance. It is considered an asset because the prepayment provides a benefit in the future. Examples of prepaid expenses are <i>Prepaid Rent</i> , <i>Prepaid Insurance</i> , and <i>Office Supplies</i> .
Equipment, Furniture, and Fixtures	The cost of equipment, furniture, and fixtures (such as light fixtures and shelving). A business has a separate asset account for each type.
Building	The cost of an office building, a store, or a warehouse.
Land	The cost of land a business uses in operations.

Notes Receivable

A written promise that a customer will pay a fixed amount of principal plus interest by a certain date in the future.

Prepaid Expense

A payment of an expense in advance.

Exhibit 2-2 | Liability Accounts

Account Name	Explanation
Accounts Payable	A promise made by the business to pay a debt in the future. Arises from a credit purchase.
Notes Payable	A <i>written</i> promise made by the business to pay a debt, usually involving <i>interest</i> , in the future.
Accrued Liability	An amount owed but not paid. A specific type of payable such as <i>Taxes Payable</i> , <i>Rent Payable</i> , and <i>Salaries Payable</i> .
Unearned Revenue	Occurs when a company receives cash from a customer but has not provided the product or service. The promise to provide services or deliver goods in the future.

Notes Payable

A written promise made by the business to pay a debt, usually involving interest, in the future.

Accrued Liability

A liability for which the business knows the amount owed but the bill has not been paid.

Unearned Revenue

A liability created when a business collects cash from customers in advance of providing services or delivering goods.



Equity

The stockholders' claim to the assets of the business is called equity or stockholders' equity. As shown in Exhibit 2-3, a company has separate accounts for each element of equity.

Exhibit 2-3 | Equity Accounts

Account Name	Explanation
Common Stock	Represents the net contributions of the stockholders in the business. Increases equity.
Dividends	Distributions of cash or other assets to the stockholders. Decreases equity.
Revenues	Earnings that result from delivering goods or services to customers. Increases equity. Examples include <i>Service Revenue</i> and <i>Rent Revenue</i> .
Expenses	The cost of selling goods or services. Decreases equity. Examples include <i>Rent Expense</i> , <i>Salaries Expense</i> , and <i>Utilities Expense</i> .

Chart of Accounts

Chart of Accounts

A list of all of a company's accounts with their account numbers.

Companies need a way to organize their accounts. They use a **chart of accounts** to do this. A chart of accounts lists all company accounts along with the account numbers. The chart of accounts for Smart Touch Learning appears in Exhibit 2-4. Account numbers are just shorthand versions of the account names. One account number equals one account name—just like your Social Security number is unique to you.

It can be confusing to choose the correct account to use when there are multiple accounts that sound similar. As an example, let's think about rent. There are four types of rent accounts: Prepaid Rent (asset), Rent Payable (liability), Rent Revenue (equity), or Rent Expense (equity). It is important that we understand the definition of each type of account so that we can use the account correctly. Prepaid Rent represents a prepayment of cash for renting a building in the future. Rent Payable represents a debt owed for renting a building currently, and Rent Expense represents the cost of renting a building currently. Rent Revenue, on the other hand, relates to the earning of revenue related to renting the building to a tenant currently.

Account numbers usually have two or more digits. Assets are often numbered beginning with 1, liabilities with 2, stockholders' equity with 3, revenues with 4, and expenses with 5. The second and third digits in an account number indicate where the account fits within the category. For example, if Smart Touch Learning is using three-digit account numbers, Cash may be account number 101, the first asset account. Accounts Receivable may be account number 111, the second asset. Accounts Payable may be account number 201, the first liability. When numbers are used, all accounts are numbered by this system. However, each company chooses its own account numbering system.

Notice in Exhibit 2-4 the gap in account numbers between 121 and 141. Smart Touch Learning may need to add another asset account in the future. For example, the business may start selling some type of inventory and want to use account number 131 for Merchandise Inventory. So, the chart of accounts will change as the business evolves.


Exhibit 2-4 | Chart of Accounts—Smart Touch Learning

Balance Sheet Accounts		
Assets	Liabilities	Equity
101 Cash	201 Accounts Payable	301 Common Stock
111 Accounts Receivable	211 Salaries Payable	311 Retained Earnings
121 Notes Receivable	221 Interest Payable	321 Dividends
141 Office Supplies	231 Unearned Revenue	
151 Furniture	241 Notes Payable	
171 Building		
191 Land		
Income Statement Accounts (Part of Equity)		
	Revenues	Expenses
	401 Service Revenue	501 Rent Expense
	411 Interest Revenue	511 Salaries Expense
		521 Utilities Expense
		531 Advertising Expense



Worldwide, accounting systems are based on the same equation:
 Assets = Liabilities + Equity.
 Or, in Spanish: Activos = Pasivos + Patrimonio Neto.
 And accounts are the building blocks for all accounting systems.

The chart of accounts varies from business to business, though many account names are common to all companies. For example, you will find Cash on every company's chart of accounts. The chart of accounts contains the list of account names you will use to record a transaction.

Ledger

In addition to a chart of accounts, companies need a way to show all of the increases and decreases in each account along with their balances. Companies use a **ledger** to fulfill this task. A ledger is a collection of all the accounts, the changes in those accounts, and their balances.

A chart of accounts and a ledger are similar in that they both list the account names and account numbers of the business. A ledger, though, provides more detail. It includes the increases and decreases of each account for a specific period and the balance of each account at a specific point in time.

Ledger

The record holding all the accounts of a business, the changes in those accounts, and their balances.

What are the similarities and differences between a chart of accounts and a ledger?

Try It!

Consider the following accounts and identify each as an asset (A), liability (L), or equity (E).

- | | |
|----------------------|-----------------------|
| 1. Rent Expense | 6. Accounts Payable |
| 2. Common Stock | 7. Unearned Revenue |
| 3. Furniture | 8. Notes Receivable |
| 4. Service Revenue | 9. Dividends |
| 5. Prepaid Insurance | 10. Insurance Expense |

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.



Learning Objective 2

Define debits, credits, and normal account balances using double-entry accounting and T-accounts

Double-Entry System

A system of accounting in which every transaction affects at least two accounts.

T-Account

A summary device that is shaped like a capital *T* with debits posted on the left side of the vertical line and credits on the right side of the vertical line.

Debit

The left side of a T-account.

Credit

The right side of a T-account.

WHAT IS DOUBLE-ENTRY ACCOUNTING?

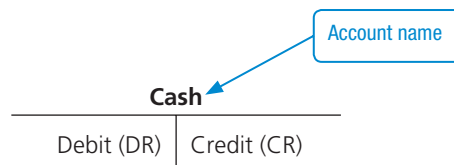
Previously you learned that every transaction must be recorded into at least two accounts. For example, when a stockholder contributes money in exchange for Common Stock, the two accounts involved are Cash and Common Stock. Accounting uses this **double-entry system** to record the dual effects of each transaction. A transaction would be incomplete if only one side were recorded.

Consider a cash purchase of office supplies. What are the dual effects? A cash purchase of office supplies:

1. Increases the account Office Supplies (the business received office supplies).
2. Decreases Cash (the business paid cash).

The T-Account

A shortened form of the ledger is called the **T-account** because it takes the form of the capital letter *T*. The vertical line divides the account into its left and right sides, with the account name at the top. For example, the Cash T-account appears as follows:



The left side of the T-account is called the **debit** side, and the right side is called the **credit** side. To become comfortable using these terms, remember the following: Debits go on the left; credits go on the right. Debit is abbreviated as DR, and Credit is abbreviated as CR.

Increases and Decreases in the Accounts

How we record increases and decreases to an account is determined by the account type (asset, liability, or equity). For any given account, increases are recorded on one side and decreases are recorded on the opposite side. The following T-accounts provide a summary:

$$\begin{array}{c}
 \text{ASSETS} \\
 \hline
 \uparrow \quad \downarrow \\
 \text{Debit} \quad \text{Credit}
 \end{array}
 \left. \vphantom{\begin{array}{c} \text{ASSETS} \\ \hline \uparrow \quad \downarrow \\ \text{Debit} \quad \text{Credit} \end{array}} \right\} = \left\{ \begin{array}{c} \text{LIABILITIES} \\ \hline \downarrow \quad \uparrow \\ \text{Debit} \quad \text{Credit} \end{array} + \begin{array}{c} \text{EQUITY} \\ \hline \downarrow \quad \uparrow \\ \text{Debit} \quad \text{Credit} \end{array} \right.$$

In other words, assets are always increased with a *debit* and decreased with a *credit*. Liabilities and equity are always increased with a *credit* and decreased with a *debit*. Whether an account is increased or decreased by a debit or a credit depends on the type of account. Debits are not “good” or “bad.” Neither are credits. Debits are not always increases or always decreases—neither are credits. **The only thing a designation as a debit or credit means is where the item is placed—on the left or right side of the T-account.**

In a computerized accounting information system, the computer interprets debits and credits as increases or decreases, based on the account type. For example, a computer reads a debit to Cash as an increase because it is an asset account. The computer reads a debit to Accounts Payable as a decrease because it is a liability account.

I always thought that a debit meant decrease and a credit meant increase. Am I wrong?





An account with a normal debit balance may occasionally have a credit balance. That indicates a negative amount in the account. For example, Cash will have a credit balance if the business overdraws its bank account. Also, the liability, Accounts Payable—a normal credit balance account—could have a debit balance if the company overpays its accounts payable. In other cases, a non-normal account balance indicates an error. For example, a credit balance in Office Supplies, Furniture, or Buildings is an error because negative amounts of these assets make no sense.

Exhibit 2-5 summarizes the rules of debit and credit and the normal balances for each account type.

Exhibit 2-5 Rules of Debit and Credit and Normal Balances for Each Account Type

Account Type	Increases	Decreases	Normal Balance
Assets	Debit	Credit	Debit
Expenses	Debit	Credit	Debit
Dividends	Debit	Credit	Debit
Liabilities	Credit	Debit	Credit
Revenues	Credit	Debit	Credit
Common Stock	Credit	Debit	Credit

An easy way to remember the rules of debits and credits is to memorize this helpful sentence. *All elephants do love rowdy children.* The first three words in the sentence will help you remember that assets, expenses, and dividends all have normal debit balances. The last three words in the sentence will remind you that liabilities, revenues, and common stock all have normal credit balances.

Determining the Balance of a T-Account

T-accounts can be used to determine the amount remaining in an account or the *balance* of the account. To illustrate, let's look at the following Cash T-Account:

Cash			
\$35,500	→	30,000	←
	→	5,500	←
		Balance 12,300	
\$35,500 - \$23,200			←
			←
			←

The balance of this Cash account is \$12,300. This is calculated by adding each side of the account separately (\$35,500 and \$23,200) and then subtracting the smaller number from the larger number (\$35,500 - \$23,200). The balance (\$12,300) is always reported on the side with the larger number.



Try It!

For each account, identify if the change would be recorded as a debit (DR) or credit (CR).

- | | |
|-------------------------------------|----------------------------------|
| 11. Increase to Cash | 16. Increase to Interest Revenue |
| 12. Decrease to Accounts Payable | 17. Increase to Rent Expense |
| 13. Increase to Common Stock | 18. Decrease to Office Supplies |
| 14. Increase to Unearned Revenue | 19. Increase to Prepaid Rent |
| 15. Decrease to Accounts Receivable | 20. Increase to Notes Payable |

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Hornngen>.

For more practice, see Short Exercises S2-2 and S2-3. **MyAccountingLab**

HOW DO YOU RECORD TRANSACTIONS?

When we reviewed the activity for Smart Touch Learning, we provided you with the transactions. In a real-world business, because of the faithful representation concept, accountants would need to provide evidence for those transactions.

Source Documents—The Origin of the Transactions

Accountants use **source documents** to provide the evidence and data for recording transactions. For example, consider Sheena Bright's contribution of \$30,000 to the business. Exhibit 2-6 illustrates the transaction. In that exhibit, Smart Touch Learning received \$30,000 and deposited it in the bank. The business then gave common stock to Sheena Bright. The check received and the bank deposit slip are the source documents that show the amount of cash received by the business and the equity contribution of the stockholder, Sheena Bright. Based on these documents, the business can determine how to record this transaction.

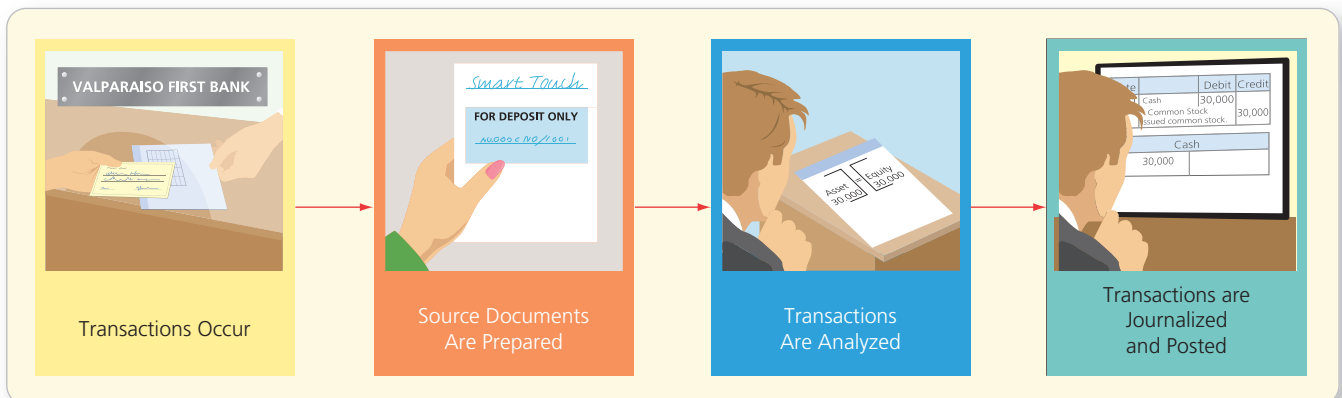
Learning Objective 3

Record transactions in a journal and post journal entries to the ledger

Source Document

Provides the evidence and data for accounting transactions.

Exhibit 2-6 | Flow of Accounting Data





ETHICS

Are receipts really important?

Elijah Morris, assistant manager for Red's American Burger Restaurant, is responsible for purchasing equipment and supplies for the restaurant. Elijah recently purchased a \$4,000 commercial-grade refrigerator for the restaurant, but he can't find the receipt. Elijah purchased the refrigerator with personal funds and is asking to be reimbursed by the restaurant. Hannah, the restaurant's accountant, has said that she is unsure if the business can reimburse Elijah without a receipt. Elijah suggests: "Hannah, it won't really matter if I have a receipt or not. You've seen the refrigerator in the restaurant, so you know I purchased it. What difference is a little receipt going to make?"

What should Hannah do? What would you do?

Solution

Hannah should not reimburse Elijah until she receives the receipt—the source document. Elijah could have purchased the refrigerator for less than the amount he is asking in reimbursement. Source documents provide the evidence of the amount of the transaction. If either an auditor or the owner of the restaurant investigated the \$4,000 purchase, he or she would need to see the source document to verify the transaction. If Elijah truly cannot find the receipt, Hannah should ask for an alternative source document such as a credit card or bank statement that shows evidence of the purchase. In addition, Elijah should be warned about using personal funds to purchase equipment for the business.

Other source documents that businesses use include the following:

- **Purchase invoices.** Documents that tell the business how much and when to pay a vendor for purchases on account, such as office supplies.
- **Bank checks.** Documents that illustrate the amount and date of cash payments.
- **Sales invoices.** Documents provided to clients when a business sells services or goods; tells the business how much revenue to record.

Journalizing and Posting Transactions

After accountants review the source documents, they are then ready to record the transactions. Transactions are first recorded in a **journal**, which is the record of transactions in date order.

Journalizing a transaction records the data only in the journal—not in the ledger (the record holding all of the accounts of a business). The data must also be transferred to the ledger. The process of transferring data from the journal to the ledger is called **posting**. We post from the journal to the ledger. Debits in the journal are posted as debits in the ledger and credits as credits—no exceptions.

The following diagram shows this process:

Date		Debit	Credit
Nov. 1	Cash	30,000	
	Common Stock Issued common stock.		30,000

Transactions are recorded
in a journal.

Cash	
30,000	

Common Stock	
	30,000

Data is posted (transferred) to
the ledger.

Journal

A record of transactions in
date order.

Posting

Transferring data from the journal
to the ledger.



You have learned steps to use when analyzing accounting transactions. Use a modified version of those steps to help when recording transactions in the journal and then posting the journal entries to the ledger. The journalizing and posting process has five steps:

- Step 1:** Identify the accounts and the account type (asset, liability, or equity).
- Step 2:** Decide whether each account increases or decreases, then apply the rules of debits and credits.
- Step 3:** Record the transaction in the journal.
- Step 4:** Post the journal entry to the ledger.
- Step 5:** Determine whether the accounting equation is in balance.

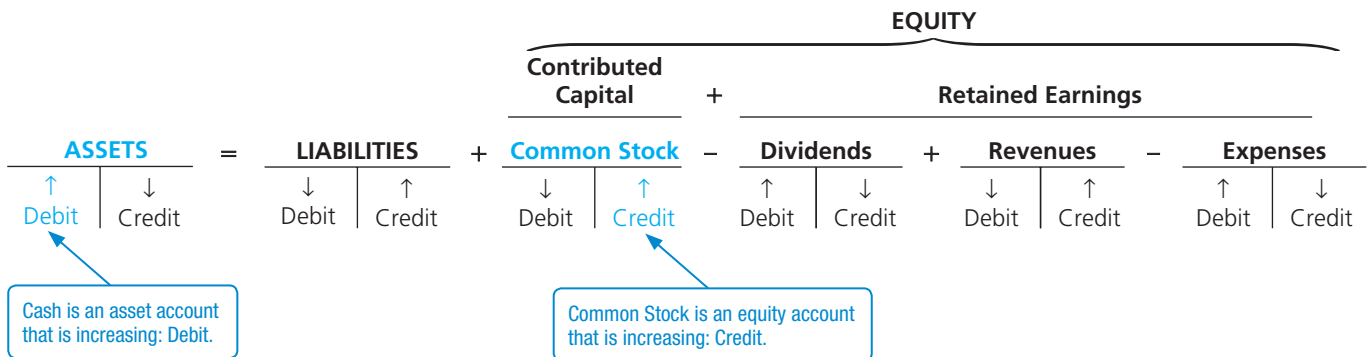
Let's begin by journalizing the first transaction of Smart Touch Learning.

Transaction 1—Stockholder Contribution

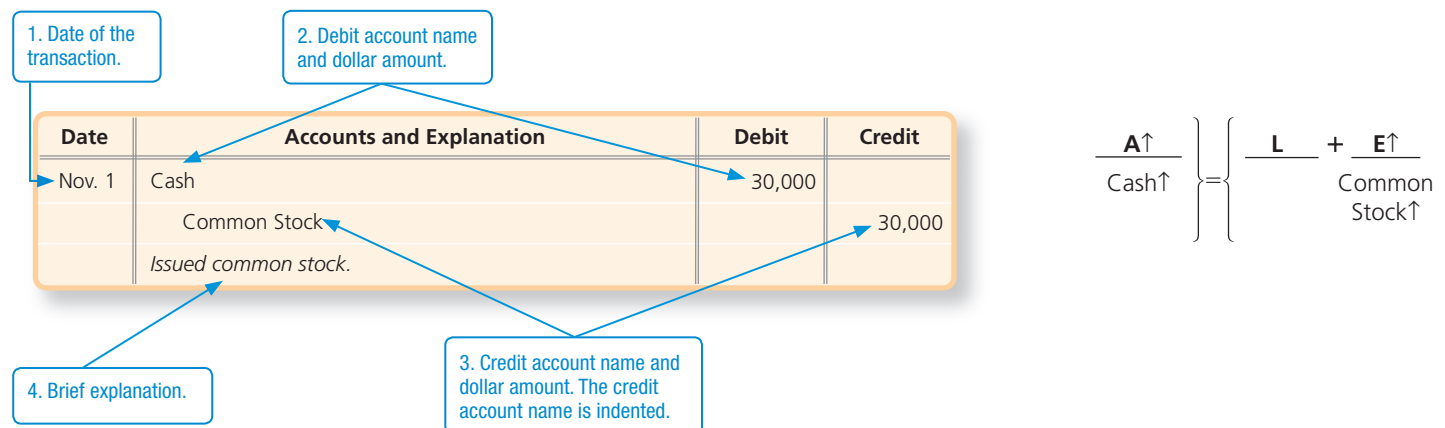
On November 1, the e-learning company received \$30,000 cash from Sheena Bright and the business issued common stock to her.

Step 1: Identify the accounts and the account type. The two accounts involved are Cash (Asset) and Common Stock (Equity).

Step 2: Decide whether each account increases or decreases, then apply the rules of debits and credits. Both accounts increase by \$30,000. Reviewing the rules of debits and credits, we use the accounting equation to help determine debits and credits for each account. Cash is an asset account and is increasing, so we will record a debit to Cash. Common Stock is an equity account and is increasing, so we will record a credit to Common Stock.



Step 3: Record the transaction in the journal. The recording of a transaction in the journal creates a journal entry. The journal entry for Transaction 1 is illustrated below. Notice that each journal entry contains four parts.





Step 4: Post the journal entry to the ledger. When transactions are posted from the journal to the ledger, the dollar amount is transferred from the debit and credit columns to the specific account. The date of the journal entry is also transferred to the T-accounts in the ledger. In a computerized system, this step is completed automatically when the transaction is recorded in the journal.

Date	Accounts and Explanation	Debit	Credit
Nov. 1	Cash	30,000	
	Common Stock		30,000
	<i>Issued common stock.</i>		

Cash		Common Stock	
Nov. 1	30,000	30,000	Nov. 1

Step 5: Determine if the accounting equation is in balance.

<u>ASSETS</u>	}	=	{	<u>LIABILITIES</u>	+	<u>EQUITY</u>
Cash					Common Stock	
(1) + 30,000					+ 30,000	

To help reinforce your learning of the account types, we will illustrate the transaction in the margin. We will indicate the accounts and account type (Step 1) and whether each account is increasing or decreasing (Step 2). These notations would not normally show up in a journal, but we included them here to reinforce the rules of debits and credits.

Let's look at Transaction 2 for Smart Touch Learning and apply the steps we just learned.

Transaction 2—Purchase of Land for Cash

On November 2, Smart Touch Learning paid \$20,000 cash for land.

Step 1: Identify the accounts and the account type. The two accounts involved are Cash (Asset) and Land (Asset).

Step 2: Decide whether each account increases or decreases, then apply the rules of debits and credits. Cash decreases. The business paid cash. Therefore, we credit Cash. The land increased, so we debit the Land account.

		EQUITY														
		Contributed Capital			+	Retained Earnings										
ASSETS		=	LIABILITIES		+	Common Stock		-	Dividends		+	Revenues		-	Expenses	
↑	↓		↓	↑		↓	↑		↑	↓		↓	↑		↑	↓
Debit	Credit		Debit	Credit		Debit	Credit		Debit	Credit		Debit	Credit		Debit	Credit

Land is an asset that is increasing: Debit.

Cash is an asset that is decreasing: Credit.



Step 3: Record the transaction in the journal.

Date	Accounts and Explanation	Debit	Credit
Nov. 2	Land	20,000	
	Cash		20,000
	<i>Paid cash for land.</i>		

$$\left. \begin{array}{l} \underline{A \uparrow \downarrow} \\ \text{Land} \uparrow \\ \text{Cash} \downarrow \end{array} \right\} = \left\{ \begin{array}{l} \underline{L} \quad + \quad \underline{E} \\ \text{Accounts Payable} \uparrow \end{array} \right.$$

Step 4: Post the journal entry to the ledger.

Cash	Land
Nov. 1 30,000 20,000 Nov. 2	Nov. 2 20,000

Step 5: Determine whether the accounting equation is in balance.

ASSETS	}	=	}	LIABILITIES + EQUITY
Cash + Land				+ Common Stock
Bal. \$30,000				\$30,000
(2) <u>-20,000</u>	+20,000			<u> </u>
Bal. \$10,000	+ \$20,000			\$30,000

We will now record journal entries for several more transactions for Smart Touch Learning. Now that you understand the steps, try to write the steps yourself before looking at the journal entry. Remember, if you need help, we'll provide the effect on the accounting equation in the margin.

Transaction 3—Purchase of Office Supplies on Account

Smart Touch Learning buys \$500 of office supplies on account on November 3.

The supplies will benefit Smart Touch Learning in future periods, so they are an asset to the company until they are used. The asset Office Supplies increased, so we debit Office Supplies. The liability Accounts Payable increased, so we credit Accounts Payable.

Date	Accounts and Explanation	Debit	Credit
Nov. 3	Office Supplies	500	
	Accounts Payable		500
	<i>Purchased office supplies on account.</i>		

$$\left. \begin{array}{l} \underline{A \uparrow} \\ \text{Office Supplies} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \underline{L \uparrow} \quad + \quad \underline{E} \\ \text{Accounts Payable} \uparrow \end{array} \right.$$

Office Supplies	Accounts Payable
Nov. 3 500	500 Nov. 3



Transaction 4—Earning of Service Revenue for Cash

On November 8, Smart Touch Learning collected cash of \$5,500 for service revenue that the business earned by providing e-learning services for clients.

The asset Cash increased, so we debit Cash. Revenue increased, so we credit Service Revenue.

$$\left. \begin{array}{l} \text{A}\uparrow \\ \text{Cash}\uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Service} \\ \text{Revenue}\uparrow \end{array} \right. + \left. \begin{array}{l} \text{E}\uparrow \\ \text{Service} \\ \text{Revenue}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Nov. 8	Cash	5,500	
	Service Revenue		5,500
	<i>Performed services and received cash.</i>		

Cash		Service Revenue	
Nov. 1	30,000	20,000	Nov. 2
Nov. 8	5,500		
		5,500	Nov. 8

Transaction 5—Earning of Service Revenue on Account

On November 10, Smart Touch Learning performed services for clients, for which the clients will pay the company later. The business earned \$3,000 of service revenue on account.

This transaction increased Accounts Receivable, so we debit this asset. Service Revenue is increased with a credit.

$$\left. \begin{array}{l} \text{A}\uparrow \\ \text{Accounts} \\ \text{Receivable}\uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Service} \\ \text{Revenue}\uparrow \end{array} \right. + \left. \begin{array}{l} \text{E}\uparrow \\ \text{Service} \\ \text{Revenue}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Nov. 10	Accounts Receivable	3,000	
	Service Revenue		3,000
	<i>Performed services on account.</i>		

Accounts Receivable		Service Revenue	
Nov. 10	3,000	5,500	Nov. 8
		3,000	Nov. 10

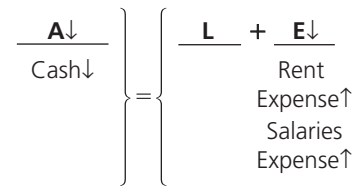
Notice the differences and the similarities between Transactions 4 and 5. In both transactions, Service Revenue was increased (credited) because in both cases the company had earned revenue. However, in Transaction 4, the company was paid at the time of service. In Transaction 5, on the other hand, the company will receive cash later (Accounts Receivable). This difference is key because the amount of revenue is not determined by when the company *receives* cash. Revenues are recorded when the company *does* the work or provides the service.

Transaction 6—Payment of Expenses with Cash

Smart Touch Learning paid the following cash expenses on November 15: office rent, \$2,000, and employee salaries, \$1,200. We need to debit each expense account to record its increase and credit Cash, an asset, for the total decrease.



Date	Accounts and Explanation	Debit	Credit
Nov. 15	Rent Expense	2,000	
	Salaries Expense	1,200	
	Cash		3,200
	<i>Paid cash expenses.</i>		



Cash	
Nov. 1	30,000
Nov. 8	5,500
	20,000
	3,200

Rent Expense	
Nov. 15	2,000

Salaries Expense	
Nov. 15	1,200

Compound Journal Entry

A journal entry that is characterized by having multiple debits and/or multiple credits.

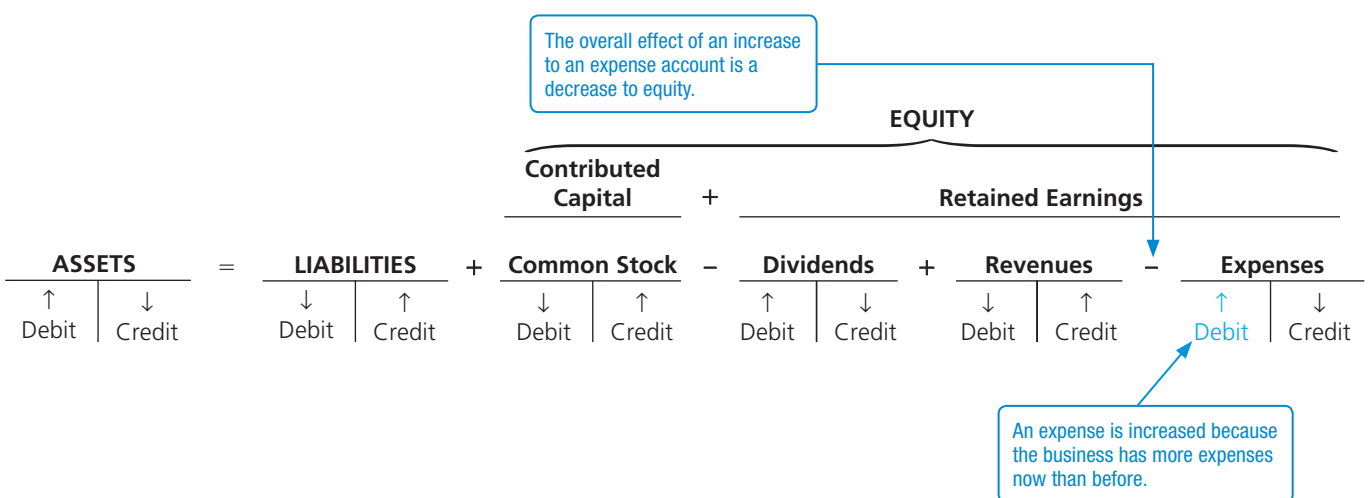
I thought expenses decreased equity, but we are debiting the expense that records an increase to the account.



Notice that the journal entry has three accounts involved—two debits and one credit. This is a compound journal entry. A **compound journal entry** has more than two accounts, but total dollar value of the debits still must equal total dollar value of the credits.

Before we move to the next transaction, let's take a moment to carefully look at expenses. In Transaction 6, we recorded a debit to each expense account. The accounting equation and the rules of debits and credits state that a debit to an expense account increases the account.

We are recording an increase to the expense account because the business has more expenses now than it had before. But, remember, the overall effect on the accounting equation is that increases in expenses decrease equity. An easy way to think about it is that we are increasing a negative account.





Transaction 7—Payment on Account (Accounts Payable)

On November 21, Smart Touch Learning paid \$300 on the accounts payable created in Transaction 3. The payment decreased cash, an asset, so we credit Cash. The payment decreased Accounts Payable, so we debit that liability.

$$\begin{array}{l} \underline{\text{A}\downarrow} \\ \text{Cash}\downarrow \end{array} \left. \vphantom{\begin{array}{l} \underline{\text{A}\downarrow} \\ \text{Cash}\downarrow \end{array}} \right\} = \left\{ \begin{array}{l} \underline{\text{L}\downarrow} + \underline{\text{E}} \\ \text{Accounts Payable}\downarrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Nov. 21	Accounts Payable	300	
	Cash		300
	<i>Paid cash on account.</i>		

Cash				Accounts Payable			
Nov. 1	30,000	20,000	Nov. 2	Nov. 21	300	500	Nov. 3
Nov. 8	5,500	3,200	Nov. 15				
		300	Nov. 21				

Notice that after recording this transaction and posting to the Accounts Payable account, the balance of Accounts Payable is \$200 (\$500 – \$300). This is the new balance that the business owes to its creditor.

Transaction 8—Collection on Account (Accounts Receivable)

On November 22, Smart Touch Learning collected \$2,000 cash from a client in Transaction 5. Cash is increased, so we debit the asset Cash. Accounts Receivable, also an asset, is decreased, so we credit Accounts Receivable. *Note:* This transaction has no effect on revenue; the related revenue was recorded in Transaction 5.

$$\begin{array}{l} \underline{\text{A}\uparrow} \\ \text{Cash}\uparrow \\ \text{Accounts Receivable}\downarrow \end{array} \left. \vphantom{\begin{array}{l} \underline{\text{A}\uparrow} \\ \text{Cash}\uparrow \\ \text{Accounts Receivable}\downarrow \end{array}} \right\} = \left\{ \begin{array}{l} \underline{\text{L}} + \underline{\text{E}} \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Nov. 22	Cash	2,000	
	Accounts Receivable		2,000
	<i>Received cash on account.</i>		

Cash				Accounts Receivable			
Nov. 1	30,000	20,000	Nov. 2	Nov. 10	3,000	2,000	Nov. 22
Nov. 8	5,500	3,200	Nov. 15				
Nov. 22	2,000	300	Nov. 21				



Transaction 9—Payment of Cash Dividend

On November 25, a payment of \$5,000 cash was paid for dividends. The dividend decreased the entity's cash, so we credit Cash. The dividend also decreased equity. Decreases in equity that result from dividends are debited to the Dividends account.

Date	Accounts and Explanation	Debit	Credit
Nov. 25	Dividends	5,000	
	Cash		5,000
	<i>Paid dividends.</i>		

$$\left. \begin{array}{l} \underline{A\downarrow} \\ \text{Cash}\downarrow \end{array} \right\} = \left\{ \begin{array}{l} \underline{L} \\ \text{Dividends}\uparrow \end{array} + \begin{array}{l} \underline{E\downarrow} \end{array} \right.$$

Cash			Dividends		
Nov. 1	30,000	20,000	Nov. 2		
Nov. 8	5,500	3,200	Nov. 15		
Nov. 22	2,000	300	Nov. 21		
		5,000	Nov. 25	5,000	

Transaction 10—Prepaid Expenses

On December 1, Smart Touch Learning prepays three months' office rent of \$3,000 (\$1,000 per month \times 3 months). The prepayment of the rent is recorded to the Prepaid Rent account (Asset). It is recorded as an asset because Smart Touch Learning will receive a benefit in the future. The asset, Prepaid Rent, is increasing, so we will need to debit it. Cash is decreasing and will be recorded as a credit.

Date	Accounts and Explanation	Debit	Credit
Dec. 1	Prepaid Rent	3,000	
	Cash		3,000
	<i>Paid rent in advance.</i>		

$$\left. \begin{array}{l} \underline{A\uparrow} \\ \text{Prepaid} \\ \text{Rent}\uparrow \\ \text{Cash}\downarrow \end{array} \right\} = \left\{ \begin{array}{l} \underline{L} \\ \text{Prepaid Rent}\uparrow \end{array} + \begin{array}{l} \underline{E} \end{array} \right.$$

Cash			Prepaid Rent		
Nov. 1	30,000	20,000	Nov. 2		
Nov. 8	5,500	3,200	Nov. 15		
Nov. 22	2,000	300	Nov. 21		
		5,000	Nov. 25		
		3,000	Dec. 1	3,000	



Transaction 11—Payment of Expense with Cash

On December 1, Smart Touch Learning paid employee salaries of \$1,200. Salaries Expense will be debited to record its increase, and Cash will be credited for the decrease.

$$\frac{A \downarrow}{\text{Cash} \downarrow} = \left\{ \frac{L}{\text{Salaries Expense} \uparrow} + \frac{E \downarrow}{\text{Salaries Expense} \uparrow} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 1	Salaries Expense	1,200	
	Cash		1,200
	<i>Paid salaries.</i>		

Cash				Salaries Expense			
Nov. 1	30,000	20,000		Nov. 2	Nov. 15	1,200	
Nov. 8	5,500	3,200		Nov. 15	Dec. 1	1,200	
Nov. 22	2,000	300		Nov. 21			
		5,000		Nov. 25			
		3,000		Dec. 1			
		1,200		Dec. 1			

Transaction 12—Purchase of Building with Notes Payable

On December 1, Smart Touch Learning purchased a \$60,000 building in exchange for a note payable. The building will benefit the business in the future, so it is recorded as an asset to the company. The asset Building is increased, so we debit Building. The liability Notes Payable increased, so we credit Notes Payable.

$$\frac{A \uparrow}{\text{Building} \uparrow} = \left\{ \frac{L \uparrow}{\text{Notes Payable} \uparrow} + \frac{E}{\text{Notes Payable} \uparrow} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 1	Building	60,000	
	Notes Payable		60,000
	<i>Purchase of building with note.</i>		

Building		Notes Payable	
Dec. 1	60,000		60,000
			Dec. 1



Transaction 13—Stockholder Contribution

On December 2, Smart Touch Learning received a contribution of furniture with a fair market value of \$18,000 from Sheena Bright. In exchange, Smart Touch Learning issued common stock. The furniture will benefit the company in the future, so it is recorded as an asset. The asset Furniture is increasing, so we debit it. Common Stock, an equity account, is also increasing and is recorded as a credit.

Date	Accounts and Explanation	Debit	Credit
Dec. 2	Furniture	18,000	
	Common Stock		18,000
	<i>Contribution of furniture in exchange for common stock.</i>		

$$\frac{\text{A}\uparrow}{\text{Furniture}\uparrow} = \left\{ \frac{\text{L}}{\quad} + \frac{\text{E}\uparrow}{\text{Common Stock}\uparrow} \right.$$

Furniture		Common Stock	
Dec. 2	18,000	30,000	Nov. 1
		18,000	Dec. 2

Transaction 14—Accrued Liability

On December 15, Smart Touch Learning received a telephone bill for \$100 and will pay this expense next month. There is no cash payment now. This is an accrued liability. Remember, an accrued liability is a liability for which the business knows the amount owed, but the bill has not been paid. The Utilities Expense increased, so we debit this expense. The liability (Utilities Payable) increased, so we credit Utilities Payable. Alternatively, we could credit Accounts Payable instead of Utilities Payable.

Date	Accounts and Explanation	Debit	Credit
Dec. 15	Utilities Expense	100	
	Utilities Payable		100
	<i>Accrued utility liability.</i>		

$$\frac{\text{A}}{\quad} = \left\{ \frac{\text{L}\uparrow}{\text{Utilities Payable}\uparrow} + \frac{\text{E}\downarrow}{\text{Utilities Expense}\uparrow} \right.$$

Utilities Payable		Utilities Expense	
	100	Dec. 15	100
		Dec. 15	



Transaction 15—Payment of Expense with Cash

On December 15, Smart Touch Learning paid employee salaries of \$1,200. Salaries Expense will be debited to record its increase, and Cash will be credited for the decrease.

$$\left. \begin{array}{l} \text{A}\downarrow \\ \text{Cash}\downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Salaries Expense}\uparrow \end{array} \right. + \left. \begin{array}{l} \text{E}\downarrow \\ \text{Salaries Expense}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 15	Salaries Expense	1,200	
	Cash		1,200
	<i>Paid salaries.</i>		

Cash				Salaries Expense			
Nov. 1	30,000	20,000		Nov. 2		Nov. 15	1,200
Nov. 8	5,500	3,200		Nov. 15		Dec. 1	1,200
Nov. 22	2,000	300		Nov. 21		Dec. 15	1,200
		5,000		Nov. 25		Dec. 1	
		3,000		Dec. 1		Dec. 1	
		1,200		Dec. 1		Dec. 15	
		1,200					

Transaction 16—Unearned Revenue

On December 21, a law firm engages Smart Touch Learning to provide e-learning services and agrees to pay \$600 in advance. Smart Touch Learning received cash but has not yet performed the services. Cash increased, so we debit Cash. The promise to perform services in the future will be recorded as Unearned Revenue, a liability account. Unearned Revenue is increasing, so we credit it. Notice that we did not record revenue. Revenue is not recorded until Smart Touch Learning provides the services.

$$\left. \begin{array}{l} \text{A}\uparrow \\ \text{Cash}\uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L}\uparrow \\ \text{Unearned Revenue}\uparrow \end{array} \right. + \left. \begin{array}{l} \text{E} \\ \text{Unearned Revenue}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 21	Cash	600	
	Unearned Revenue		600
	<i>Collected cash for future services.</i>		

Cash				Unearned Revenue			
Nov. 1	30,000	20,000				600	Dec. 21
Nov. 8	5,500	3,200		Nov. 15			
Nov. 22	2,000	300		Nov. 21			
Dec. 21	600	5,000		Nov. 25			
		3,000		Dec. 1			
		1,200		Dec. 1			
		1,200		Dec. 15			



Transaction 17—Earning of Service Revenue for Cash

On December 28, Smart Touch Learning collected cash of \$8,000 for Service Revenue that the business earned by providing e-learning services for clients.

Date	Accounts and Explanation	Debit	Credit
Dec. 28	Cash	8,000	
	Service Revenue		8,000
	<i>Performed services and received cash.</i>		

$$\frac{\text{A}\uparrow}{\text{Cash}\uparrow} = \left\{ \frac{\text{L}}{\quad} + \frac{\text{E}\uparrow}{\text{Service Revenue}\uparrow} \right.$$

Cash				Service Revenue			
Nov. 1	30,000	20,000	Nov. 2	5,500	Nov. 8		
Nov. 8	5,500	3,200	Nov. 15	3,000	Nov. 10		
Nov. 22	2,000	300	Nov. 21	8,000	Dec. 28		
Dec. 21	600	5,000	Nov. 25				
Dec. 28	8,000	3,000	Dec. 1				
		1,200	Dec. 1				
		1,200	Dec. 15				

The Ledger Accounts After Posting

Exhibit 2-7 (on the next page) shows the T-accounts of Smart Touch Learning after posting the journal entries from the journal to the ledger. The accounts are grouped under their headings. Notice that at December 31, Smart Touch Learning has assets of \$114,700 (\$12,200 + \$1,000 + \$500 + \$3,000 + \$18,000 + \$60,000 + \$20,000), liabilities of \$60,900 (\$200 + \$100 + \$600 + \$60,000), and equity of \$53,800 (\$48,000 - \$5,000 + \$16,500 - \$2,000 - \$3,600 - \$100). The accounting equation is in balance (\$114,700 = \$60,900 + \$53,800).



The Four-Column Account: An Alternative to the T-Account

The ledger accounts illustrated thus far appear as T-accounts, with the debits on the left and the credits on the right. The T-account clearly separates debits from credits and is used for teaching. An alternative to using the T-account is the four-column account. The four-column account still has debit and credit columns, but it also adds two additional columns that are used to determine a running balance. Exhibit 2-8 shows the Cash T-account and the Cash four-column account for Smart Touch Learning.

The first pair of Debit/Credit columns in the four-column account is for transaction amounts posted to the account from the journal, such as the \$30,000 debit. The second pair of Debit/Credit columns shows the balance of the account as of each date. Because the four-column format provides more information, it is used more often in practice than the T-account. Notice that the balance after the last transaction on December 28 is \$12,200, which is the same balance calculated in the T-account.

Do you notice the column labeled *Post Ref.* in the four-column account in Exhibit 2-8? This column is used in the posting process. When the information is transferred from the journal to the ledger, a posting reference (Post Ref.) is added. This allows a user of the financial data to trace the amount in the ledger back to the journal. In a computerized system, the user would be able to click on the posting reference to view the

Exhibit 2-8 T-Account Versus Four-Column Account

CASH					
Nov. 1	30,000	20,000	Nov. 2		
Nov. 8	5,500	3,200	Nov. 15		
Nov. 22	2,000	300	Nov. 21		
Dec. 21	600	5,000	Nov. 25		
Dec. 28	8,000	3,000	Dec. 1		
		1,200	Dec. 1		
		1,200	Dec. 15		
Bal.	12,200				

CASH				Account No. 101		
Date	Item	Post Ref.	Debit	Credit	Balance	
					Debit	Credit
2016						
Nov. 1		J1	30,000		30,000	
Nov. 2		J1		20,000	10,000	
Nov. 8		J1	5,500		15,500	
Nov. 15		J1		3,200	12,300	
Nov. 21		J1		300	12,000	
Nov. 22		J1	2,000		14,000	
Nov. 25		J1		5,000	9,000	
Dec. 1		J2		3,000	6,000	
Dec. 1		J2		1,200	4,800	
Dec. 15		J2		1,200	3,600	
Dec. 21		J2	600		4,200	
Dec. 28		J2	8,000		12,200	



related journal entry. Exhibit 2-9 shows the posting and associated posting references for Transaction 1 of Smart Touch Learning. Remember, in a computerized environment, this process is completed automatically when the user enters the journal entry.

Exhibit 2-9 | Posting References

The page number from the journal. → Page 1

Date	Accounts and Explanation	Post. Ref.	Debit	Credit
Nov. 1	Cash	101	30,000	
	Common Stock	301		30,000
	<i>Issued common stock.</i>			

The account number from the ledger.

CASH Account No. 101

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2016						
Nov. 1		J1	30,000		30,000	

COMMON STOCK Account No. 301

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2016						
Nov. 1		J1		30,000		30,000

Try It!

21. EMB Consulting Services had the following transactions for the month of November. Journalize the transactions and include an explanation with each entry.

-
- | | |
|--------|--|
| Nov. 1 | The business received \$10,000 cash and issued common stock. |
| 15 | Purchased office supplies on account, \$400. |
| 18 | Paid advertising bill, \$150. |
| 20 | Received \$1,000 from customers for services rendered. |
| 28 | Cash dividends of \$500 were paid to stockholders. |
-

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S2-4 through S2-7. **MyAccountingLab**



WHAT IS THE TRIAL BALANCE?

After the transactions are recorded in the journal and then posted to the ledger, a **trial balance** can be prepared. The trial balance summarizes the ledger by listing all the accounts with their balances—assets first, followed by liabilities, and then equity. In a manual accounting system, the trial balance provides an accuracy check by showing whether total debits equal total credits. In all types of systems, the trial balance is a useful summary of the accounts and their balances because it shows the balances on a specific date for all accounts in a company's accounting system. Exhibit 2-10 is the trial balance of Smart Touch Learning at December 31, 2016.

Learning Objective 4

Prepare the trial balance and illustrate how to use the trial balance to prepare financial statements

Trial Balance

A list of all ledger accounts with their balances at a point in time.

Exhibit 2-10 | Trial Balance

SMART TOUCH LEARNING Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 12,200	
Accounts Receivable	1,000	
Office Supplies	500	
Prepaid Rent	3,000	
Furniture	18,000	
Building	60,000	
Land	20,000	
Accounts Payable		\$ 200
Utilities Payable		100
Unearned Revenue		600
Notes Payable		60,000
Common Stock		48,000
Dividends	5,000	
Service Revenue		16,500
Rent Expense	2,000	
Salaries Expense	3,600	
Utilities Expense	100	
Total	\$ 125,400	\$ 125,400

The trial balance and the balance sheet are not the same. Make sure you understand the differences between these two documents. A trial balance verifies the equality of debits and credits and is an internal document used only by employees of the company. The balance sheet, on the other hand, presents the business's accounting equation and is a financial statement that can be used by both internal and external users.

Preparing Financial Statements from the Trial Balance

In addition to proving the equality of debits and credits, the trial balance is also used to prepare the financial statements. The account balances are taken directly from the trial balance and are used to prepare the income statement, statement of retained earnings, and balance sheet. In Exhibit 2-11 (on the next page), we present the financial statements for the two months ended December 31, 2016, for Smart Touch Learning.


Exhibit 2-11 | Smart Touch Learning's Financial Statements

SMART TOUCH LEARNING Income Statement Two Months Ended December 31, 2016	
Revenues:	
Service Revenue	\$ 16,500
Expenses:	
Salaries Expense	\$ 3,600
Rent Expense	2,000
Utilities Expense	100
Total Expenses	<u>5,700</u>
Net Income	<u><u>\$ 10,800</u></u>

SMART TOUCH LEARNING Statement of Retained Earnings Two Months Ended December 31, 2016	
Retained Earnings, November 1, 2016	\$ 0
Net income for the two months	10,800
	<u>10,800</u>
Dividends	(5,000)
Retained Earnings, December 31, 2016	<u><u>\$ 5,800</u></u>

SMART TOUCH LEARNING Balance Sheet December 31, 2016			
Assets		Liabilities	
Cash	\$ 12,200	Accounts Payable	\$ 200
Accounts Receivable	1,000	Utilities Payable	100
Office Supplies	500	Unearned Revenue	600
Prepaid Rent	3,000	Notes Payable	<u>60,000</u>
Furniture	18,000	Total Liabilities	60,900
Building	60,000	Stockholders' Equity	
Land	20,000	Common Stock	48,000
		Retained Earnings	5,800
		Total Stockholders' Equity	<u>53,800</u>
Total Assets	<u><u>\$ 114,700</u></u>	Total Liabilities and Stockholders' Equity	<u><u>\$ 114,700</u></u>

Correcting Trial Balance Errors

Throughout the accounting process, total debits should always equal total credits. If they do not, there is an error. Computerized accounting systems eliminate many errors because most software will not let you make a journal entry that does not balance. But computers cannot *eliminate* all errors because humans can input the wrong data.

Balancing errors can be detected by computing the difference between total debits and total credits on the trial balance. Then perform one or more of the following actions:

- 1. Search the trial balance for a missing account.** For example, suppose the accountant omitted the Dividends account from the trial balance in Exhibit 2-10. Total debits would then be \$120,400 (\$125,400 – \$5,000). Trace each account from the ledger to the trial balance, and you will locate the missing account.
- 2. Divide the difference between total debits and total credits by 2.** A debit treated as a credit, or vice versa, doubles the amount of the error. Suppose the accountant posted a \$500 credit as a debit. Total debits contain the \$500, and total credits omit the \$500. The out-of-balance amount is \$1,000. Dividing the difference by 2 identifies the \$500



amount of the transaction. Then search the journal or ledger for a \$500 transaction and trace it to the account affected.

3. **Divide the out-of-balance amount by 9.** If the result is evenly divisible by 9, the error may be a *slide* (example: writing \$1,000 as \$100 or writing \$100 as \$1,000) or a *transposition* (example: listing \$1,200 as \$2,100). Suppose, for example, that the accountant entered the \$5,000 Dividends as \$50,000 on the trial balance. This is a slide-type error. Total debits would differ from total credits by \$45,000 ($\$50,000 - \$5,000 = \$45,000$). Dividing \$45,000 by 9 yields \$5,000, the correct amount of the dividends. Look for an account in the ledger with a \$5,000 balance until you reach the Dividends account. You have then found the error.

Total debits can equal total credits on the trial balance; however, there still could be errors in individual account balances because an incorrect account might have been selected in an individual journal entry.

Try It!

22. Using the following accounts and their balances, prepare the trial balance for Cooper Furniture Repair as of December 31, 2016. All accounts have normal balances.

Cash	\$ 7,000	Advertising Expense	\$ 1,200
Unearned Revenue	4,500	Utilities Expense	800
Equipment	10,000	Rent Expense	5,000
Service Revenue	8,000	Accounts Payable	2,300
Common Stock	12,200	Dividends	3,000

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S2-8. [MyAccountingLab](#)

HOW DO YOU USE THE DEBT RATIO TO EVALUATE BUSINESS PERFORMANCE?

Previously you learned that evaluating a company's return on assets (Net income / Average total assets) can help in determining how well a company is performing. In this chapter, you learn about another tool that can be used when reviewing financial statements. The **debt ratio** shows the proportion of assets financed with debt and is calculated by dividing total liabilities by total assets. It can be used to evaluate a business's ability to pay its debts.

$$\text{Debt ratio} = \text{Total liabilities} / \text{Total assets}$$

Think about the accounting equation (Assets = Liabilities + Equity). The equation shows who can claim the assets. The liabilities represent the claims of the creditors, and the equity represents the claims of the stockholders. Companies that have a high percentage of liabilities are at greater risk of default. If they are unable to pay their creditors as the amounts become due, the creditors have the right to claim the assets. The debt ratio calculates the percentage of assets that are financed with liabilities.

Learning Objective 5

Use the debt ratio to evaluate business performance

Debt Ratio

Shows the proportion of assets financed with debt. Total liabilities / Total assets.



Let's look at **Green Mountain Coffee Roasters, Inc.** and evaluate its ability to pay its debts. On its 2013 balance sheet (located in Appendix A), Green Mountain reported (in thousands) total liabilities of \$1,125,978 (\$597,063 + \$160,221 + \$76,061 + \$252,867 + \$28,721 + \$11,045) and total assets of \$3,761,548. The debt ratio for Green Mountain as of September 28, 2013, follows:

$$\begin{aligned} \text{Debt ratio} &= \text{Total liabilities} / \text{Total assets} \\ &= \$1,125,978 / \$3,761,548 = 0.299 = 29.9\%* \end{aligned}$$

*rounded

A debt ratio of 29.9% means that approximately thirty percent of the assets of Green Mountain are financed with debt. The other 70.1% (100% – 29.9%) are financed by stockholders of the corporation. The debt ratio indicates the risk of a company. The higher the debt ratio, the higher the risk. All liabilities must eventually be paid, and the debt ratio is one indication of the ability of the company to fulfill these obligations.

DECISIONS

Would you purchase equipment with debt?

Jackson Russell works as a district sales manager for a large pharmaceutical sales company. Jackson would like to purchase a new high-tech marketing display that he will be able to use at upcoming medical conferences. The marketing display will allow his customers to access up-to-date information and research statistics on the pharmaceuticals that his company sells by using multiple touch screen computers. He believes that the marketing display will significantly increase the sales revenue of the products he sells. The only problem is that the marketing display will cost \$50,000, and he does not have the cash in his budget to purchase the display. Jackson will need to purchase the display using debt, which will increase the district's debt ratio from 20% to 58%. Jackson is aware that his company closely monitors the district's debt ratio and has a policy that the district must maintain a ratio below 55%. Should Jackson purchase the equipment?

Solution

If the company has a policy that the district's debt ratio must remain below 55%, then Jackson should not purchase the equipment. However, there might be a way to structure the purchase so that the district's debt ratio would stay below 55%. Jackson either needs to incur less debt or increase his total assets. He could do this in several possible ways. One alternative might be for Jackson to pay for part of the display equipment with cash and only finance part of it with debt. Even putting as little as \$10,000 cash down on the equipment would keep the debt ratio below 55%. Another alternative might be for his district to recognize revenue. If there are open sales opportunities that his employees could close, they might be able to increase total assets (and revenue) and, thereby, decrease the debt ratio.

Try It!

23. Using the following accounts and their balances, calculate the debt ratio for Cooper Furniture Repair as of December 31, 2016.

Cash	\$ 7,000	Advertising Expense	\$ 1,200
Unearned Revenue	4,500	Utilities Expense	800
Equipment	10,000	Rent Expense	5,000
Service Revenue	8,000	Accounts Payable	2,300
Common Stock	12,200	Dividends	3,000

Check your answer online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S2-9. **MyAccountingLab**

REVIEW

> Things You Should Know

1. What is an account?

- An account is a detailed record of all increases and decreases that have occurred in an individual asset, liability, or equity during a specific period.
- Common asset accounts: Cash, Accounts Receivable, Notes Receivable, Prepaid Expenses, Land, Building, Furniture
- Common liability accounts: Accounts Payable, Notes Payable, Taxes Payable, Salaries Payable, Unearned Revenue
- Common equity accounts: Common Stock, Dividends, Revenues, Expenses
- A chart of accounts lists a company's accounts along with account numbers.
- A ledger shows the increases and decreases in each account along with their balances.

2. What is double-entry accounting?

- Double-entry accounting requires transactions to be recorded into at least two accounts.
- The T-account is shaped like a capital *T* with debits posted to the left side of the vertical line and credits posted to the right side of the vertical line.
- Debit = Left
- Credit = Right
- Assets, Dividends, and Expenses are increased with a debit and decreased with a credit.
- Liabilities, Common Stock, and Revenues are increased with a credit and decreased with a debit.
- The normal balance of an account is the increase side of an account.

3. How do you record transactions?

- Source documents provide the evidence and data for transactions.
- Transactions are recorded in a journal, and then the journal entries are posted (transferred) to the ledger.
- Transactions are journalized and posted using five steps:
 - Step 1: Identify the accounts and the account type.
 - Step 2: Decide whether each account increases or decreases, then apply the rules of debits and credits.
 - Step 3: Record the transaction in the journal.
 - Step 4: Post the journal entry to the ledger.
 - Step 5: Determine whether the accounting equation is in balance.

4. What is the trial balance?

- The trial balance summarizes the ledger by listing all the accounts with their balances.
- Assets are listed first, followed by liabilities, and then equity.
- The trial balance ensures that debits equal credits and is used to prepare the financial statements.

5. How do you use the debt ratio to evaluate business performance?

- The debt ratio can be used to evaluate a business's ability to pay its debts.
- Debt ratio = Total liabilities / Total assets.

> Summary Problem

The trial balance of Harper Service Center as of February 29, 2016, follows:

HARPER SERVICE CENTER		
Trial Balance February 29, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 23,900	
Accounts Receivable	4,500	
Office Supplies	0	
Land	0	
Accounts Payable		\$ 2,000
Utilities Payable		0
Unearned Revenue		0
Notes Payable		0
Common Stock		18,500
Dividends	0	
Service Revenue		10,000
Salaries Expense	800	
Rent Expense	1,000	
Interest Expense	0	
Utilities Expense	300	
Total	\$ 30,500	\$ 30,500

Requirement 2

Date	Accounts and Explanation	Debit	Credit
Mar. 2	Cash	45,000	
	Notes Payable		45,000
	<i>Borrowed cash on notes payable.</i>		
4	Land	40,000	
	Cash		40,000
	<i>Purchased land with cash.</i>		
9	Cash	5,000	
	Service Revenue		5,000
	<i>Performed services and received cash.</i>		
13	Office Supplies	300	
	Accounts Payable		300
	<i>Purchased office supplies on account.</i>		
15	Accounts Receivable	2,600	
	Service Revenue		2,600
	<i>Performed services on account.</i>		
18	Accounts Payable	1,200	
	Cash		1,200
	<i>Paid cash on account.</i>		
21	Salaries Expense	3,000	
	Rent Expense	1,500	
	Interest Expense	400	
	Cash		4,900
	<i>Paid cash expenses.</i>		
25	Cash	3,100	
	Accounts Receivable		3,100
	<i>Received cash on account.</i>		
27	Utilities Expense	200	
	Utilities Payable		200
	<i>Received utility bill.</i>		
29	Cash	1,500	
	Unearned Revenue		1,500
	<i>Collected cash for future services.</i>		
30	Dividends	1,800	
	Cash		1,800
	<i>Paid dividends.</i>		

> Key Terms

Account (p. 80)

Accrued Liability (p. 81)

Chart of Accounts (p. 82)

Compound Journal Entry (p. 93)

Credit (p. 84)

Debit (p. 84)

Debt Ratio (p. 105)

Double-Entry System (p. 84)

Journal (p. 88)

Ledger (p. 83)

Normal Balance (p. 85)

Notes Payable (p. 81)

Notes Receivable (p. 81)

Posting (p. 88)

Prepaid Expense (p. 81)

Source Document (p. 87)

T-Account (p. 84)

Trial Balance (p. 103)

Unearned Revenue (p. 81)

> Quick Check

Learning Objective 1

- The detailed record of the changes in a particular asset, liability, or stockholders' equity is called
 - an account.
 - a journal.
 - a ledger.
 - a trial balance.

Learning Objective 1

- Which of the following accounts is a liability?
 - Accounts Receivable
 - Service Revenue
 - Unearned Revenue
 - Prepaid Rent Expense

Learning Objective 2

- The left side of an account is used to record which of the following?
 - Debit or credit, depending on the type of account
 - Increases
 - Credits
 - Debits

Learning Objective 2

- Which of the following statements is correct?
 - Prepaid Expenses are decreased with a debit.
 - Unearned Revenue is increased with a debit.
 - Rent Expense is increased with a credit.
 - Accounts Payable is increased with a credit.

Learning Objective 3

- Your business purchased office supplies of \$2,500 on account. The journal entry to record this transaction is as follows:

Date	Accounts and Explanation	Debit	Credit
a.	Office Supplies	2,500	
	Accounts Receivable		2,500
b.	Office Supplies	2,500	
	Accounts Payable		2,500
c.	Accounts Payable	2,500	
	Office Supplies		2,500
d.	Cash	2,500	
	Accounts Payable		2,500

ASSESS YOUR PROGRESS

> Review Questions

1. Identify the three categories of the accounting equation, and list at least four accounts associated with each category.
2. What is the purpose of the chart of accounts? Explain the numbering typically associated with the accounts.
3. What does a ledger show? What's the difference between a ledger and the chart of accounts?
4. Accounting uses a double-entry system. Explain what this sentence means.
5. What is a T-account? On which side is the debit? On which side is the credit? Where does the account name go on a T-account?
6. When are debits increases? When are debits decreases?
7. When are credits increases? When are credits decreases?
8. Identify which types of accounts have a normal debit balance and which types of accounts have a normal credit balance.
9. What are source documents? Provide examples of source documents that a business might use.
10. Where are transactions initially recorded?
11. Explain the five steps in journalizing and posting transactions.
12. What are the four parts of a journal entry?
13. What is involved in the posting process?
14. What is the purpose of the trial balance?
15. What is the difference between the trial balance and the balance sheet?
16. If total debits equal total credits on the trial balance, is the trial balance error-free? Explain your answer.
17. What is the calculation for the debt ratio? Explain what the debt ratio evaluates.

> Short Exercises

Learning Objective 1

S2-1 Identifying accounts

Consider the following accounts:

- | | |
|----------------------|---------------------|
| a. Notes Receivable | f. Taxes Payable |
| b. Common Stock | g. Rent Expense |
| c. Prepaid Insurance | h. Furniture |
| d. Notes Payable | i. Dividends |
| e. Rent Revenue | j. Unearned Revenue |

Identify each account as an asset (A), liability (L), or equity (E).

S2-2 Identifying increases and decreases in accounts

For each account, identify whether the changes would be recorded as a debit (DR) or credit (CR).

- | | |
|------------------------------------|---------------------------------|
| a. Increase to Accounts Receivable | f. Decrease to Prepaid Rent |
| b. Decrease to Unearned Revenue | g. Increase to Common Stock |
| c. Decrease to Cash | h. Increase to Notes Receivable |
| d. Increase to Interest Expense | i. Decrease to Accounts Payable |
| e. Increase to Salaries Payable | j. Increase to Interest Revenue |

Learning Objective 2**S2-3 Identifying normal balances**

For each account, identify whether the normal balance is a debit (DR) or credit (CR).

- | | |
|---------------------|------------------------|
| a. Notes Payable | f. Common Stock |
| b. Dividends | g. Utilities Expense |
| c. Service Revenue | h. Office Supplies |
| d. Land | i. Advertising Expense |
| e. Unearned Revenue | j. Interest Payable |

Learning Objective 2**S2-4 Journalizing transactions**

Jack Davis opened a medical practice in Sacramento, California, and had the following transactions during the month of January.

-
- | | |
|--------|---|
| Jan. 1 | The business received \$35,000 cash and issued common stock to Davis. |
| 2 | Purchased medical supplies on account, \$13,000. |
| 4 | Performed services for patients receiving \$1,900. |
| 12 | Paid monthly office rent of \$2,600. |
| 15 | Recorded \$10,000 revenue for services rendered to patients on account. |
-

Journalize the transactions of Jack Davis, M.D. Include an explanation with each entry.

Learning Objective 3**S2-5 Journalizing transactions**

Arkansas Sales Consultants completed the following transactions during the latter part of January:

-
- | | |
|---------|---|
| Jan. 22 | Performed services for customers on account, \$9,000. |
| 30 | Received cash on account from customers, \$7,000. |
| 31 | Received a utility bill, \$210, which will be paid during February. |
| 31 | Paid monthly salary to salesman, \$2,400. |
| 31 | Received \$2,475 for three months of consulting service to be performed starting in February. |
| 31 | Cash dividends of \$900 were paid to stockholders. |
-

Journalize the transactions of Arkansas Sales Consultants. Include an explanation with each journal entry.

Learning Objective 3

Learning Objective 2**S2-6 Calculating the balance of a T-account**

Accounts Payable			
May 2	6,000	14,000	May 1
May 22	12,000	1,000	May 5
		7,000	May 15
		500	May 23

Calculate the Accounts Payable balance.

Learning Objective 3**S2-7 Journalizing transactions and posting to T-accounts**

Kenneth Watson Optical Dispensary completed the following transactions during the latter part of March:

Mar. 15	Purchased office supplies on account, \$2,600.
28	Paid \$1,300 on account.

Requirements

1. Journalize the transactions of Kenneth Watson Optical Dispensary. Include an explanation with each journal entry.
2. Open the following accounts (use T-account format): Cash (Beginning Balance of \$23,000), Office Supplies, and Accounts Payable. Post the journal entries from Requirement 1 to the accounts, and compute the balance in each account.

Learning Objective 4**S2-8 Preparing a trial balance**

Henderson Floor Coverings reported the following summarized data at December 31, 2016. Accounts appear in no particular order, and all have normal balances.

Service Revenue	\$ 38,000	Salaries Payable	\$ 15,000
Equipment	45,000	Salaries Expense	1,800
Rent Expense	10,000	Cash	12,000
Common Stock	25,000	Accounts Receivable	4,000
Accounts Payable	1,500	Interest Payable	7,500
Dividends	12,900	Utilities Expense	1,300

Prepare the trial balance of Henderson Floor Coverings at December 31, 2016.

Learning Objective 5**S2-9 Calculating debt ratio**

Vacuum Magic Carpet Care had the following total assets, liabilities, and equity as of October 31:

Assets	\$ 240,000
Liabilities	60,000
Equity	180,000

What is Vacuum Magic Carpet Care's debt ratio as of October 31?

> Exercises

E2-10 Using accounting vocabulary

Match the accounting terms with the corresponding definitions.

- | | |
|----------------------------|--|
| 1. Posting | a. A detailed record of all increases and decreases that have occurred in a particular asset, liability, or equity during a period |
| 2. Account | b. The record holding all the accounts of a business, the changes in those accounts, and their balances |
| 3. Debit | c. A journal entry that is characterized by having multiple debits and/or multiple credits |
| 4. Journal | d. A record of transactions in date order |
| 5. Chart of accounts | e. Left side of a T-account |
| 6. Trial balance | f. Side of an account where increases are recorded |
| 7. Normal balance | g. Transferring amounts from the journal to the ledger |
| 8. Ledger | h. Right side of a T-account |
| 9. Credit | i. A list of all accounts with their balances at a point in time |
| 10. Compound journal entry | j. A list of all accounts with their account numbers |

Learning Objectives 1, 2, 3, 4

E2-11 Creating a chart of accounts

Raymond Autobody Shop has the following accounts:

Accounts Payable	Service Revenue
Cash	Equipment
Utilities Expense	Common Stock
Automotive Supplies	Advertising Expense
Dividends	Unearned Revenue
Retained Earnings	

Create a chart of accounts for Raymond Autobody Shop using the standard numbering system. Each account is separated by a factor of 10. For example, the first asset account will be 100 and the next asset account will 110.

Learning Objective 1

E2-12 Identifying accounts, increases in accounts, and normal balances

- | | |
|------------------------|----------------------|
| a. Interest Revenue | f. Unearned Revenue |
| b. Accounts Payable | g. Prepaid Rent |
| c. Common Stock | h. Utilities Expense |
| d. Office Supplies | i. Dividends |
| e. Advertising Expense | j. Service Revenue |

Learning Objectives 1, 2

Requirements

1. Identify each account as asset (A), liability (L), or equity (E).
2. Identify whether the account is increased with a debit (DR) or credit (CR).
3. Identify whether the normal balance is a debit (DR) or credit (CR).

Learning Objective 2**E2-13 Identifying increases and decreases in accounts and normal balances**

Insert the missing information into the accounting equation. Signify increases as *Incr.* and decreases as *Decr.*

(a)	=	LIABILITIES	+	(b)												
				Contributed Capital				+	Retained Earnings							
ASSETS		=	(c)		+	Common Stock		-	(d)		+	Revenues		-	Expenses	
(e) Debit	Decr. (n)		Decr. (o)	(f) Credit		(g) (p)	(h) Credit		(i) (q)	(j) Credit		(k) Debit	(l) Credit		Incr. (r)	(m) Credit

Learning Objective 3**E2-14 Identifying source documents**

For each transaction, identify a possible source document.

- a. The business received \$20,000 cash and issued common stock to stockholders.
- b. Purchased office supplies on account, \$500.
- c. Recorded \$1,000 revenue for services rendered to customers.

Learning Objective 3**E2-15 Analyzing and journalizing transactions**

As the manager of Margarita Mexican Restaurant, you must deal with a variety of business transactions. Provide an explanation for the following transactions:

- a. Debit Equipment and credit Cash.
- b. Debit Dividends and credit Cash.
- c. Debit Wages Payable and credit Cash.
- d. Debit Equipment and credit Common Stock.
- e. Debit Cash and credit Unearned Revenue.
- f. Debit Advertising Expense and credit Cash.
- g. Debit Cash and credit Service Revenue.

Use the following information to answer Exercises E2-16 and E2-17.

The following transactions occurred for London Engineering:

Jul. 2	Received \$12,000 contribution from Brett London in exchange for common stock.
4	Paid utilities expense of \$410.
5	Purchased equipment on account, \$2,200.
10	Performed services for a client on account, \$2,800.
12	Borrowed \$7,500 cash, signing a notes payable.
19	Cash dividends of \$750 were paid to stockholders.
21	Purchased office supplies for \$860 and paid cash.
27	Paid the liability from July 5.

Learning Objective 3**E2-16 Analyzing and journalizing transactions**

Journalize the transactions of London Engineering. Include an explanation with each journal entry. Use the following accounts: Cash; Accounts Receivable; Office Supplies; Equipment; Accounts Payable; Notes Payable; Common Stock; Dividends; Service Revenue; Utilities Expense.

E2-17 Posting journal entries to T-accounts**Requirements**

1. Open the following T-accounts for London Engineering: Cash; Accounts Receivable; Office Supplies; Equipment; Accounts Payable; Notes Payable; Common Stock; Dividends; Service Revenue; Utilities Expense.
2. Post the journal entries to the T-accounts. Also transfer the dates to the T-accounts.
3. Compute the July 31 balance for each account.

Use the following information to answer Exercises E2-18 and E2-19.

The following transactions occurred for Wilson Technology Solutions:

May 1	The business received cash of \$85,000 and issued common stock to Zack Wilson.
2	Purchased office supplies on account, \$550.
4	Paid \$57,000 cash for building and land. The building had a fair market value of \$48,000.
6	Performed services for customers and received cash, \$3,600.
9	Paid \$450 on accounts payable.
17	Performed services for customers on account, \$3,400.
19	Paid rent expense for the month, \$1,400.
20	Received \$1,300 from customers for services to be performed next month.
21	Paid \$300 for advertising in next month's <i>IT Technology</i> magazine.
23	Received \$2,600 cash on account from a customer.
31	Incurred and paid salaries, \$1,200.

E2-18 Analyzing and journalizing transactions

Journalize the transactions of Wilson Technology Solutions. Include an explanation with each journal entry. Use the following accounts: Cash; Accounts Receivable; Office Supplies; Prepaid Advertising; Building; Land; Accounts Payable; Unearned Revenue; Common Stock; Service Revenue; Rent Expense; Salaries Expense.

E2-19 Posting journal entries to four-column accounts**Requirements**

1. Open four-column accounts using the following account numbers: Cash, 110; Accounts Receivable, 120; Office Supplies, 130; Prepaid Advertising, 140; Building, 150; Land, 160; Accounts Payable, 210; Unearned Revenue, 220; Common Stock, 310; Service Revenue, 410; Rent Expense, 510; Salaries Expense, 520.
2. Post the journal entries to the four-column accounts, and determine the balance in the account after each transaction. Assume that the journal entries were recorded on page 10 of the journal. Make sure to complete the Post. Ref. columns in the journal and ledger.

Learning Objective 3

3. Cash Balance \$15,280

Learning Objective 3**Learning Objective 3**

2. Cash Balance \$32,150

Learning Objective 3

E2-20 Analyzing transactions from T-accounts

The first nine transactions of North-West Airplane Repair have been posted to the T-accounts. Provide an explanation for each of the nine transactions.

ASSETS		=	LIABILITIES		+	EQUITY							
						Contributed Capital		+	Retained Earnings				
Cash		=	Accounts Payable		+	Common Stock		-	Dividends	+	Service Revenue	-	Rent Expense
(1) 370,000	360,000 (2)		(5) 1,200	1,500 (4)		370,000	(1) (8)	7,000			21,000 (9)	(7)	1,400
(3) 260,000	1,200 (5)		Notes Payable										
(9) 21,000	1,500 (6)			260,000 (3)									
	3,900 (7)												Salaries Expense
	7,000 (8)												(7) 2,500
													Property Tax Expense
													(6) 1,500
Office Supplies													
(4) 1,500													
Building													
(2) 360,000													

Learning Objective 3

E2-21 Journalizing transactions from T-accounts

In December 2016, the first five transactions of Atkins' Lawn Care Company have been posted to the T-accounts. Prepare the journal entries that served as the sources for the five transactions. Include an explanation for each entry.

Cash			Office Supplies			Equipment			Building	
(1) 56,000	37,000 (3)		(2) 200			(5) 5,900			(3) 37,000	
(4) 49,000	5,900 (5)									
Accounts Payable			Notes Payable			Common Stock				
	200 (2)			49,000 (4)			56,000 (1)			

Learning Objective 4

E2-22 Preparing a trial balance

Total Debits \$211,500

The accounts of Aker Moving Company follow with their normal balances as of August 31, 2016. The accounts are listed in no particular order.

Common Stock	\$ 53,300	Trucks	\$ 132,000
Insurance Expense	600	Fuel Expense	3,000
Accounts Payable	4,200	Dividends	6,200
Service Revenue	92,000	Utilities Expense	500
Building	48,000	Accounts Receivable	8,700
Advertising Expense	200	Notes Payable	62,000
Salaries Expense	7,000	Office Supplies	300
Cash	5,000		

Prepare Aker's trial balance as of August 31, 2016.

Learning Objective 4**E2-25 Analyzing accounting errors**

Beth Rothman has trouble keeping her debits and credits equal. During a recent month, Beth made the following accounting errors:

- a. In preparing the trial balance, Beth omitted a \$4,000 Notes Receivable. The credit to Cash was correct.
- b. Beth posted a \$90 Utilities Expense as \$900. The credit to Cash was correct.
- c. In recording a \$400 payment on account, Beth debited Equipment instead of Accounts Payable.
- d. In journalizing a receipt of cash for service revenue, Beth debited Cash for \$800 instead of the correct amount of \$80. The credit was correct.
- e. Beth recorded a \$130 purchase of office supplies on account by debiting Office Supplies and crediting Accounts Payable for \$310.

Requirements

1. For each of these errors, state whether total debits equal total credits on the trial balance.
2. Identify each account that has an incorrect balance, and the amount and direction of the error (such as "Accounts Receivable \$500 too high").

Learning Objective 4

Total Debits \$39,750

E2-26 Correcting errors in a trial balance

The accountant for Town and Country Painting Specialists is having a hard time preparing the trial balance as of November 30, 2016:

TOWN AND COUNTRY PAINTING SPECIALISTS		
Trial Balance November 30, 2016		
Account Title	Balance	
	Debit	Credit
Painting Equipment	\$ 13,000	
Cash	12,900	
Accounts Receivable	1,100	
Advertising Expense	450	
Dividends		\$ 7,000
Accounts Payable		3,100
Rent Expense	2,700	
Common Stock	15,000	
Service Revenue		19,650
Unearned Revenue	2,000	
Salaries Expense	2,100	
Office Supplies		300
Utilities Expense	200	
Total	\$ 49,450	\$ 30,050

Prepare the corrected trial balance as of November 30, 2016. Assume all amounts are correct and all accounts have normal balances.

Learning Objective 4

Total Debits \$34,900

E2-27 Correcting errors in a trial balance

The following trial balance of Josh Maddy Tutoring Service at May 31, 2016, does not balance.

JOSH MADDY TUTORING SERVICE		
Trial Balance May 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 2,900	
Accounts Receivable	2,000	
Office Supplies	600	
Computer Equipment	16,000	
Accounts Payable		\$ 11,500
Utilities Payable		200
Common Stock		11,800
Dividends	9,800	
Service Revenue		9,700
Salaries Expense	1,600	
Rent Expense	900	
Utilities Expense	700	
Total	<u>\$ 34,500</u>	<u>\$ 33,200</u>

Investigation of the accounting records reveals that the bookkeeper:

- a. Recorded a \$400 cash revenue transaction by debiting Accounts Receivable. The credit entry was correct.
- b. Posted a \$1,000 credit to Accounts Payable as \$100.
- c. Did not record Utilities Expense or the related Utilities Payable in the amount of \$600.
- d. Understated Common Stock by \$400.

Prepare the corrected trial balance as of May 31, 2016, complete with a heading; journal entries are not required.

Learning Objective 5

Total Assets \$177,800

E2-28 Calculating the debt ratio

Jack Harper, M.D., reported the following trial balance as of September 30, 2016:

JACK HARPER, M.D.		
Trial Balance September 30, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 33,000	
Accounts Receivable	8,100	
Office Supplies	2,800	
Office Equipment	29,000	
Building	100,000	
Land	23,000	
Accounts Payable		\$ 2,400
Utilities Payable		400
Unearned Revenue		8,027
Notes Payable		93,000
Common Stock		110,000
Dividends	58,000	
Service Revenue		65,473
Salaries Expense	23,900	
Utilities Expense	800	
Advertising Expense	700	
Total	<u>\$ 279,300</u>	<u>\$ 279,300</u>

Calculate the debt ratio for Jack Harper, M.D.

> Problems Group A

P2-29A Journalizing transactions, posting journal entries to T-accounts, and preparing a trial balance

Vincent Yarwood practices medicine under the business title Vincent Yarwood, M.D. During July, the medical practice completed the following transactions:

-
- | | |
|--------|---|
| Jul. 1 | Yarwood contributed \$68,000 cash to the business in exchange for common stock. |
| 5 | Paid monthly rent on medical equipment, \$550. |
| 9 | Paid \$17,000 cash to purchase land to be used in operations. |
| 10 | Purchased office supplies on account, \$1,800. |
| 19 | Borrowed \$24,000 from the bank for business use. |
| 22 | Paid \$1,700 on account. |
| 28 | The business received a bill for advertising in the daily newspaper to be paid in August, \$290. |
| 31 | Revenues earned during the month included \$6,000 cash and \$5,500 on account. |
| 31 | Paid employees' salaries \$2,000, office rent \$1,000, and utilities \$550. Record as a compound entry. |
| 31 | The business received \$1,260 for medical screening services to be performed next month. |
| 31 | Paid cash dividends of \$7,400. |
-

The business uses the following accounts: Cash; Accounts Receivable; Office Supplies; Land; Accounts Payable; Advertising Payable; Unearned Revenue; Notes Payable; Common Stock; Dividends; Service Revenue; Salaries Expense; Rent Expense; Utilities Expense; and Advertising Expense.

Requirements

1. Journalize each transaction. Explanations are not required.
2. Post the journal entries to the T-accounts, using transaction dates as posting references in the ledger accounts. Label the balance of each account *Bal.*
3. Prepare the trial balance of Vincent Yarwood, M.D., as of July 31, 2017.

Learning Objectives 3, 4

2. Cash Balance \$69,060

Learning Objectives 3, 4

4. Total Debits \$55,900

P2-30A Journalizing transactions, posting journal entries to T-accounts, and preparing a trial balance

Doris Stann started her practice as a design consultant on September 1, 2017. During the first month of operations, the business completed the following transactions:

Sep. 1	Received \$47,000 cash and issued common stock to Stann.
4	Purchased office supplies, \$700, and furniture, \$1,600, on account.
6	Performed services for a law firm and received \$1,400 cash.
7	Paid \$20,000 cash to acquire land to be used in operations.
10	Performed services for a hotel and received its promise to pay the \$900 within one week.
14	Paid for the furniture purchased on September 4 on account.
15	Paid assistant's semimonthly salary, \$1,480.
17	Received cash on account, \$700.
20	Prepared a design for a school on account, \$700.
25	Received \$2,200 cash for design services to be performed in October.
28	Received \$2,600 cash for consulting with Plummer & Gordon.
29	Paid \$2,400 cash for a 12-month insurance policy starting on October 1.
30	Paid assistant's semimonthly salary, \$1,480.
30	Paid monthly rent expense, \$500.
30	Received a bill for utilities, \$400. The bill will be paid next month.
30	Paid cash dividends of \$3,000.

Requirements

- Record each transaction in the journal using the following account titles: Cash; Accounts Receivable; Office Supplies; Prepaid Insurance; Furniture; Land; Accounts Payable; Utilities Payable; Unearned Revenue; Common Stock; Dividends; Service Revenue; Salaries Expense; Rent Expense; Utilities Expense. Explanations are not required.
- Open a T-account for each of the accounts.
- Post the journal entries to the T-accounts, using transaction dates as posting references in the ledger accounts. Label the balance of each account *Bal.*
- Prepare the trial balance of Doris Stann, Designer, as of September 30, 2017.

P2-31A Journalizing transactions, posting journal entries to four-column accounts, and preparing a trial balance

Trevor McGraw opened a law office on January 1, 2017. During the first month of operations, the business completed the following transactions:

Learning Objectives 3, 4

3. Cash Balance \$23,400

Jan. 1	McGraw contributed \$62,000 cash to the business, Trevor McGraw, Attorney. The business issued common stock to McGraw.
3	Purchased office supplies, \$500, and furniture, \$2,000, on account.
4	Performed legal services for a client and received \$1,600 cash.
7	Purchased a building with a market value of \$70,000, and land with a market value of \$29,000. The business paid \$35,000 cash and signed a note payable to the bank for the remaining amount.
11	Prepared legal documents for a client on account, \$300.
15	Paid assistant's semimonthly salary, \$1,180.
16	Paid for the office supplies purchased on January 3 on account.
18	Received \$2,000 cash for helping a client sell real estate.
19	Defended a client in court and billed the client for \$1,400.
25	Received a bill for utilities, \$550. The bill will be paid next month.
29	Received cash on account, \$700.
30	Paid \$840 cash for a 12-month insurance policy starting on February 1.
30	Paid assistant's semimonthly salary, \$1,180.
31	Paid monthly rent expense, \$1,300.
31	Paid cash dividends of \$2,900.

Requirements

- Record each transaction in the journal, using the following account titles: Cash; Accounts Receivable; Office Supplies; Prepaid Insurance; Furniture; Building; Land; Accounts Payable; Utilities Payable; Notes Payable; Common Stock; Dividends; Service Revenue; Salaries Expense; Rent Expense; and Utilities Expense. Explanations are not required.
- Open the following four-column accounts including account numbers: Cash, 101; Accounts Receivable, 111; Office Supplies, 121; Prepaid Insurance, 131; Furniture, 141; Building, 151; Land, 161; Accounts Payable, 201; Utilities Payable, 211; Notes Payable, 221; Common Stock, 301; Dividends, 311; Service Revenue, 411; Salaries Expense, 511; Rent Expense, 521; and Utilities Expense, 531.
- Post the journal entries to four-column accounts in the ledger, using dates, account numbers, journal references, and posting references. Assume the journal entries were recorded on page 1 of the journal.
- Prepare the trial balance of Trevor McGraw, Attorney, at January 31, 2017.

Learning Objectives 3, 4

3. Cash Balance \$16,700

P2-32A Journalizing transactions, posting journal entries to four-column accounts, and preparing a trial balance

The trial balance of Steve Mentz, CPA, is dated March 31, 2017:

STEVE MENTZ, CPA		
Trial Balance		
March 31, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$ 18,000	
Accounts Receivable	9,500	
Office Supplies	1,000	
Furniture	0	
Automobile	0	
Land	26,000	
Accounts Payable		\$ 5,500
Unearned Revenue		0
Common Stock		44,100
Dividends	0	
Service Revenue		10,800
Salaries Expense	5,000	
Rent Expense	900	
Total	\$ 60,400	\$ 60,400

During April, the business completed the following transactions:

-
- Apr. 4 Collected \$1,000 cash from a client on account.
 - 8 Performed tax services for a client on account, \$5,800.
 - 13 Paid \$1,500 on account.
 - 14 Purchased furniture on account, \$4,600.
 - 15 Mentz contributed his personal automobile to the business in exchange for common stock. The automobile had a market value of \$8,000.
 - 18 Purchased office supplies on account, \$500.
 - 19 Received \$2,900 for tax services performed on April 8.
 - 20 Paid cash dividends of \$8,000.
 - 21 Received \$5,400 cash for consulting work completed.
 - 24 Received \$1,200 cash for accounting services to be completed next month.
 - 27 Paid office rent, \$700.
 - 28 Paid employee salary, \$1,600.
-

Requirements

1. Record the April transactions in the journal. Use the following accounts: Cash; Accounts Receivable; Office Supplies; Furniture; Automobile; Land; Accounts Payable; Unearned Revenue; Common Stock; Dividends; Service Revenue; Salaries Expense; and Rent Expense. Include an explanation for each entry.
2. Open the four-column ledger accounts listed in the trial balance, together with their balances as of March 31. Use the following account numbers: Cash, 11; Accounts Receivable, 12; Office Supplies, 13; Furniture, 14; Automobile, 15; Land, 16; Accounts Payable, 21; Unearned Revenue, 22; Common Stock, 31; Dividends, 33; Service Revenue, 41; Salaries Expense, 51; and Rent Expense, 52.
3. Post the journal entries to four-column accounts in the ledger, using dates, account numbers, journal references, and posting references. Assume the journal entries were recorded on page 5 of the journal.
4. Prepare the trial balance of Steve Mentz, CPA, at April 30, 2017.

P2-33A Correcting errors in a trial balance

The trial balance of Learn for Life Child Care does not balance.

Learning Objective 4

Total Debits \$115,900

LEARN FOR LIFE CHILD CARE		
Trial Balance		
August 31, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$ 8,800	
Accounts Receivable	7,100	
Office Supplies	1,200	
Prepaid Insurance	1,800	
Equipment	90,600	
Accounts Payable		\$ 2,700
Notes Payable		55,000
Common Stock		58,000
Dividends	4,400	
Service Revenue		2,200
Salaries Expense	5,200	
Rent Expense	600	
Total	\$ 119,700	\$ 117,900

The following errors are detected:

- a. Cash is understated by \$1,300.
- b. A \$4,600 debit to Accounts Receivable was posted as a credit.
- c. A \$1,500 purchase of office supplies on account was neither journalized nor posted.
- d. Equipment was incorrectly transferred from the ledger as \$90,600. It should have been transferred as \$82,000.

- e. Salaries Expense is overstated by \$900.
- f. A \$800 cash payment for advertising expense was neither journalized nor posted.
- g. A \$200 cash dividend was incorrectly journalized as \$2,000.
- h. Service Revenue was understated by \$4,600.
- i. A 12-month insurance policy was posted as a \$900 credit to Prepaid Insurance. Cash was posted correctly.

Prepare the corrected trial balance at August 31, 2017. Journal entries are not required.

Learning Objectives 4, 5

- 2. Ending Retained Earnings \$5,890

P2-34A Preparing financial statements from the trial balance and calculating the debt ratio

The trial balance as of July 31, 2017, for Sandra Sousa, Registered Dietician, is presented below:

SANDRA SOUSA, REGISTERED DIETICIAN		
Trial Balance July 31, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$ 33,000	
Accounts Receivable	9,500	
Office Supplies	1,500	
Prepaid Insurance	2,000	
Equipment	15,000	
Accounts Payable		\$ 3,300
Unearned Revenue		2,810
Notes Payable		25,000
Common Stock		24,000
Dividends	2,600	
Service Revenue		11,840
Salaries Expense	2,300	
Rent Expense	800	
Utilities Expense	250	
Total	\$ 66,950	\$ 66,950

Requirements

1. Prepare the income statement for the month ended July 31, 2017.
2. Prepare the statement of retained earnings for the month ended July 31, 2017. The beginning balance of retained earnings was \$0.
3. Prepare the balance sheet as of July 31, 2017.
4. Calculate the debt ratio as of July 31, 2017.

> Problems Group B

P2-35B Journalizing transactions, posting journal entries to T-accounts, and preparing a trial balance

Vito York practices medicine under the business title Vito York, M.D. During March, the medical practice completed the following transactions:

Mar. 1	York contributed \$64,000 cash to the business in exchange for common stock.
5	Paid monthly rent on medical equipment, \$630.
9	Paid \$13,000 cash to purchase land to be used in operations.
10	Purchased office supplies on account, \$1,800.
19	Borrowed \$24,000 from the bank for business use.
22	Paid \$1,200 on account.
28	The business received a bill for advertising in the daily newspaper to be paid in April, \$270.
31	Revenues earned during the month included \$6,600 cash and \$5,800 on account.
31	Paid employees' salaries \$2,700, office rent \$1,500, and utilities \$400. Record as a compound entry.
31	The business received \$1,450 for medical screening services to be performed next month.
31	Paid cash dividends of \$6,600.

The business uses the following accounts: Cash; Accounts Receivable; Office Supplies; Land; Accounts Payable; Advertising Payable; Unearned Revenue; Notes Payable; Common Stock; Dividends; Service Revenue; Salaries Expense; Rent Expense; Utilities Expense; and Advertising Expense.

Requirements

1. Journalize each transaction. Explanations are not required.
2. Post the journal entries to the T-accounts, using transaction dates as posting references in the ledger accounts. Label the balance of each account *Bal.*
3. Prepare the trial balance of Vito York, M.D., as of March 31, 2017.

Learning Objectives 3, 4

2. Cash Balance \$70,020

Learning Objectives 3, 4

4. Total Debits \$49,500

P2-36B Journalizing transactions, posting journal entries to T-accounts, and preparing a trial balance

Deb Sikes started her practice as a design consultant on November 1, 2017. During the first month of operations, the business completed the following transactions:

Nov. 1	Received \$39,000 cash and issued common stock to Sikes.
4	Purchased office supplies, \$900, and furniture, \$1,800, on account.
6	Performed services for a law firm and received \$2,000 cash.
7	Paid \$24,000 cash to acquire land to be used in operations.
10	Performed services for a hotel and received its promise to pay the \$1,200 within one week.
14	Paid for the furniture purchased on November 4 on account.
15	Paid assistant's semimonthly salary, \$1,410.
17	Received cash on account, \$1,000.
20	Prepared a design for a school on account, \$900.
25	Received \$2,100 cash for design services to be performed in December.
28	Received \$2,800 cash for consulting with Plummer & Gordon.
29	Paid \$1,080 cash for a 12-month insurance policy starting on December 1.
30	Paid assistant's semimonthly salary, \$1,410.
30	Paid monthly rent expense, \$800.
30	Received a bill for utilities, \$600. The bill will be paid next month.
30	Paid cash dividends of \$4,000.

Requirements

- Record each transaction in the journal using the following account titles: Cash; Accounts Receivable; Office Supplies; Prepaid Insurance; Furniture; Land; Accounts Payable; Utilities Payable; Unearned Revenue; Common Stock; Dividends; Service Revenue; Salaries Expense; Rent Expense; Utilities Expense. Explanations are not required.
- Open a T-account for each of the accounts.
- Post the journal entries to the T-accounts, using transaction dates as posting references in the ledger accounts. Label the balance of each account *Bal.*
- Prepare the trial balance of Deb Sikes, Designer, as of November 30, 2017.

Learning Objectives 3, 4

3. Service Revenue Balance \$6,000

P2-37B Journalizing transactions, posting journal entries to four-column accounts, and preparing a trial balance

Taylor Murray opened a law office on January 1, 2017. During the first month of operations, the business completed the following transactions:

-
- | | |
|--------|--|
| Apr. 1 | Moore contributed \$76,000 cash to the business, Trevor Moore, Attorney. The business issued common stock to Moore. |
| 3 | Purchased office supplies, \$400, and furniture, \$2,200, on account. |
| 4 | Performed legal services for a client and received \$900 cash. |
| 7 | Purchased a building with a market value of \$120,000, and land with a market value of \$29,000. The business paid \$45,000 cash and signed a note payable to the bank for the remaining amount. |
| 11 | Prepared legal documents for a client on account, \$800. |
| 15 | Paid assistant's semimonthly salary, \$1,230. |
| 16 | Paid for the office supplies purchased on April 3 on account. |
| 18 | Received \$2,800 cash for helping a client sell real estate. |
| 19 | Defended a client in court and billed the client for \$1,500. |
| 25 | Received a bill for utilities, \$650. The bill will be paid next month. |
| 28 | Received cash on account, \$1,700. |
| 29 | Paid \$4,800 cash for a 12-month insurance policy starting on May 1. |
| 29 | Paid assistant's semimonthly salary, \$1,230. |
| 30 | Paid monthly rent expense, \$1,100. |
| 30 | Paid cash dividends of \$2,000. |
-

Requirements

- Record each transaction in the journal, using the following account titles: Cash; Accounts Receivable; Office Supplies; Prepaid Insurance; Furniture; Building; Land; Accounts Payable; Utilities Payable; Notes Payable; Common Stock; Dividends; Service Revenue; Salaries Expense; Rent Expense; and Utilities Expense. Explanations are not required.
- Open the following four-column accounts including account numbers: Cash, 101; Accounts Receivable, 111; Office Supplies, 121; Prepaid Insurance, 131; Furniture, 141; Building, 151; Land, 161; Accounts Payable, 201; Utilities Payable, 211; Notes Payable, 221; Common Stock, 301; Dividends, 311; Service Revenue, 411; Salaries Expense, 511; Rent Expense, 521; and Utilities Expense, 531.
- Post the journal entries to four-column accounts in the ledger, using dates, account numbers, journal references, and posting references. Assume the journal entries were recorded on page 1 of the journal.
- Prepare the trial balance of Taylor Murray, Attorney, at January 31, 2017.

Learning Objectives 3, 4

3. Cash Balance \$11,000

P2-38B Journalizing transactions, posting journal entries to four-column accounts, and preparing a trial balance

The trial balance of James Howe, CPA, is dated March 31, 2017:

JAMES HOWE, CPA		
Trial Balance		
March 31, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$ 10,000	
Accounts Receivable	7,500	
Office Supplies	400	
Furniture	0	
Automobile	0	
Land	27,000	
Accounts Payable		\$ 4,200
Unearned Revenue		0
Common Stock		33,300
Dividends	0	
Service Revenue		10,800
Salaries Expense	2,500	
Rent Expense	900	
Total	\$ 48,300	\$ 48,300

During April, the business completed the following transactions:

-
- Apr. 4 Collected \$2,000 cash from a client on account.
 - 8 Performed tax services for a client on account, \$5,400.
 - 13 Paid \$3,300 on account.
 - 14 Purchased furniture on account, \$4,600.
 - 15 Howe contributed his personal automobile to the business in exchange for common stock. The automobile had a market value of \$10,000.
 - 18 Purchased office supplies on account, \$1,000.
 - 19 Received \$2,700 for tax services performed on April 8.
 - 20 Paid cash dividends of \$4,000.
 - 21 Received \$3,800 cash for consulting work completed.
 - 24 Received \$1,400 cash for accounting services to be completed next month.
 - 27 Paid office rent, \$600.
 - 28 Paid employee salary, \$1,000.
-

Requirements

- Record the April transactions in the journal using the following accounts: Cash; Accounts Receivable; Office Supplies; Furniture; Automobile; Land; Accounts Payable; Unearned Revenue; Common Stock; Dividends; Service Revenue; Salaries Expense; and Rent Expense. Include an explanation for each entry.
- Open the four-column ledger accounts listed in the trial balance, together with their balances as of March 31. Use the following account numbers: Cash, 11; Accounts Receivable, 12; Office Supplies, 13; Furniture, 14; Automobile, 15; Land, 16; Accounts Payable, 21; Unearned Revenue, 22; Common Stock, 31; Dividends, 33; Service Revenue, 41; Salaries Expense, 51; and Rent Expense, 52.
- Post the journal entries to four-column accounts in the ledger, using dates, account numbers, journal references, and posting references. Assume the journal entries were recorded on page 5 of the journal.
- Prepare the trial balance of James Howe, CPA, at April 30, 2017.

P2-39B Correcting errors in a trial balance

The trial balance of Creative Tots Child Care does not balance.

Learning Objective 4

Total Debits \$122,400

CREATIVE TOTS CHILD CARE		
Trial Balance August 31, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$ 9,060	
Accounts Receivable	6,900	
Office Supplies	700	
Prepaid Insurance	900	
Equipment	87,500	
Accounts Payable		\$ 1,800
Notes Payable		46,000
Common Stock		56,000
Dividends	4,340	
Service Revenue		10,900
Salaries Expense	4,000	
Rent Expense	400	
Total	\$ 113,800	\$ 114,700

The following errors are detected:

- Cash is understated by \$1,000.
- A \$4,800 debit to Accounts Receivable was posted as a credit.
- A \$1,700 purchase of office supplies on account was neither journalized nor posted.
- Equipment was incorrectly transferred from the ledger as \$87,500. It should have been transferred as \$80,000.

- e. Salaries Expense is overstated by \$800.
- f. A \$800 cash payment for advertising expense was neither journalized nor posted.
- g. A \$160 cash dividend was incorrectly journalized as \$1,600.
- h. Service Revenue was understated by \$4,000.
- i. A 12-month insurance policy was posted as a \$1,300 credit to Prepaid Insurance. Cash was posted correctly.

Prepare the corrected trial balance at August 31, 2017. Journal entries are not required.

Learning Objectives 4, 5

1. Net Income \$7,508

P2-40B Preparing financial statements from the trial balance and calculating the debt ratio

The trial balance as of July 31, 2017, for Sarah Silk, Registered Dietician, is presented below:

SARAH SILK, REGISTERED DIETICIAN		
Trial Balance July 31, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$ 30,000	
Accounts Receivable	9,700	
Office Supplies	2,200	
Prepaid Insurance	2,700	
Equipment	20,000	
Accounts Payable		\$ 3,400
Unearned Revenue		5,192
Notes Payable		25,000
Common Stock		26,000
Dividends	2,500	
Service Revenue		9,858
Salaries Expense	1,300	
Rent Expense	800	
Utilities Expense	250	
Total	\$ 69,450	\$ 69,450

Requirements

1. Prepare the income statement for the month ended July 31, 2017.
2. Prepare the statement of retained earnings for the month ended July 31, 2017. The beginning balance of retained earnings was \$0.
3. Prepare the balance sheet as of July 31, 2017.
4. Calculate the debt ratio as of July 31, 2017.

> Continuing Problem

P2-41 Journalizing transactions, posting to T-accounts, and preparing a trial balance

Problem P2-41 continues with the consulting business begun in Problem P1-54 in Chapter 1. Here you will account for Daniels Consulting's transactions as it is actually done in practice.

Daniels Consulting completed the following transactions during December 2016:

Dec. 2	Stockholders contributed \$20,000 cash in exchange for common stock.
2	Paid monthly office rent, \$2,000.
3	Paid cash for a computer, \$3,600. This equipment is expected to remain in service for five years.
4	Purchased office furniture on account, \$3,000. The furniture should last for five years.
5	Purchased office supplies on account, \$800.
9	Performed consulting service for a client on account, \$2,500.
12	Paid utilities expenses, \$150.
18	Performed service for a client and received cash of \$2,100.
21	Received \$2,400 in advance for client service to be performed in the future.
21	Hired an administrative assistant to be paid \$2,055 on the 20th day of each month. The secretary begins work immediately.
26	Paid \$200 on account.
28	Collected \$400 on account.
30	Cash dividends of \$1,000 were paid to stockholders.

Requirements

1. Journalize the transactions, using the following accounts: Cash; Accounts Receivable; Office Supplies; Equipment; Furniture; Accounts Payable; Unearned Revenue; Common Stock; Dividends; Service Revenue; Rent Expense; and Utilities Expense. Explanations are not required.
2. Open a T-account for each of the accounts.
3. Post the journal entries to the T-accounts, and calculate account balances. Formal posting references are not required.
4. Prepare a trial balance as of December 31, 2016.
5. Prepare the income statement of Daniels Consulting for the month ended December 31, 2016.
6. Prepare the statement of retained earnings for the month ended December 31, 2016.
7. Prepare the balance sheet as of December 31, 2016.
8. Calculate the debt ratio for Daniels Consulting at December 31, 2016.

> Practice Set

P2-42 Journalizing transactions, posting to T-accounts, and preparing a trial balance

Consider the following transactional data for the first month of operations for Crystal Clear Cleaning.

Nov. 1	Stockholders contributed \$35,000 and a truck, with a market value of \$7,000, to the business in exchange for common stock.
2	The business paid \$2,000 to Pleasant Properties for November through February rent. (Debit Prepaid Rent)
3	Paid \$1,800 for a business insurance policy for the term November 1, 2017 through October 31, 2018. (Debit Prepaid Insurance)
4	Purchased cleaning supplies on account, \$220.
5	Purchased on account an industrial vacuum cleaner costing \$2,000. The invoice is payable November 25.
7	Paid \$1,200 for a computer and printer.
9	Performed cleaning services on account in the amount of \$3,800.
10	Received \$300 for services rendered on November 9.
15	Paid employees, \$350.
16	Received \$12,000 for a 1-year contract beginning November 16 for cleaning services to be provided. Contract begins November 16, 2017, and ends November 15, 2018. (Credit Unearned Revenue)
17	Provided cleaning services and received \$1,000 cash.
18	Received a utility bill for \$250 with a due date of December 4, 2017. (Use Accounts Payable)
20	Borrowed \$96,000 from bank with interest rate of 9% per year.
21	Received \$900 on account for services performed on November 9.
25	Paid \$1,000 on account for vacuum cleaner purchased on November 5.
29	Paid \$500 for advertising.
30	Cash dividends of \$200 were paid to stockholders.

Requirements

1. Journalize the transactions, using the following accounts: Cash; Accounts Receivable; Cleaning Supplies; Prepaid Rent; Prepaid Insurance; Equipment; Truck; Accounts Payable; Unearned Revenue; Notes Payable; Common Stock; Dividends; Service Revenue; Salaries Expense; Advertising Expense; and Utilities Expense. Explanations are not required.
2. Open a T-account for each account.
3. Post the journal entries to the T-accounts, and calculate account balances. Formal posting references are not required.
4. Prepare a trial balance as of November 30, 2017.

CRITICAL THINKING

> Decision Case 2-1

Your friend, Dean McChesney, requested that you advise him on the effects that certain transactions will have on his business, A-Plus Travel Planners. Time is short, so you cannot journalize the transactions. Instead, you must analyze the transactions without a journal. McChesney will continue the business only if he can expect to earn a monthly net income of \$6,000. The business completed the following transactions during June:

- a. McChesney deposited \$10,000 cash in a business bank account to start the company. The company issued common stock to McChesney.
- b. Paid \$300 cash for office supplies.
- c. Incurred advertising expense on account, \$700.
- d. Paid the following cash expenses: administrative assistant's salary, \$1,400; office rent, \$1,000.
- e. Earned service revenue on account, \$8,800.
- f. Collected cash from customers on account, \$1,200.

Requirements

1. Open the following T-accounts: Cash; Accounts Receivable; Office Supplies; Accounts Payable; Common Stock; Service Revenue; Salaries Expense; Rent Expense; and Advertising Expense.
2. Post the transactions directly to the accounts without using a journal. Record each transaction by letter. Calculate account balances.
3. Prepare a trial balance at June 30, 2016.
4. Compute the amount of net income or net loss for this first month of operations. Would you recommend that McChesney continue in business?

> Ethical Issue 2-1

Better Days Ahead, a charitable organization, has a standing agreement with First National Bank. The agreement allows Better Days Ahead to overdraw its cash balance at the bank when donations are running low. In the past, Better Days Ahead managed funds wisely and rarely used this privilege. Jacob Henson has recently become the president of Better Days. To expand operations, Henson acquired office equipment and spent large amounts on fundraising. During Henson's presidency, Better Days Ahead has maintained a negative bank balance of approximately \$10,000.

What is the ethical issue in this situation, if any? State why you approve or disapprove of Henson's management of Better Days Ahead's funds.

> Fraud Case 2-1

Roy Akins was the accounting manager at Zelco, a tire manufacturer, and he played golf with Hugh Stallings, the CEO, who was something of a celebrity in the community. The CEO stood to earn a substantial bonus if Zelco increased net income by year-end. Roy was eager to get into Hugh's elite social circle; he boasted to Hugh that he knew some accounting tricks that could increase company income by simply

revising a few journal entries for rental payments on storage units. At the end of the year, Roy changed the debits from “rent expense” to “prepaid rent” on several entries. Later, Hugh got his bonus, and the deviations were never discovered.

Requirements

1. How did the change in the journal entries affect the net income of the company at year-end?
2. Who gained and who lost as a result of these actions?

> Financial Statement Case 2-1

Visit <http://www.pearsonglobaleditions.com/Horngren> to view a link to the **Starbucks Corporation** Fiscal 2013 Annual Report.

Requirements

1. Calculate the debt ratio for Starbucks Corporation as of September 29, 2013.
2. How did the debt ratio for Starbucks Corporation compare to the debt ratio for **Green Mountain Coffee Roasters, Inc.**? Discuss.

> Communication Activity 2-1

In 35 words or fewer, explain the difference between a debit and a credit, and explain what the normal balance of the six account types is.

MyAccountingLab

For a wealth of online resources, including exercises, problems, media, and immediate tutorial help, please visit <http://www.myaccountinglab.com>.

> Quick Check Answers

1. a 2. c 3. d 4. d 5. b 6. b 7. d 8. b 9. a 10. b

The Adjusting Process

3



Where's My Bonus?

Liam Mills was surprised when he opened his mail. He had just received his most recent quarterly bonus check from his employer, Custom Marketing, and the check was smaller than he expected. Liam worked as a sales manager and was responsible for product marketing and implementation in the southwest region of the United States. He was paid a monthly salary but also received a 3% bonus for all revenue generated from advertising services provided to customers in his geographical area. He was counting on his fourth quarter (October–December) bonus check to be large enough to pay off the credit card debt he had accumulated over the holiday break. It had been a great year-end for Liam.

He had closed several open accounts, successfully signing several annual advertising contracts. In addition, because of his negotiating skills, he was

able to collect half of the payments for services up front instead of waiting for his customers to pay every month. Liam expected that his bonus check would be huge because of this new business, but it wasn't.

The next day, Liam stopped by the accounting office to discuss his bonus check. He was surprised to learn that his bonus was calculated by the revenue earned by his company through December 31. Although Liam had negotiated to receive half of the payments up front, the business had not yet earned the revenue from those payments. Custom Marketing will not record revenue earned until the advertising services have been performed. Eventually Liam will see the new business reflected in his bonus check, but he'll have to wait until the revenue has been earned.



How Was Revenue Earned Calculated?

At the end of a time period (often December 31), companies are required to accurately report revenues earned and expenses incurred during that time period. In order to do this, the company reviews the account balances as of the end of the time period and determines whether any adjustments are needed. For example, CC Media Holdings, Inc., the parent company of radio giant Clear Channel Communications and Clear Channel Outdoor Holdings, an outdoor advertising agency, must determine the amount of revenue earned from open advertising contracts. These contracts can cover only a few weeks or as long as several years. Only the amount earned in the current time period is reported as revenue on the income statement. *Adjusting the books* is the process of reviewing and adjusting the account balances so that amounts on the financial statements are reported accurately. This is what we will learn in this chapter.





Chapter 3 Learning Objectives



- 1 Differentiate between cash basis accounting and accrual basis accounting
- 2 Define and apply the time period concept, revenue recognition, and matching principles
- 3 Explain the purpose of and journalize and post adjusting entries
- 4 Explain the purpose of and prepare an adjusted trial balance
- 5 Identify the impact of adjusting entries on the financial statements
- 6 Explain the purpose of a worksheet and use it to prepare adjusting entries and the adjusted trial balance
- 7 Understand the alternative treatments of recording deferred expenses and deferred revenues (Appendix 3A)

In Chapter 1, we introduced you to the accounting equation and the financial statements. In Chapter 2, you learned about T-accounts, debits, credits, and the trial balance. But have you captured all the transactions for a particular period? Not yet.

In this chapter, we continue our exploration of the accounting cycle by learning how to update the accounts at the end of the period. This process is called adjusting the books, and it requires special journal entries called *adjusting entries*. For example, you learn how, at the end of a particular period, you must determine how many office supplies you have used and how much you owe your employees—and make adjusting entries to account for these amounts. These are just some of the adjusting entries you need to make before you can see the complete picture of how well your company performed during a period of time.

Cash Basis Accounting

Accounting method that records revenues only when cash is received and expenses only when cash is paid.

Accrual Basis Accounting

Accounting method that records revenues when earned and expenses when incurred.

Learning Objective 1

Differentiate between cash basis accounting and accrual basis accounting

If cash basis accounting is not allowed by GAAP, why would a business choose to use this method?

WHAT IS THE DIFFERENCE BETWEEN CASH BASIS ACCOUNTING AND ACCRUAL BASIS ACCOUNTING?

There are two ways to record transactions—cash basis accounting or accrual basis accounting.

- **Cash basis accounting** records only transactions with cash: cash receipts and cash payments. When cash is received, revenues are recorded. When cash is paid, expenses are recorded. As a result, revenues are recorded only when cash is received and expenses are recorded only when cash is paid. The cash basis of accounting is not allowed under Generally Accepted Accounting Principles (GAAP); however, small businesses will sometimes use this method. **The cash method is an easier accounting method to follow because it generally requires less knowledge of accounting concepts and principles. The cash basis accounting method also does a good job of tracking a business's cash flow.**
- **Accrual basis accounting** records the effect of each transaction as it occurs—that is, revenues are recorded when earned and expenses are recorded when incurred. Most businesses use the accrual basis as covered in this book. The accrual basis of accounting provides a better picture of a business's revenues and expenses. It records revenue only when it has been earned and expenses only when they have been incurred. Under accrual basis accounting, it is irrelevant when cash is received or paid.



Example: Suppose on May 1, Smart Touch Learning paid \$1,200 for insurance for the next six months (\$200 per month). This prepayment represents insurance coverage for May through October. Under the cash basis method, Smart Touch Learning would record Insurance Expense of \$1,200 on May 1. This is because the cash basis method records an expense when cash is paid. Alternatively, accrual basis accounting requires the company to prorate the expense. Smart Touch Learning would record a \$200 expense every month from May through October. This is illustrated as follows:

	Cash basis		Accrual basis	
Cash Payment Made	May 1:	\$ 1,200	May 1:	\$ 1,200
Expense Recorded	May 1:	\$ 1,200	May 31:	\$ 200
			June 30:	200
			July 31:	200
			August 31:	200
			September 30:	200
			October 31:	200
Total Expense Recorded		<u>\$ 1,200</u>		<u>\$ 1,200</u>

Now let's see how the cash basis and the accrual basis methods account for revenues.

Example: Suppose on April 30, Smart Touch Learning received \$600 for services to be performed for the next six months (May through October). Under the cash basis method, Smart Touch Learning would record \$600 of revenue when the cash is received on April 30. The accrual basis method, though, requires the revenue to be recorded only when it is earned. Smart Touch Learning would record \$100 of revenue each month for the next six months beginning in May.

	Cash basis		Accrual basis	
Cash Received	April 30:	\$ 600	April 30:	\$ 600
Revenue Recorded	April 30:	\$ 600	May 31:	\$ 100
			June 30:	100
			July 31:	100
			August 31:	100
			September 30:	100
			October 31:	100
Total Revenue Recorded		<u>\$ 600</u>		<u>\$ 600</u>

Notice that under both methods, cash basis and accrual basis, the total amount of revenues and expenses recorded by October 31 was the same. The major difference between a cash basis accounting system and an accrual basis accounting system is the timing of recording the revenue or expense.



Try It!

Total Pool Services earned \$130,000 of service revenue during 2016. Of the \$130,000 earned, the business received \$105,000 in cash. The remaining amount, \$25,000, was still owed by customers as of December 31. In addition, Total Pool Services incurred \$85,000 of expenses during the year. As of December 31, \$10,000 of the expenses still needed to be paid. In addition, Total Pool Services prepaid \$5,000 cash in December 2016 for expenses incurred during the next year.

1. Determine the amount of service revenue and expenses for 2016 using a cash basis accounting system.
2. Determine the amount of service revenue and expenses for 2016 using an accrual basis accounting system.

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S3-1 and S3-2. **MyAccountingLab**

WHAT CONCEPTS AND PRINCIPLES APPLY TO ACCRUAL BASIS ACCOUNTING?

Learning Objective 2

Define and apply the time period concept, revenue recognition, and matching principles.

As we have seen, the timing and recognition of revenues and expenses are the key differences between the cash basis and accrual basis methods of accounting. These differences can be explained by understanding the time period concept and the revenue recognition and matching principles.

The Time Period Concept

Smart Touch Learning will know with 100% certainty how well it has operated only if the company sells all of its assets, pays all of its liabilities, and gives any leftover cash to its stockholders. For obvious reasons, it is not practical to measure income this way. Because businesses need periodic reports on their affairs, the **time period concept** assumes that a business's activities can be sliced into small time segments and that financial statements can be prepared for specific periods, such as a month, quarter, or year.

The basic accounting period is one year, and most businesses prepare annual financial statements. The 12-month accounting period used for the annual financial statements is called a **fiscal year**. For most companies, the annual accounting period is the calendar year, from January 1 through December 31. Other companies use a fiscal year that ends on a date other than December 31. The year-end date is usually the low point in business activity for the year. Retailers are a notable example. For instance, Wal-Mart Stores, Inc., and J. C. Penney Company, Inc., use a fiscal year that ends around January 31 because the low point of their business activity comes about a month after the holidays.

The Revenue Recognition Principle

The **revenue recognition principle** tells accountants the following things:

- *When* to record revenue—that is, when to make a journal entry for revenue
- The *amount* of revenue to record

When to Record Revenue

The revenue recognition principle requires companies to record revenue when it has been earned—but not before. Revenue has been earned when the business has delivered a good

Time Period Concept

Assumes that a business's activities can be sliced into small time segments and that financial statements can be prepared for specific periods, such as a month, quarter, or year.

Fiscal Year

An accounting year of any 12 consecutive months that may or may not coincide with the calendar year.

Revenue Recognition Principle

Requires companies to record revenue when it has been earned and determines the amount of revenue to record.



COMING SOON

The NEW Revenue Recognition Principle

On May 28, 2014, the FASB and IASB issued new guidance on accounting for revenue recognition, *Revenue Recognition—Revenue from Contracts with Customers*. Under this new guidance, the previous principle related to revenue recognition will be eliminated.

This new standard will become effective for public business entities with annual reporting periods beginning after December 15, 2016. For all other entities, the new standard will be effective for annual periods beginning after December 15, 2017.

The new revenue recognition principle will apply to most contracts with customers and states that an entity should recognize revenue in an amount that reflects the consideration that the entity expects to be entitled to in exchange for goods or services. The business will recognize revenue by applying five steps:

Step 1: Identify the contract with the customer. A contract is an agreement between two or more parties with enforceable rights and obligations.

Step 2: Identify the performance obligations in the contract. A performance obligation is a contractual promise with a customer to transfer a distinct good or service.

Step 3: Determine the transaction price. The transaction price is the amount that the entity expects to be entitled to as a result of transferring goods or services to the customer.

Step 4: Allocate the transaction price to the performance obligations in the contract. If the transaction has multiple performance obligations, the transaction price will be allocated among the different performance obligations.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation. The business will recognize revenue when (or as) it satisfies a performance obligation by transferring a good or service to a customer.

As this new standard will not be effective until after 2016, the revenue recognition principle discussed in this book is current through December 2016.

or service to the customer, not necessarily when the business receives the cash from the customer. The earnings process is complete when the company has done everything required by the sale agreement regardless of whether cash is received.

The Amount of Revenue to Record

Revenue is recorded for the actual selling price of the item or service transferred to the customer. Suppose that in order to obtain a new client, Smart Touch Learning performs e-learning services for the discounted price of \$100. Ordinarily, the business would have charged \$200 for this service. How much revenue should the business record? Smart Touch Learning charged only \$100, so the business records \$100 of revenue.

The Matching Principle

The **matching principle** (sometimes called the *expense recognition principle*) guides accounting for expenses and ensures the following:

- All expenses are recorded when they are incurred during the period.
- Expenses are matched against the revenues of the period.

To match expenses against revenues means to subtract expenses incurred during one month from revenues earned during that same month. The goal is to compute an accurate net income or net loss for the time period.

There is a natural link between some expenses and revenues. For example, Smart Touch Learning pays a commission to the employee who sells the e-learning company's services. The commission expense is directly related to the e-learning company's revenue earned. Other expenses are not so easy to link to revenues. For example, Smart Touch Learning's monthly rent expense occurs regardless of the revenues earned that month. The matching principle tells us to identify those expenses with a particular period, such as a month or a year, when the related revenue occurred. The business will record rent expense each month based on the rental agreement.

Matching Principle

Guides accounting for expenses, ensures that all expenses are recorded when they are incurred during the period, and matches those expenses against the revenues of the period.



Try It!

Match the accounting terminology to the definitions.

- | | |
|--|--|
| <p>3. Time period concept</p> <p>4. Revenue recognition principle</p> <p>5. Matching principle</p> | <p>a. requires companies to record revenue when it has been earned and determines the amount of revenue to record</p> <p>b. assumes that a business's activities can be sliced into small time segments and that financial statements can be prepared for specific periods</p> <p>c. guides accounting for expenses, ensures that all expenses are recorded when they are incurred during the period, and matches those expenses against the revenues of the period.</p> |
|--|--|

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S3-3 and S3-4. [MyAccountingLab](#)

WHAT ARE ADJUSTING ENTRIES, AND HOW DO WE RECORD THEM?

Learning Objective 3

Explain the purpose of and journalize and post adjusting entries

The end-of-period process begins with the trial balance, which you learned how to prepare in the previous chapter. Exhibit 3-1 is the unadjusted trial balance of Smart Touch Learning at December 31, 2016.

Exhibit 3-1 | Unadjusted Trial Balance

SMART TOUCH LEARNING Unadjusted Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 12,200	
Accounts Receivable	1,000	
Office Supplies	500	
Prepaid Rent	3,000	
Furniture	18,000	
Building	60,000	
Land	20,000	
Accounts Payable		\$ 200
Utilities Payable		100
Unearned Revenue		600
Notes Payable		60,000
Common Stock		48,000
Dividends	5,000	
Service Revenue		16,500
Rent Expense	2,000	
Salaries Expense	3,600	
Utilities Expense	100	
Total	\$ 125,400	\$ 125,400



This *unadjusted trial balance* lists the revenues and expenses of the e-learning company for November and December. But these amounts are incomplete because they omit various revenue and expense transactions. Accrual basis accounting requires the business to review the unadjusted trial balance and determine whether any additional revenues and expenses need to be recorded. Are there revenues that Smart Touch Learning has earned that haven't been recorded yet? Are there expenses that have occurred that haven't been journalized?

For example, consider the Office Supplies account in Exhibit 3-1. Smart Touch Learning uses office supplies during the two months. This reduces the office supplies on hand (an asset) and creates an expense (Supplies Expense). It is a waste of time to record Supplies Expense every time office supplies are used. But by December 31, enough of the \$500 of Office Supplies on the unadjusted trial balance (Exhibit 3-1) have probably been used that we need to adjust the Office Supplies account. This is an example of why we need to adjust some accounts at the end of the accounting period.

An **adjusting entry** is completed at the end of the accounting period and records revenues to the period in which they are earned and expenses to the period in which they occur. Adjusting entries also update the asset and liability accounts. Adjustments are needed to properly measure several items such as:

1. Net income (loss) on the income statement
2. Assets and liabilities on the balance sheet

There are two basic categories of adjusting entries: *deferrals* and *accruals*. In a deferral adjustment, the cash payment occurs before an expense is incurred or the cash receipt occurs before the revenue is earned. Deferrals defer the recognition of revenue or expense to a date after the cash is received or paid. Accrual adjustments are the opposite. An accrual records an expense before the cash is paid, or it records the revenue before the cash is received.

The two basic categories of adjusting entries can be further separated into four types:

1. Deferred expenses (deferral)
2. Deferred revenues (deferral)
3. Accrued expenses (accrual)
4. Accrued revenues (accrual)

The focus of this chapter is on learning how to account for these four types of adjusting entries.

Deferred Expenses

Deferred expenses, also called prepaid expenses, are advance payments of future expenses. They are deferrals because the expense is not recognized at the time of payment but deferred until they are used up. Such payments are considered assets rather than expenses until they are used up. When the prepayment is used up, the used portion of the asset becomes an expense via an adjusting entry.

Prepaid Rent

Remember Transaction 10 in Chapter 2? Smart Touch Learning prepaid three months' office rent of \$3,000 (\$1,000 per month × 3 months) on December 1, 2016. The entry to record the payment was as follows:

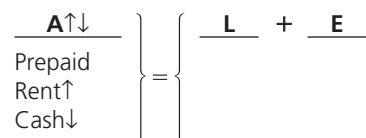
Date	Accounts and Explanation	Debit	Credit
Dec. 1	Prepaid Rent	3,000	
	Cash		3,000
	<i>Paid rent in advance.</i>		

Adjusting Entry

An entry made at the end of the accounting period that is used to record revenues to the period in which they are earned and expenses to the period in which they occur.

Deferred Expense

An asset created when a business makes advance payments of future expenses.

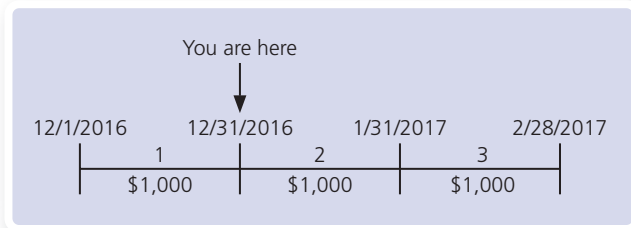




After posting, Prepaid Rent has a \$3,000 debit balance.

Prepaid Rent	
Dec. 1	3,000

Throughout December, Prepaid Rent maintains this balance. But \$3,000 is *not* the amount of Prepaid Rent for the balance sheet at December 31. Why?



As of December 31, Prepaid Rent should be decreased for the amount that has been used up. The used-up portion is one month of the three months prepaid, or one-third of the prepayment. Recall that an asset that has expired is an *expense*. The adjusting entry transfers \$1,000 ($\$3,000 \times 1/3$) from Prepaid Rent to Rent Expense. The adjusting entry is as follows:

$$\left. \begin{array}{l} \text{A} \downarrow \\ \text{Prepaid} \\ \text{Rent} \downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Rent} \\ \text{Expense} \uparrow \end{array} \right. + \left. \begin{array}{l} \text{E} \downarrow \\ \text{Rent} \\ \text{Expense} \uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Rent Expense	1,000	
	Prepaid Rent		1,000
	<i>To record rent expense.</i>		

After posting, Prepaid Rent and Rent Expense show correct ending balances:

Prepaid Rent		Rent Expense	
Dec. 1	3,000	Dec. 31	1,000
		Nov. 15	2,000
		Dec. 31	1,000
Bal.	2,000	Bal.	3,000

Prepaid Rent is an example of an asset that was overstated prior to journalizing and posting the adjusting entry. Notice that the ending balance in Prepaid Rent is now \$2,000. Because Prepaid Rent is an asset account for Smart Touch Learning, it should contain only two more months of rent on December 31 (for January and February). So we have \$1,000 rent per month times two months equals the \$2,000 Prepaid Rent balance.

If Smart Touch Learning had prepaid insurance, the same type of analysis would apply to the prepayment of three months of insurance. The only difference is in the account titles. Prepaid Insurance would be used instead of Prepaid Rent, and Insurance Expense would be used instead of Rent Expense.

Office Supplies

Office supplies are also accounted for as prepaid expenses. Let's look at another example. On November 3, Smart Touch Learning purchased \$500 of office supplies on account.



The December 31 unadjusted trial balance, therefore, still lists Office Supplies with a \$500 debit balance. But Smart Touch Learning’s December 31 balance sheet should *not* report office supplies of \$500. Why not?

During November and December, the e-learning company used office supplies to conduct business. The cost of the supplies used becomes *Supplies Expense*. To measure Supplies Expense, the business first counts the office supplies on hand at the end of December. This is the amount of the asset still owned by the business. Assume that office supplies costing \$100 remain on December 31. Then the business uses the Office Supplies T-account to determine the value of the supplies that were used:

Office Supplies			
Nov. 3	500	?	
Bal.	100		

Amount of office supplies remaining

Amount of office supplies used = Supplies Expense

So, we can solve for the office supplies used as follows:

$$\begin{aligned}
 \text{Office Supplies Balance before Adjustment} - \text{Office Supplies Used} &= \text{Office Supplies on Hand} \\
 \$500 - \text{Office Supplies Used} &= \$100 \\
 \text{Office Supplies Used} &= \$400
 \end{aligned}$$

The December 31 adjusting entry updates Office Supplies and records Supplies Expense for November and December as follows:

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Supplies Expense	400	
	Office Supplies		400
	<i>To record office supplies used.</i>		

$$\left. \begin{array}{l} \text{A} \downarrow \\ \text{Office} \\ \text{Supplies} \downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} + \text{E} \downarrow \\ \text{Supplies} \\ \text{Expense} \uparrow \end{array} \right.$$

After posting the adjusting entry, the December 31 balance of Office Supplies is correctly reflected as \$100 and the Supplies Expense is correctly reflected as \$400.

Office Supplies				Supplies Expense			
Nov. 3	500	400	Dec. 31	Dec. 31	400		
Bal.	100			Bal.	400		

The Office Supplies account then enters January with a \$100 balance. If the adjusting entry for Office Supplies had not been recorded, the asset would have been overstated and Supplies Expense would have been understated. In making the adjusting entry, the correct balance of Office Supplies, \$100, is now reported on the balance sheet as of December 31 and the income statement is correctly reporting an expense of \$400.

Depreciation

Plant assets are long-lived, tangible assets used in the operation of a business. Examples include land, buildings, equipment, furniture, and automobiles. As a business uses these assets, their value and usefulness decline. The decline in usefulness of a plant asset is an expense, and accountants systematically spread the asset’s cost over its useful life. The allocation of a plant

Plant Asset

Long-lived, tangible asset, such as land, buildings, and equipment, used in the operation of a business.



Depreciation

The process by which businesses spread the allocation of a plant asset's cost over its useful life.

asset's cost over its useful life is called **depreciation**. For example, a business might pay cash for an automobile when purchased, but the automobile will last for years, so depreciation allocates the cost spent on the car over the time the business uses the car. All plant assets are depreciated, with the exception of land. We record no depreciation for land because, unlike buildings and equipment, it does not have a definitive or clearly estimable useful life, so it is difficult to allocate the cost of land.

Similarity to Prepaid Expenses The concept of accounting for plant assets is similar to that of prepaid expenses. The major difference is the length of time it takes for the asset to be used up. Prepaid expenses usually expire within a year, but plant assets remain useful for several years. As a business uses its plant assets, an adjusting entry is required to allocate the assets' costs. The adjusting entry records the cost allocation to an expense account called Depreciation Expense.

Let's review an example for Smart Touch Learning. On December 2, the business received a contribution of furniture with a market value of \$18,000 from Sheena Bright. In exchange, Smart Touch Learning issued shares of stock to Bright and made the following journal entry:

$$\frac{\text{A}\uparrow}{\text{Furniture}\uparrow} = \left\{ \begin{array}{l} \text{L} \\ \text{E}\uparrow \\ \text{Common Stock}\uparrow \end{array} \right. + \left\{ \begin{array}{l} \text{E}\uparrow \\ \text{Common Stock}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 2	Furniture	18,000	
	Common Stock		18,000
	<i>Contribution of furniture in exchange for common stock.</i>		

After posting, the Furniture account has an \$18,000 balance:

Furniture	
Dec. 2	18,000

Smart Touch Learning believes the furniture will remain useful for five years, and at the end of five years, Smart Touch Learning believes the furniture will be worthless. The expected value of a depreciable asset at the end of its useful life is called the **residual value**. Smart Touch Learning will use the straight-line method to compute the amount of depreciation. The **straight-line method** allocates an equal amount of depreciation each year and is calculated as:

Residual Value

The expected value of a depreciable asset at the end of its useful life.

Straight-Line Method

A depreciation method that allocates an equal amount of depreciation each year.
 (Cost – Residual value) / Useful life.

$$\text{Straight-line depreciation} = (\text{Cost} - \text{Residual value}) / \text{Useful life}$$

Smart Touch Learning will calculate the depreciation of the furniture for the month of December as:

$$\begin{aligned} \text{Straight-line depreciation} &= (\text{Cost} - \text{Residual value}) / \text{Useful life} \\ &= (\$18,000 - \$0) / 5 \text{ years} \\ &= \$3,600 \text{ per year} / 12 \text{ months} = \$300 \text{ per month} \end{aligned}$$



Depreciation expense for December is recorded by the following adjusting entry:

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Depreciation Expense—Furniture	300	
	Accumulated Depreciation—Furniture		300
	<i>To record depreciation on furniture.</i>		

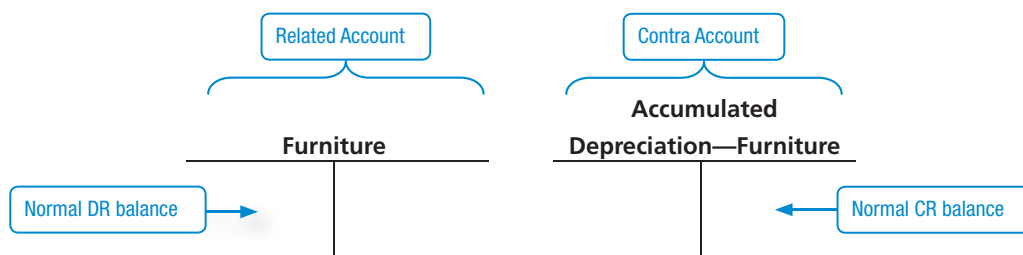
$$\left. \begin{array}{l} \text{A} \downarrow \\ \text{Accumulated} \\ \text{Depreciation—} \\ \text{Furniture} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} + \text{E} \downarrow \\ \text{Depreciation} \\ \text{Expense—} \\ \text{Furniture} \uparrow \end{array} \right.$$

The Accumulated Depreciation Account Notice that in the above adjusting entry for depreciation, we credited Accumulated Depreciation—Furniture and *not* the asset account Furniture. Why? We need to keep the original cost of the furniture separate from the accumulated depreciation because of the cost principle. Managers can then refer to the Furniture account to see how much the asset originally cost. This information may help decide how much to sell the asset for in the future or how much to pay for new furniture. The **Accumulated Depreciation** account is the sum of all depreciation expense recorded for the depreciable asset to date. Accumulated Depreciation will increase (accumulate) over time.

Accumulated Depreciation is a contra asset, which means that it is an asset account with a normal credit balance. Contra means opposite. A **contra account** has two main characteristics:

- A contra account is paired with and is listed immediately after its related account in the chart of accounts and associated financial statement.
- A contra account’s normal balance (debit or credit) is the opposite of the normal balance of the related account.

For example, Accumulated Depreciation—Furniture is the contra account that follows the Furniture account on the balance sheet. The Furniture account has a normal debit balance, so Accumulated Depreciation—Furniture, a contra asset, has a normal credit balance.



A business may have a separate Accumulated Depreciation account for each depreciable asset. Because Smart Touch Learning has both a Building and a Furniture account, it also has these two accounts: Accumulated Depreciation—Building, and Accumulated Depreciation—Furniture. However, small companies often have only one Accumulated Depreciation account for all of their depreciable assets.

When recording depreciation, why don't we record a credit to the Furniture account?



Accumulated Depreciation
The sum of all the depreciation expense recorded to date for a depreciable asset.

Contra Account
An account that is paired with, and is listed immediately after, its related account in the chart of accounts and associated financial statement and whose normal balance is the opposite of the normal balance of the related account.



After posting the depreciation, the accounts appear as follows:

Furniture		Accumulated Depreciation—Furniture		Depreciation Expense—Furniture	
Dec. 2	18,000		300	Dec. 31	300

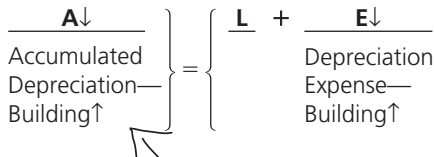
The Accumulated Depreciation account accumulates the depreciation expense. This means that next month an additional \$300 will be added to the Accumulated Depreciation—Furniture account creating a balance of \$600, representing two months of depreciation. At the end of three months, the Accumulated Depreciation—Furniture account will have a balance of \$900 (\$300 per month x 3 months).

Book Value The balance sheet reports both Furniture and Accumulated Depreciation—Furniture. Because it is a contra account, Accumulated Depreciation—Furniture is subtracted from Furniture. The resulting net amount (cost minus accumulated depreciation) of a plant asset is called its **book value**. The book value represents the cost invested in the asset that the business has not yet expensed. For Smart Touch Learning’s furniture, the book value on December 31 is as follows:

Book Value
A depreciable asset’s cost minus accumulated depreciation.

Book value of furniture:	
Furniture	\$ 18,000
Less: Accumulated Depreciation—Furniture	(300)
Book value of furniture	\$ 17,700

Depreciation on the building purchased on December 1 would be recorded in a similar manner. Suppose that the monthly depreciation is \$250. The following adjusting entry would record depreciation for December:



Date	Accounts and Explanation	Debit	Credit
Dec. 31	Depreciation Expense—Building	250	
	Accumulated Depreciation—Building		250
	<i>To record depreciation on building.</i>		

Remember, an increase in a contra asset, such as Accumulated Depreciation, decreases total assets. This is because a contra asset has a credit balance and credits decrease assets.



Had Smart Touch Learning not recorded the adjusting entries for depreciation on the furniture and building, plant assets would have been overstated and expenses would have been understated. After recording the adjusting entries, plant assets are reported at the correct net amount, as shown on the December 31 partial balance sheet in Exhibit 3-2.

Exhibit 3-2 | Plant Assets on the Balance Sheet of Smart Touch Learning

SMART TOUCH LEARNING Balance Sheet (Partial) December 31, 2016			
Plant Assets:			
Furniture	\$ 18,000		
Less: Accumulated Depreciation—Furniture	(300)	\$ 17,700	
Building	60,000		
Less: Accumulated Depreciation—Building	(250)	59,750	
Land		20,000	
Plant Assets, Net		\$ 97,450	

Deferred Revenues

Remember, deferred (or unearned) revenues occur when the company receives cash before it does the work or delivers a product to earn that cash. The company owes a product or a service to the customer, or it owes the customer his or her money back. Only after completing the job or delivering the product does the business *earn* the revenue. Because of this delay, unearned revenue is a liability and is also called **deferred revenue**. The revenue associated with the work or product is not recognized when the cash is received but is instead deferred until it is earned.

Suppose, for example, a law firm engages Smart Touch Learning to provide e-learning services for the next 30 days, agreeing to pay \$600 in advance. Smart Touch Learning collected the amount on December 21 and recorded the following entry:

Deferred Revenue

A liability created when a business collects cash from customers in advance of completing a service or delivering a product.

Date	Accounts and Explanation	Debit	Credit
Dec. 21	Cash	600	
	Unearned Revenue		600
	<i>Collected cash for future services.</i>		

$$\left. \begin{array}{l} \text{A} \uparrow \\ \text{Cash} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \uparrow \\ \text{Unearned} \\ \text{Revenue} \uparrow \end{array} \right. + \frac{\text{E}}{\quad}$$

The liability account, Unearned Revenue, now shows that Smart Touch Learning owes \$600 in services.

Unearned Revenue	
600	Dec. 21



During the last 10 days of the month—December 22 through December 31—Smart Touch Learning will *earn* approximately one-third (10 days divided by 30 days) of the \$600, or \$200. Therefore, Smart Touch Learning makes the following adjusting entry to record earning \$200 of revenue:

$$A \left. \vphantom{A} \right\} = \left\{ \begin{array}{l} \frac{L \downarrow}{\text{Unearned Revenue} \downarrow} + \frac{E \uparrow}{\text{Service Revenue} \uparrow} \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Unearned Revenue	200	
	Service Revenue		200
	<i>To record service revenue earned that was collected in advance.</i>		

This adjusting entry shifts \$200 from the liability account to the revenue account. Service Revenue increases by \$200, and Unearned Revenue decreases by \$200. Now both accounts are up to date at December 31:

Unearned Revenue				Service Revenue			
Dec. 31	200	600	Dec. 21		5,500	Nov. 8	
		400	Bal.		3,000	Nov. 10	
					8,000	Dec. 28	
					200	Dec. 31	
					16,700	Bal.	

Had the adjusting entry not been made, the liability, Unearned Revenue, would be overstated and Service Revenue would be understated.

Accrued Expenses

Accrued Expense
An expense that the business has incurred but has not yet paid.

Businesses often incur expenses before paying for them. The term **accrued expense** refers to an expense of this type. An accrued expense hasn't been paid for yet. Consider an employee's salary. Salaries Expense grows as the employee works, so the expense is said to *accrue*. Another accrued expense is interest expense on a note payable. Interest accrues as time passes on the note. An accrued expense always creates an accrued liability.

Corporations do not make daily or weekly journal entries to accrue expenses. Instead, they wait until the end of the accounting period. They make an adjusting entry to bring each expense (and the related liability) up to date for the financial statements.

Accrued Salaries Expense

Smart Touch Learning pays its employee a monthly salary of \$2,400—half on the 15th and half on the first day of the next month. On the next page is a calendar for December and the first week in January with the two pay days circled.



December 2016						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Dec 1	2	3
4	5	6	7	8	9	10
11	12	13	14	15 Pay Day	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
Jan 1 Pay Day	2	3	4	5	6	7

During December, the company paid the first half-month salary on Thursday, December 15, and made this entry:

Date	Accounts and Explanation	Debit	Credit
Dec. 15	Salaries Expense	1,200	
	Cash		1,200
	<i>Paid salaries.</i>		

$$\left. \begin{array}{l} \text{A} \downarrow \\ \text{Cash} \downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Salaries Expense} \uparrow \end{array} \right. + \left\{ \begin{array}{l} \text{E} \downarrow \\ \text{Salaries Expense} \uparrow \end{array} \right.$$

The December 15 entry records only the first half of December's salaries expense. The second payment of \$1,200 will occur on January 1; however, the expense was incurred in December, so the expense must be recorded in December. On December 31, Smart Touch Learning makes the following adjusting entry:

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Salaries Expense	1,200	
	Salaries Payable		1,200
	<i>To accrue salaries expense.</i>		

$$\left. \begin{array}{l} \text{A} \\ \text{Salaries Expense} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \uparrow \\ \text{Salaries Payable} \uparrow \end{array} \right. + \left\{ \begin{array}{l} \text{E} \downarrow \\ \text{Salaries Expense} \uparrow \end{array} \right.$$

After posting, both Salaries Expense and Salaries Payable are up to date:

Salaries Payable		Salaries Expense	
	1,200		Nov. 15 1,200
	Dec. 31 ←		Dec. 1 1,200
	1,200		Dec. 15 1,200
	Bal.		Dec. 31 → 1,200
			Bal. 4,800



Salaries Expense shows a full two months' salary, and Salaries Payable shows the liability owed at December 31. This is an example of a liability that was understated before the adjusting entry was made. It also is an example of the matching principle: We are recording December's Salaries Expense in December so it will be reported on the same income statement as December's revenues.

Future Payment of Accrued Salaries Expense The adjusting entry at December 31 creates a liability that will eventually be paid. In this case, Smart Touch Learning will pay its employee the second half of December's wages on January 1. Because the expense has already been recorded, Smart Touch Learning will not record the expense again. To do so would record the expense twice, thus overstating the expense account. Instead, the business will decrease the amount of the liability, Salaries Payable, with a debit and record the cash payment. On January 1, Smart Touch Learning would record the following journal entry:

$$\left. \begin{array}{l} \text{A} \downarrow \\ \text{Cash} \downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \downarrow \\ \text{Salaries} \\ \text{Payable} \downarrow \end{array} \right. + \text{E}$$

Date	Accounts and Explanation	Debit	Credit
Jan. 1	Salaries Payable	1,200	
	Cash		1,200
	<i>To record payment of accrued expense.</i>		

Don't confuse this entry with an adjusting entry. Adjusting entries are recorded only at the end of the accounting period and are used to record either revenue earned or expenses incurred. This entry is a journal entry.

It is simply recording an everyday business transaction—the payment of salaries previously accrued.

In this example, the amount paid for salaries was equal to the amount of the liability in the adjusting entry. Sometimes, however, the amount paid might be different than the liability in the adjusting entry. For example, assume that instead of making a payment for salaries on January 1, Smart Touch Learning doesn't make the payment until January 15 and pays a full month's salary.

By delaying the payment, Smart Touch Learning incurs additional days of salaries expense. The journal entry to record the payment on January 15 will not only decrease the payable recorded in the adjusting entry but will also record any additional expense incurred.

Accrued Interest Expense

Borrowing money creates an additional liability for a Note Payable. Remember the purchase of the building on December 1, 2016? Smart Touch Learning purchased a \$60,000 building in exchange for a loan. Smart Touch Learning signed a one-year loan and recorded the following entry using the Notes Payable account:

$$\left. \begin{array}{l} \text{A} \uparrow \\ \text{Building} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \uparrow \\ \text{Notes} \\ \text{Payable} \uparrow \end{array} \right. + \text{E}$$

Date	Accounts and Explanation	Debit	Credit
Dec. 1	Building	60,000	
	Notes Payable		60,000
	<i>Purchase of building with note.</i>		



ETHICS

When should accrued expenses be recorded?

Evan is in the process of recording the adjusting entries for Green Landscaping Services. Bob Green, owner and manager, has asked Evan to record all of the adjusting entries except for accrued expenses. Bob has a meeting with the banker on Monday to apply for a business loan. Bob knows that the banker will review his balance sheet and income statement. Bob is concerned that by recording the accrued expenses, the business's liabilities will be significantly higher on the balance sheet and a net loss will be reported on the income statement (due to higher expenses). Bob has instructed Evan to delay recording the accrued expenses until after his meeting with the banker. What should Evan do?

Solution

Failing to record the adjusting entries for accrued expenses violates the matching principle. Recording the expenses now (before Monday) accurately matches the occurrence of the expenses with the revenues that were created during that period. If Evan does not record the adjusting entries, the financial statements will not accurately represent the financial position or operating performance of the business. The banker could be tricked into lending the company money. Then, if the business could not repay the loan, the bank would lose—all because the banker relied on incorrect accounting information supplied by the company.

Interest on this note is payable one year later, on December 1, 2017. Although the company won't make the interest payment for a year, the company must record the amount of interest expense that has been incurred by December 31, 2016. The company will make an adjusting entry to record interest expense for one month (December 1–December 31). Assume one month's interest expense on this note is \$100. The December 31 adjusting entry to accrue interest expense is as follows:

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Interest Expense	100	
	Interest Payable		100
	<i>To accrue interest expense.</i>		

$$\begin{array}{c} \mathbf{A} \\ \left. \vphantom{\mathbf{A}} \right\} = \left\{ \begin{array}{cc} \frac{\mathbf{L}\uparrow}{\text{Interest Payable}\uparrow} + \frac{\mathbf{E}\downarrow}{\text{Interest Expense}\uparrow} \end{array} \right.
 \end{array}$$

Notice that the adjusting entry records a credit to the liability, Interest Payable. This is because the interest payment will not be made until next year; therefore, Smart Touch Learning owes interest to the bank. Had the adjusting entry not been recorded, liabilities and expenses would have been understated. After posting, Interest Expense and Interest Payable now have the following correct balances:

Interest Payable		Interest Expense
100 Dec. 31	←→	Dec. 31 100
100 Bal.		Bal. 100

Accrued Revenues

As we have just seen, expenses can occur before a company makes a cash payment for them, which creates an accrued expense. Similarly, businesses can earn revenue before they receive the cash. This creates an **accrued revenue**, which is a revenue that has been earned but for which the cash has not yet been collected.

Assume that Smart Touch Learning is hired on December 15 to perform e-learning services, beginning on December 16. Under this agreement, the business will earn \$1,600

Accrued Revenue

A revenue that has been earned but for which the cash has not yet been collected.



monthly and receive payment on January 15. At the date of hiring, Smart Touch Learning does not record a journal entry because revenue has not yet been earned. During December, it will earn half a month's fee, \$800, for work December 16 through December 31. On December 31, Smart Touch Learning makes the following adjusting entry to record the revenue earned December 16 through December 31:

$$\left. \begin{array}{l} \text{A}\uparrow \\ \text{Accounts} \\ \text{Receivable}\uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Service} \\ \text{Revenue}\uparrow \end{array} \right. + \begin{array}{l} \text{E}\uparrow \\ \text{Service} \\ \text{Revenue}\uparrow \end{array}$$

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Accounts Receivable	800	
	Service Revenue		800
	<i>To accrue service revenue.</i>		

The adjusting entry records the earned revenue and brings the balance of the Service Revenue account to \$17,500. In addition, the adjusting entry records an additional \$800 account receivable. Smart Touch Learning did not record cash because the business has not yet received payment on the services provided. The cash will not be received until January 15. Smart Touch Learning's account balances after posting the adjusting entry are:

Accounts Receivable				Service Revenue			
Nov. 10	3,000	2,000	Nov. 22		5,500	Nov. 8	
Dec. 31	800				3,000	Nov. 10	
Bal.	1,800				8,000	Dec. 28	
					200	Dec. 31	
					800	Dec. 31	
					17,500	Bal.	

Without the adjustment, Smart Touch Learning's financial statements would understate both an asset, Accounts Receivable, and a revenue, Service Revenue.

Future Receipt of Accrued Revenues The adjusting entry on December 31 records revenue earned for half a month and also creates an accounts receivable. When Smart Touch Learning receives the payment on January 15, the business will record the following entry:

$$\left. \begin{array}{l} \text{A}\uparrow \\ \text{Cash}\uparrow \\ \text{Accounts} \\ \text{Receivable}\downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Service} \\ \text{Revenue}\uparrow \end{array} \right. + \begin{array}{l} \text{E}\uparrow \\ \text{Service} \\ \text{Revenue}\uparrow \end{array}$$

Date	Accounts and Explanation	Debit	Credit
Jan. 15	Cash	1,600	
	Service Revenue		800
	Accounts Receivable		800
	<i>Performed services and received cash.</i>		

Notice that on January 15, Smart Touch Learning records revenue only for the remaining half of the month (January 1–January 15). Smart Touch Learning recognizes that \$800 of revenue was already recorded in December. The entry on January 15 removes



the accounts receivable and records the remaining revenue. If the business had incorrectly recorded \$1,600 of Service Revenue on January 15, the revenue would have been overstated in January.

Exhibit 3-3 summarizes the adjusting entries for deferrals and accruals.

Exhibit 3-3 | Deferral and Accrual Adjustments

	ORIGINAL ENTRY	ADJUSTING ENTRY																		
DEFERRALS—Cash receipt or Cash payment occurs first.																				
Prepaid Expenses	<table border="1"> <tr> <td>Prepaid Rent</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Cash</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Pay for rent in advance and record an asset first.</i></td> </tr> </table>	Prepaid Rent	XXX		Cash		XXX	<i>Pay for rent in advance and record an asset first.</i>			<table border="1"> <tr> <td>Rent Expense</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Prepaid Rent</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Adjust for rent used later.</i></td> </tr> </table>	Rent Expense	XXX		Prepaid Rent		XXX	<i>Adjust for rent used later.</i>		
	Prepaid Rent	XXX																		
Cash		XXX																		
<i>Pay for rent in advance and record an asset first.</i>																				
Rent Expense	XXX																			
Prepaid Rent		XXX																		
<i>Adjust for rent used later.</i>																				
Depreciation	<table border="1"> <tr> <td>Furniture</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Cash</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Pay for furniture in advance and record an asset first.</i></td> </tr> </table>	Furniture	XXX		Cash		XXX	<i>Pay for furniture in advance and record an asset first.</i>			<table border="1"> <tr> <td>Depreciation Expense—Furniture</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Accumulated Depreciation—Furniture</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Adjust for depreciation (use) of asset later.</i></td> </tr> </table>	Depreciation Expense—Furniture	XXX		Accumulated Depreciation—Furniture		XXX	<i>Adjust for depreciation (use) of asset later.</i>		
	Furniture	XXX																		
Cash		XXX																		
<i>Pay for furniture in advance and record an asset first.</i>																				
Depreciation Expense—Furniture	XXX																			
Accumulated Depreciation—Furniture		XXX																		
<i>Adjust for depreciation (use) of asset later.</i>																				
Unearned Revenues	<table border="1"> <tr> <td>Cash</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Unearned Revenue</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Receive cash in advance and record a liability first.</i></td> </tr> </table>	Cash	XXX		Unearned Revenue		XXX	<i>Receive cash in advance and record a liability first.</i>			<table border="1"> <tr> <td>Unearned Revenue</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Service Revenue</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Adjust for revenue earned later.</i></td> </tr> </table>	Unearned Revenue	XXX		Service Revenue		XXX	<i>Adjust for revenue earned later.</i>		
	Cash	XXX																		
Unearned Revenue		XXX																		
<i>Receive cash in advance and record a liability first.</i>																				
Unearned Revenue	XXX																			
Service Revenue		XXX																		
<i>Adjust for revenue earned later.</i>																				
ACCRUALS—Cash receipt or Cash payment occurs later.																				
<div style="border: 1px solid black; border-radius: 50%; padding: 10px; margin: 10px;"> <p style="text-align: center;">Two rules to remember about adjusting entries:</p> <ol style="list-style-type: none"> 1. Adjusting entries <u>never</u> involve the Cash account. 2. Adjusting entries either <ol style="list-style-type: none"> a. Increase a revenue account (credit revenue) or b. Increase an expense account (debit expense). </div>	Accrued Expenses	<table border="1"> <tr> <td>Salaries Expense</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Salaries Payable</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Accrual for expense incurred first.</i></td> </tr> </table>	Salaries Expense	XXX		Salaries Payable		XXX	<i>Accrual for expense incurred first.</i>											
	Salaries Expense	XXX																		
Salaries Payable		XXX																		
<i>Accrual for expense incurred first.</i>																				
	Accrued Revenues	<table border="1"> <tr> <td>Accounts Receivable</td> <td style="text-align: center;">XXX</td> <td></td> </tr> <tr> <td>Service Revenue</td> <td></td> <td style="text-align: center;">XXX</td> </tr> <tr> <td colspan="3"><i>Accrual for revenue earned first.</i></td> </tr> </table>	Accounts Receivable	XXX		Service Revenue		XXX	<i>Accrual for revenue earned first.</i>											
Accounts Receivable	XXX																			
Service Revenue		XXX																		
<i>Accrual for revenue earned first.</i>																				



The adjusting entries and account balances after posting for Smart Touch Learning at December 31 are shown in Exhibit 3-4.

- Panel A gives the data for each adjustment.
- Panel B shows the adjusting entries.
- Panel C shows the T-accounts and balances after posting.

Exhibit 3-4 | Journalizing and Posting the Adjusting Entries of Smart Touch Learning

Panel A: Information for Adjustments

- | | |
|--|---------------------------------------|
| a. Prepaid rent expired, \$1,000. | f. Accrued salaries expense, \$1,200. |
| b. Supplies used, \$400. | g. Accrued interest on note, \$100. |
| c. Depreciation on furniture, \$300. | h. Accrued service revenue, \$800. |
| d. Depreciation on building, \$250. | |
| e. Service revenue that was collected in advance and now has been earned, \$200. | |

Panel B: Adjusting Entries

Date	Accounts and Explanation	Debit	Credit
(a) Dec. 31	Rent Expense	1,000	
	Prepaid Rent		1,000
	<i>To record rent expense.</i>		
(b) 31	Supplies Expense	400	
	Office Supplies		400
	<i>To record office supplies used.</i>		
(c) 31	Depreciation Expense—Furniture	300	
	Accumulated Depreciation—Furniture		300
	<i>To record depreciation on furniture.</i>		
(d) 31	Depreciation Expense—Building	250	
	Accumulated Depreciation—Building		250
	<i>To record depreciation on building.</i>		
(e) 31	Unearned Revenue	200	
	Service Revenue		200
	<i>To record service revenue earned that was collected in advance.</i>		
(f) 31	Salaries Expense	1,200	
	Salaries Payable		1,200
	<i>To accrue salaries expense.</i>		
(g) 31	Interest Expense	100	
	Interest Payable		100
	<i>To accrue interest expense.</i>		
(h) 31	Accounts Receivable	800	
	Service Revenue		800
	<i>To accrue service revenue.</i>		



Try It!

Startech Surveillance Services had the following adjustments as of the end of the year:

- a. Equipment depreciation was \$1,500.
 - b. \$700 of advertising expense was incurred but not paid. (Use Advertising Payable.)
 - c. Office Supplies on hand at the end of the year totaled \$250. The beginning balance of Office Supplies was \$600.
 - d. \$1,200 of rent revenue was earned but not recorded or received.
 - e. Unearned revenue of \$3,000 had been earned.
6. For each situation, indicate which category of adjustment (deferral or accrual) is described.
 7. Journalize the adjusting entry needed.

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S3-5 through S3-12. **MyAccountingLab**

WHAT IS THE PURPOSE OF THE ADJUSTED TRIAL BALANCE, AND HOW DO WE PREPARE IT?

Learning Objective 4

Explain the purpose of and prepare an adjusted trial balance

Adjusted Trial Balance

A list of all the accounts with their adjusted balances.

This chapter began with the *unadjusted* trial balance. After the adjustments have been journalized and posted, the account balances are updated and an **adjusted trial balance** can be prepared by listing all the accounts with their adjusted balances. Remember, the purpose of a trial balance is to ensure that total debits equal total credits. Even if the trial balance balances, it does not guarantee that a mistake has not been made. For example, an adjusting entry could have been recorded for the incorrect amount or could have been omitted entirely. The equality of the trial balance ensures only that each posted transaction had an equal debit and credit amount.

The adjusted trial balance for Smart Touch Learning is shown in Exhibit 3-5.

**Exhibit 3-5** | Adjusted Trial Balance

SMART TOUCH LEARNING		
Adjusted Trial Balance		
December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 12,200	
Accounts Receivable	1,800	
Office Supplies	100	
Prepaid Rent	2,000	
Furniture	18,000	
Accumulated Depreciation—Furniture		\$ 300
Building	60,000	
Accumulated Depreciation—Building		250
Land	20,000	
Accounts Payable		200
Utilities Payable		100
Salaries Payable		1,200
Interest Payable		100
Unearned Revenue		400
Notes Payable		60,000
Common Stock		48,000
Dividends	5,000	
Service Revenue		17,500
Rent Expense	3,000	
Salaries Expense	4,800	
Supplies Expense	400	
Utilities Expense	100	
Depreciation Expense—Furniture	300	
Depreciation Expense—Building	250	
Interest Expense	100	
Total	<u>\$ 128,050</u>	<u>\$ 128,050</u>



Try It!

8. Hooten Carpentry had the following accounts and account balances after adjusting entries. Assume all accounts have normal balances. Prepare the adjusted trial balance for Hooten Carpentry as of December 31, 2016.

Cash	\$ 4,025	Common Stock	\$?
Land	5,000	Accounts Receivable	660
Utilities Expense	400	Office Supplies	120
Accounts Payable	225	Utilities Payable	210
Accumulated Depreciation—Equipment	1,000	Service Revenue	12,000
Salaries Expense	550	Unearned Revenue	300
Supplies Expense	80	Depreciation Expense—Equipment	800
Equipment	10,000	Dividends	500

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S3-13. [MyAccountingLab](#)

WHAT IS THE IMPACT OF ADJUSTING ENTRIES ON THE FINANCIAL STATEMENTS?

Learning Objective 5

Identify the impact of adjusting entries on the financial statements

The adjusted trial balance is used to prepare the financial statements. If adjusting entries are not recorded, the ledger accounts will not reflect the correct balances and the adjusted trial balance will be incorrect. Remember, adjusting entries are completed to ensure that all revenues and expenses for the accounting period examined have been recorded. In addition, adjusting entries update the balance sheet accounts so that all accounts are properly valued. Exhibit 3-6 summarizes the impact on the financial statements had the adjusting entries not been recorded.



Exhibit 3-6 | Impact of Adjusting Entries on Financial Statements

Type of Adjusting Entry	Description	Adjusting Entry		Impact on Financial Statement if Adjusting Entries Are Not Made
Deferred Expenses	Advance cash payments of future expenses.	Expense Asset*	DR CR	Income Statement: expenses understated net income overstated Balance Sheet: assets overstated equity overstated
Deferred Revenues	Advance cash receipts of future revenues.	Liability Revenue	DR CR	Income Statement: revenues understated net income understated Balance Sheet: liabilities overstated equity understated
Accrued Expenses	An expense that has been incurred but not paid.	Expense Liability	DR CR	Income Statement: expenses understated net income overstated Balance Sheet: liabilities understated equity overstated
Accrued Revenues	A revenue that has been earned but cash has not yet been collected.	Asset Revenue	DR CR	Income Statement: revenues understated net income understated Balance Sheet: assets understated equity understated

*If recording depreciation: the contra asset, Accumulated Depreciation, is credited.

Try It!

9. Identify the impact on the income statement and balance sheet if adjusting entries for the following situations were not recorded.
 - a. Office Supplies used, \$800.
 - b. Accrued service revenue, \$4,000.
 - c. Depreciation on building, \$3,500.
 - d. Prepaid Insurance expired, \$650.
 - e. Accrued salaries expense, \$2,750.
 - f. Service revenue that was collected in advance has now been earned, \$130.

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S3-14. [MyAccountingLab](#)

HOW COULD A WORKSHEET HELP IN PREPARING ADJUSTING ENTRIES AND THE ADJUSTED TRIAL BALANCE?

A useful step in preparing adjusting entries and the adjusted trial balance is to create a worksheet. A **worksheet** is an internal document that helps summarize data for the preparation of the financial statements. The worksheet is not a journal, a ledger, or a financial statement. It is merely a summary device that helps identify the accounts that need adjustments. Most worksheets are completed using Microsoft Excel.

Exhibit 3-7 (on the next page) shows the partially completed worksheet for Smart Touch Learning.

Learning Objective 6

Explain the purpose of a worksheet and use it to prepare adjusting entries and the adjusted trial balance

Worksheet

An internal document that helps summarize data for the preparation of financial statements.


Exhibit 3-7 | Partially Completed Worksheet

SMART TOUCH LEARNING										
Worksheet										
December 31, 2016										
Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
Cash	\$ 12,200				\$ 12,200					
Accounts Receivable	1,000		(h) \$ 800		1,800					
Office Supplies	500			\$ 400 (b)	100					
Prepaid Rent	3,000			1,000 (a)	2,000					
Furniture	18,000				18,000					
Accumulated Depreciation—Furniture				300 (c)		\$ 300				
Building	60,000				60,000					
Accumulated Depreciation—Building				250 (d)		250				
Land	20,000				20,000					
Accounts Payable		\$ 200				200				
Utilities Payable		100				100				
Salaries Payable				1,200 (f)		1,200				
Interest Payable				100 (g)		100				
Unearned Revenue		600 (e)	200			400				
Notes Payable		60,000				60,000				
Common Stock		48,000				48,000				
Dividends	5,000				5,000					
Service Revenue		16,500		1,000 (e,h)		17,500				
Rent Expense	2,000		(a) 1,000		3,000					
Salaries Expense	3,600		(f) 1,200		4,800					
Supplies Expense			(b) 400		400					
Utilities Expense	100				100					
Depreciation Expense—Furniture			(c) 300		300					
Depreciation Expense—Building			(d) 250		250					
Interest Expense			(g) 100		100					
Total	\$ 125,400	\$ 125,400	\$ 4,250	\$ 4,250	\$ 128,050	\$ 128,050				

In this chapter, we complete a part of the worksheet. For now, we will concern ourselves with the first four sections.

Section 1. Account names: The account names are taken from and listed in the same order as the chart of accounts. (Cash first, Accounts Receivable second, and so on.)

Section 2. Unadjusted trial balance: The account balances are copied directly from the ledger before any adjustments. Total debits must equal total credits.

Section 3. Adjustments: Enter the adjusting journal entries that were made on December 31.

Section 4. Adjusted trial balance: Gives the account balances after adjustments. Each amount in these columns is computed by combining the unadjusted trial balance amounts plus or minus the adjustments. For example, Accounts Receivable starts with a debit balance of \$1,000. Adding the \$800 debit from the adjustment gives Accounts Receivable an adjusted balance of \$1,800. Service Revenue starts with a \$16,500 credit balance. Adding the \$1,000 credit from the adjustment gives Service Revenue an adjusted balance of \$17,500. As with the unadjusted trial balance, total debits must equal total credits.

The income statement and balance sheet sections of the worksheet remain to be completed. These will be covered in the next chapter.



Try It!

10. The partial worksheet for Sam's Delivery Service follows. Complete the adjusted trial balance columns.

SAM'S DELIVERY SERVICE											
Worksheet											
December 31, 2016											
Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet		
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	
Cash	\$ 6,500										
Accounts Receivable	800		(g) \$ 225								
Office Supplies	250			\$ 80 (b)							
Prepaid Rent	1,000			800 (a)							
Delivery Van	23,000										
Accumulated Depreciation—Delivery Van				750 (c)							
Equipment	15,000										
Accumulated Depreciation—Equipment				300 (d)							
Accounts Payable		\$ 800									
Utilities Payable		230									
Salaries Payable				875 (f)							
Unearned Revenue		400 (e)	130								
Common Stock		37,800									
Dividends	8,000										
Delivery Revenue		23,000		355 (e,g)							
Rent Expense	3,000		(a) 800								
Salaries Expense	4,500		(f) 875								
Supplies Expense			(b) 80								
Utilities Expense	180										
Depreciation Expense—Delivery Van			(c) 750								
Depreciation Expense—Equipment			(d) 300								
Total	\$ 62,230	\$ 62,230	\$ 3,160	\$ 3,160							

Check your answers online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercise S3-15. [MyAccountingLab](#)

APPENDIX 3A: Alternative Treatment of Recording Deferred Expenses and Deferred Revenues

Chapters 1–3 illustrate the most popular way to account for deferred expenses and deferred revenues. This appendix illustrates an alternative approach.

WHAT IS AN ALTERNATIVE TREATMENT OF RECORDING DEFERRED EXPENSES AND DEFERRED REVENUES?

Deferred Expenses

Recall that deferred expenses, also called prepaid expenses, are advance payments of future expenses such as insurance, rent, and advertising. Office supplies are also accounted for as deferred expenses.

Learning Objective 7

Understand the alternative treatment of recording deferred expenses and deferred revenues



When a business prepays an expense—rent, for example—it can debit an *asset* account (Prepaid Rent) and defer the recognition of the expense. For example, Smart Touch Learning prepaid three months of office rent totaling \$3,000 on December 1, 2016. The journal entry can be recorded as:

$$\left. \begin{array}{l} \text{A}\uparrow\downarrow \\ \text{Prepaid} \\ \text{Rent}\uparrow \\ \text{Cash}\downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{E} \end{array} \right. + \left\{ \begin{array}{l} \text{E} \\ \text{Rent} \\ \text{Expense}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 1	Prepaid Rent	3,000	
	Cash		3,000
	<i>Paid rent in advance.</i>		

Deferred Expense Recorded Initially as an Expense

Deferring an expense creates an asset. However, the asset may be so short lived that it will expire in the current accounting period—within one year or less. Thus, the accountant may decide to debit the prepayment to an expense account at the time of payment. The entry could, alternatively, be recorded as follows:

$$\left. \begin{array}{l} \text{A}\downarrow \\ \text{Cash}\downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{E}\downarrow \\ \text{Rent} \\ \text{Expense}\uparrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 1	Rent Expense	3,000	
	Cash		3,000
	<i>Paid rent in advance.</i>		

As of December 31, only one month's prepayment has expired, leaving two months of rent still prepaid. In this case, the accountant must transfer two-thirds of the original prepayment of \$3,000, or \$2,000, to the asset account Prepaid Rent. At December 31, 2016, the business still has the benefit of prepayment for January 1 through February 28, 2017. The adjusting entry at December 31 is as follows:

$$\left. \begin{array}{l} \text{A}\uparrow \\ \text{Prepaid} \\ \text{Rent}\uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{E}\uparrow \\ \text{Rent} \\ \text{Expense}\downarrow \end{array} \right.$$

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Prepaid Rent	2,000	
	Rent Expense		2,000
	<i>To record prepaid rent.</i>		

After posting, the two accounts appear as follows:

Prepaid Rent		Rent Expense	
Dec. 31	2,000	Dec. 1	3,000
Bal.	2,000	Dec. 31	2,000
		Bal.	1,000

At December 31, the \$3,000 prepayment is correctly divided as \$2,000 of Prepaid Rent and \$1,000 of Rent Expense, regardless of whether the business initially debits the prepayment to an asset or to an expense account.



Deferred Revenues

Deferred revenues, also called unearned revenues, arise when a business collects cash before earning the revenue. Deferred revenues are liabilities because the business that receives the cash owes the customer goods or services to be delivered later.

When a business receives cash in advance of providing services, a *liability* can be created. As an example, a law firm engages Smart Touch Learning to provide monthly e-learning services, agreeing to pay \$600 in advance. Smart Touch Learning received the \$600 on December 21. Smart Touch Learning records the following entry, recognizing the liability and deferring the recognition of the revenue.

Date	Accounts and Explanation	Debit	Credit
Dec. 21	Cash	600	
	Unearned Revenue		600
	<i>Collected cash for future services.</i>		

$$\left. \begin{array}{l} \text{A} \uparrow \\ \text{Cash} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \uparrow \\ \text{Unearned} \\ \text{Revenue} \uparrow \end{array} + \begin{array}{l} \text{E} \\ \text{Service} \\ \text{Revenue} \uparrow \end{array} \right.$$

Deferred Revenues Recorded Initially as a Revenue

Another way to account for the receipt of cash is to credit a *revenue* account when the business receives cash.

Date	Accounts and Explanation	Debit	Credit
Dec. 21	Cash	600	
	Service Revenue		600
	<i>Collected cash for future services.</i>		

$$\left. \begin{array}{l} \text{A} \uparrow \\ \text{Cash} \uparrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \\ \text{Service} \\ \text{Revenue} \uparrow \end{array} + \begin{array}{l} \text{E} \uparrow \\ \text{Service} \\ \text{Revenue} \uparrow \end{array} \right.$$

If the business then earns all the revenue within the same accounting period, no adjusting entry is needed at the end. However, if the business earns only part of the revenue in that period, it must make an adjusting entry. In our example, Smart Touch Learning has earned only one-third of the \$600, or \$200, by December 31, 2016. Accordingly, Smart Touch Learning must make an adjusting entry to transfer the unearned portion (2/3 of \$600, or \$400) from the revenue account to a liability, as follows:

Date	Accounts and Explanation	Debit	Credit
Dec. 31	Service Revenue	400	
	Unearned Revenue		400
	<i>To record unearned revenue.</i>		

$$\left. \begin{array}{l} \text{A} \\ \text{Service} \\ \text{Revenue} \downarrow \end{array} \right\} = \left\{ \begin{array}{l} \text{L} \uparrow \\ \text{Unearned} \\ \text{Revenue} \uparrow \end{array} + \begin{array}{l} \text{E} \downarrow \\ \text{Service} \\ \text{Revenue} \downarrow \end{array} \right.$$

The adjusting entry transfers the unearned portion of service revenue to the liability account because Smart Touch Learning still owes e-learning services next year. After posting, the total amount, \$600, is properly divided between the liability account—\$400, and the revenue account—\$200, as follows:

Unearned Revenue			Service Revenue		
	400	Dec. 31	←	Dec. 31	400
	400	Bal.		600	Dec. 21
				200	Bal.



At December 31, the \$600 cash receipt is correctly divided: \$400 of Unearned Revenue and \$200 of Service Revenue, regardless of whether the business initially credits the cash receipt to a liability or to a revenue account.

Try It!

11A. Iron Horse Printing Services purchased \$1,000 of printing supplies for cash, recording the transaction using the alternative treatment for deferred expenses. At the end of the year, Iron Horse had \$300 of printing supplies remaining. Record the journal entry for the purchase of printing supplies and the adjusting entry for printing supplies not used.

Check your answer online in MyAccountingLab or at <http://www.pearsonglobaleditions.com/Horngren>.

For more practice, see Short Exercises S3A-16 and S3A-17. [MyAccountingLab](#)

REVIEW

> Things You Should Know

- 1. What is the difference between cash basis accounting and accrual basis accounting?**
 - Cash basis accounting: Revenue is recorded only when cash is received, and expenses are recorded only when cash is paid.
 - Not GAAP
 - Often used by small businesses
 - Accrual basis accounting: Revenue is recorded when earned, and expenses are recorded when incurred.
- 2. What concepts and principles apply to accrual basis accounting?**
 - The time period concept assumes that a business's activities can be sliced into small time segments and that financial statements can be prepared for specific periods, such as a month, quarter, or year.
 - The revenue recognition principle requires companies to record revenue when it has been earned and determines the amount of revenue to record.
 - The matching principle guides accounting for expenses and ensures that all expenses are recorded when they are incurred during the period. It then matches those expenses against the revenues of the period.
- 3. What are adjusting entries, and how do we record them?**
 - Adjusting entries are completed at the end of the accounting period and record revenues to the period in which they are earned and expenses to the period in which they occur.

- Adjusting entries also update the asset and liability accounts.
- Four types of adjusting entries:
 - Deferred expenses (or prepaid expenses): advance payment of future expenses adjusted for amount used

Date	Accounts and Explanation	Debit	Credit
	Expense	XXX	
	Asset		XXX

- Deferred revenues (or unearned revenues): advance receipts of future revenues adjusted for amount earned

Date	Accounts and Explanation	Debit	Credit
	Liability	XXX	
	Revenue		XXX

- Accrued expenses: expenses that have been incurred but not paid

Date	Accounts and Explanation	Debit	Credit
	Expense	XXX	
	Liability		XXX

- Accrued revenues: revenues that have been earned but not collected

Date	Accounts and Explanation	Debit	Credit
	Asset	XXX	
	Revenue		XXX

4. What is the purpose of the adjusted trial balance, and how do we prepare it?

- An adjusted trial balance is a list of all the accounts with their adjusted balances.
- It ensures that total debits equal total credits.

5. What is the impact of adjusting entries on the financial statements?

- If adjusting entries are not recorded, the balance sheet and income statement accounts will either be overstated or understated.
- Overstating or understating accounts causes the financial statements to be incorrect.

6. How could a worksheet help in preparing adjusting entries and the adjusted trial balance?

- A worksheet is an internal document that helps identify the accounts that need adjustments.
- In addition, a worksheet helps summarize data for the preparation of the financial statements.

7. What is an alternative treatment of recording deferred expenses and deferred revenues? (Appendix 3A)

- Deferred expenses can be recorded to an expense account at the time of payment. The adjusting entry would transfer any remaining prepayment to the asset account, Prepaid Expenses.
- Deferred revenues can be recorded to a revenue account at the time of cash receipt. The adjusting entry would transfer any remaining liability to the liability account, Unearned Revenue.

> Summary Problem 3-1

The unadjusted trial balance as of December 31, 2016, the end of the annual accounting period for Super Employment Services, follows:

SUPER EMPLOYMENT SERVICES		
Unadjusted Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 6,000	
Accounts Receivable	5,000	
Office Supplies	1,000	
Furniture	10,000	
Accumulated Depreciation—Furniture		\$ 4,000
Building	40,000	
Accumulated Depreciation—Building		30,000
Land	10,000	
Accounts Payable		2,000
Salaries Payable		
Unearned Revenue		8,000
Common Stock		12,000
Dividends	25,000	
Service Revenue		60,000
Salaries Expense	16,000	
Supplies Expense		
Depreciation Expense—Furniture		
Depreciation Expense—Building		
Advertising Expense	3,000	
Total	\$ 116,000	\$ 116,000

Data needed for the adjusting entries include the following:

- Office Supplies on hand at year-end, \$200.
- Depreciation on furniture, \$2,000.
- Depreciation on building, \$1,000.
- Salaries owed but not yet paid, \$500.
- Accrued service revenue, \$1,300.
- \$3,000 of the unearned revenue has been earned.

Requirements

- Open the ledger accounts in T-account form with their unadjusted balances as shown on the unadjusted trial balance.
- Journalize Super's adjusting entries at December 31, 2016. Use the letter (*a*, *b*, and so on) as the date.
- Post the adjusting entries to T-accounts. Determine the ending balances in the T-accounts on December 31, 2016.
- Prepare an adjusted trial balance.
- Prepare a partial worksheet including the account names, unadjusted trial balance, adjustments, and adjusted trial balance.

> Solution

Requirement 1 - See next page

Requirement 2

Date	Accounts and Explanations	Debit	Credit
2016			
(a) Dec. 31	Supplies Expense (\$1,000 – \$200)	800	
	Office Supplies		800
	<i>To record office supplies used.</i>		
(b) 31	Depreciation Expense—Furniture	2,000	
	Accumulated Depreciation—Furniture		2,000
	<i>To record depreciation expense on furniture.</i>		
(c) 31	Depreciation Expense—Building	1,000	
	Accumulated Depreciation—Building		1,000
	<i>To record depreciation expense on building.</i>		
(d) 31	Salaries Expense	500	
	Salaries Payable		500
	<i>To accrue salaries expense.</i>		
(e) 31	Accounts Receivable	1,300	
	Service Revenue		1,300
	<i>To accrue service revenue.</i>		
(f) 31	Unearned Revenue	3,000	
	Service Revenue		3,000
	<i>To record service revenue earned that was collected in advance.</i>		

Requirements 1 and 3

ASSETS

Cash		Building	
Bal.	6,000	Bal.	40,000
Accounts Receivable		Accumulated Depreciation—Building	
Bal.	5,000		30,000 Bal.
(e)	1,300		1,000 (c)
Bal.	6,300		31,000 Bal.
Office Supplies		Land	
Bal.	1,000	800	(a)
Bal.	200		
Furniture			
Bal.	10,000		
Accumulated Depreciation—Furniture			
	4,000		Bal.
	2,000		(b)
	6,000		Bal.

LIABILITIES

Accounts Payable		Salaries Payable	
	2,000		Bal.
Unearned Revenue			
(f)	3,000	8,000	Bal.
		5,000	Bal.

EQUITY

Common Stock		Salaries Expense	
	12,000		Bal.
			16,000
		(d)	500
		Bal.	16,500
Dividends		Supplies Expense	
Bal.	25,000	(a)	800
		Bal.	800
Service Revenue		Depreciation Expense—Furniture	
	60,000	(b)	2,000
	1,300		Bal.
	3,000		2,000
	64,300		
Advertising Expense		Depreciation Expense—Building	
Bal.	3,000	(c)	1,000
		Bal.	1,000

Requirement 4

SUPER EMPLOYMENT SERVICES		
Adjusted Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 6,000	
Accounts Receivable	6,300	
Office Supplies	200	
Furniture	10,000	
Accumulated Depreciation—Furniture		\$ 6,000
Building	40,000	
Accumulated Depreciation—Building		31,000
Land	10,000	
Accounts Payable		2,000
Salaries Payable		500
Unearned Revenue		5,000
Common Stock		12,000
Dividends	25,000	
Service Revenue		64,300
Salaries Expense	16,500	
Supplies Expense	800	
Depreciation Expense—Furniture	2,000	
Depreciation Expense—Building	1,000	
Advertising Expense	3,000	
Total	<u>\$ 120,800</u>	<u>\$ 120,800</u>

Requirement 5

SUPER EMPLOYMENT SERVICES						
Worksheet						
December 31, 2016						
Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	\$ 6,000				\$ 6,000	
Accounts Receivable	5,000		(e) \$ 1,300		6,300	
Office Supplies	1,000			(a) \$ 800	200	
Furniture	10,000				10,000	
Accumulated Depreciation—Furniture		\$ 4,000		(b) 2,000		\$ 6,000
Building	40,000				40,000	
Accumulated Depreciation—Building		30,000		(c) 1,000		31,000
Land	10,000				10,000	
Accounts Payable		2,000				2,000
Salaries Payable				(d) 500		500
Unearned Revenue		8,000	(f) 3,000			5,000
Common Stock		12,000				12,000
Dividends	25,000				25,000	
Service Revenue		60,000		(e) 1,300		
				(f) 3,000		64,300
Salaries Expense	16,000		(d) 500		16,500	
Supplies Expense			(a) 800		800	
Depreciation Expense—Furniture			(b) 2,000		2,000	
Depreciation Expense—Building			(c) 1,000		1,000	
Advertising Expense	3,000				3,000	
Total	\$ 116,000	\$ 116,000	\$ 8,600	\$ 8,600	\$ 120,800	\$ 120,800

> Key Terms

Accrual Basis Accounting (p. 142)

Accrued Expense (p. 154)

Accrued Revenue (p. 157)

Accumulated Depreciation (p. 151)

Adjusted Trial Balance (p. 162)

Adjusting Entry (p. 147)

Book Value (p. 152)

Cash Basis Accounting (p. 142)

Contra Account (p. 151)

Deferred Expense (p. 147)

Deferred Revenue (p. 153)

Depreciation (p. 150)

Fiscal Year (p. 144)

Matching Principle (p. 145)

Plant Asset (p. 149)

Residual Value (p. 150)

Revenue Recognition
Principle (p. 144)

Straight-Line Method (p. 150)

Time Period Concept (p. 144)

Worksheet (p. 165)

> Quick Check

Learning Objective 1

- Which of the following is true of accrual basis accounting and cash basis accounting?
 - Accrual accounting records revenue only when it is earned.
 - Accrual accounting is not allowed under GAAP.
 - Cash basis accounting records all transactions.
 - All of the above are true.

2. Get Fit Now gains a client who prepays \$540 for a package of six physical training sessions. Get Fit Now collects the \$540 in advance and will provide the training later. After four training sessions, what should Get Fit Now report on its income statement assuming it uses the accrual basis accounting method?
 - a. Service revenue of \$360
 - b. Service revenue of \$540
 - c. Unearned service revenue of \$360
 - d. Cash of \$180

3. The revenue recognition principle requires
 - a. time to be divided into annual periods to measure revenue properly.
 - b. revenue to be recorded only after the business has earned it.
 - c. expenses to be matched with revenue of the period.
 - d. revenue to be recorded only after the cash is received.

4. Adjusting the accounts is the process of
 - a. subtracting expenses from revenues to measure net income.
 - b. recording transactions as they occur during the period.
 - c. updating the accounts at the end of the period.
 - d. zeroing out account balances to prepare for the next period.

5. Which of the following is an example of a deferral (or prepaid) adjusting entry?
 - a. Recording the usage of office supplies during the period.
 - b. Recording salaries expense for employees not yet paid.
 - c. Recording revenue that has been earned but not yet received.
 - d. Recording interest expense incurred on a notes payable not due until next year.

6. Assume that the weekly payroll of In the Woods Camping Supplies is \$300. December 31, end of the year, falls on Tuesday, and In the Woods will pay its employee on Friday for the full week. What adjusting entry will In the Woods make on Tuesday, December 31? (Use five days as a full workweek.)

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Learning Objective 1

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Learning Objective 2

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Learning Objective 3

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Learning Objective 3

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Learning Objective 3

Date	Accounts and Explanation	Debit	Credit
a.	Salaries Expense	120	
	Salaries Payable		120
b.	Salaries Payable	300	
	Salaries Expense		300
c.	Salaries Expense	120	
	Cash		120
d.	<i>No adjustment is needed because the company will pay the payroll on Friday.</i>		

.....
Learning Objective 4

7. The adjusted trial balance shows
 - a. amounts that may be out of balance.
 - b. account balances after adjustments.
 - c. assets and liabilities only.
 - d. revenues and expenses only.

Learning Objective 5

8. A & D Window Cleaning performed \$450 of services but has not yet billed customers for the month. If A & D fails to record the adjusting entry, what is the impact on the financial statements?
- balance sheet: assets understated; equity overstated
income statement: expense understated
 - balance sheet: liabilities overstated; equity understated
income statement: revenues understated
 - balance sheet: assets overstated, equity understated
income statement: expenses understated
 - balance sheet: assets understated, equity understated
income statement: revenues understated

Learning Objective 6

9. A worksheet
- is a journal used to record transactions.
 - is a financial statement that reports net income during the period.
 - is an internal document that helps summarize data for the preparation of financial statements.
 - is a ledger listing the account balances and changes in those accounts.

**Learning Objective 7
Appendix 3A**

- 10A. On February 1, Clovis Wilson Law Firm contracted to provide \$3,000 of legal services for the next three months and received \$3,000 cash from the client. Assuming Wilson records deferred revenues using the alternative treatment, what would be the adjusting entry recorded on February 28?

Date	Accounts and Explanation	Debit	Credit
a.	Cash	3,000	
	Unearned Revenue		3,000
b.	Service Revenue	2,000	
	Unearned Revenue		2,000
c.	Unearned Revenue	1,000	
	Service Revenue		1,000
d.	Cash	3,000	
	Service Revenue		3,000

Check your answers at the end of the chapter.

ASSESS YOUR PROGRESS

> Review Questions

- What is the difference between cash basis accounting and accrual basis accounting?
- Which method of accounting (cash or accrual basis) is consistent with Generally Accepted Accounting Principles?
- Which accounting concept or principle requires companies to divide their activities into small time segments such as months, quarters, or years?
- What is a fiscal year? Why might companies choose to use a fiscal year that is not a calendar year?

5. Under the revenue recognition principle, when is revenue recorded?
6. Under the matching principle, when are expenses recorded?
7. When are adjusting entries completed, and what is their purpose?
8. What are the two basic categories of adjusting entries? Provide two examples of each.
9. What is a deferred expense? Provide an example.
10. What is the process of allocating the cost of a plant asset over its useful life called?
11. What is a contra account?
12. In the recording of depreciation expense, which account is credited?
13. What does accumulated depreciation represent?
14. How is book value calculated, and what does it represent?
15. What is a deferred revenue? Provide an example.
16. What is an accrued expense? Provide an example.
17. What is an accrued revenue? Provide an example.
18. What are the two rules to remember about adjusting entries?
19. When is an adjusted trial balance prepared, and what is its purpose?
20. If an accrued expense is not recorded at the end of the year, what is the impact on the financial statements?
21. What is a worksheet, and how is it used to help prepare an adjusted trial balance?
- 22A. If a payment of a deferred expense was recorded under the alternative treatment, what account would be debited at the time of payment?
- 23A. If a payment of a deferred expense was recorded under the alternative treatment, what account would be debited in the adjusting entry?

> Short Exercises

S3-1 Comparing cash and accrual basis accounting for expenses

The Jack Frost Law Firm prepays for advertising in the local newspaper. On January 1, the law firm paid \$4,500 for six months of advertising.

How much advertising expense should Jack Frost Law Firm record for the two months ending February 28 under the

- a. cash basis?
- b. accrual basis?

.....
Learning Objective 1

S3-2 Comparing cash and accrual basis accounting for revenues

Secure Home provides house-sitting for people while they are away on vacation. Some of its customers pay immediately after the job is finished. Some customers ask that the business send them a bill. As of the end of the year, Secure Home has collected \$700 from cash-paying customers. Secure Home's remaining customers owe the business \$900.

How much service revenue would Secure Home have for the year under the

- a. cash basis?
- b. accrual basis?

.....
Learning Objective 1

Learning Objective 2**S3-3 Applying the revenue recognition principle**

Midwest Magazine sells subscriptions for \$60 for 30 issues. The company collects cash in advance and then mails out the magazines to subscribers each month.

Apply the revenue recognition principle to determine

- when *Midwest Magazine* should record revenue for this situation.
- the amount of revenue *Midwest Magazine* should record for ten issues.

Learning Objective 2**S3-4 Applying the matching principle**

Suppose on January 1 Aiden's Tavern prepaid rent of \$14,400 for the full year.

At March 31, how much rent expense should be recorded for the period January 1 through March 31?

Learning Objective 3**S3-5 Identifying types of adjusting entries**

A select list of transactions for Anuradha's Goals follows:

Apr. 1	Paid six months of rent, \$4,800.
10	Received \$1,200 from customer for six-month service contract that began April 1.
15	Purchased a computer for \$1,000.
18	Purchased \$300 of office supplies on account.
30	Work performed but not yet billed to customer, \$500.
30	Employees earned \$600 in salaries that will be paid May 2.

For each transaction, identify what type of adjusting entry would be needed. Select from the following four types of adjusting entries: deferred expense, deferred revenue, accrued expense, accrued revenue.

Learning Objective 3**S3-6 Journalizing and posting adjusting entries for prepaid rent**

On June 1, Gear Up of Toledo prepaid six months of rent, \$3,900.

Requirements

- Record the journal entry for the June 1 payment.
- Record the adjusting entry required at June 30.
- Using T-accounts, post the journal entry and adjusting entry to the accounts involved and show their balances at June 30. (Ignore the Cash account.)

Learning Objective 3**S3-7 Journalizing and posting an adjusting entry for office supplies**

On November 1, Carley Equipment had a beginning balance in the Office Supplies account of \$1,400. During the month, Carley purchased \$2,300 of office supplies. At November 30, Carley Equipment had \$1,800 of office supplies on hand.

Requirements

- The Office Supplies T-account has been opened for you. Enter the beginning balance and purchase of office supplies.
- Record the adjusting entry required at November 30.
- Post the adjusting entry to the two accounts involved, and show their balances at November 30.

S3-8 Journalizing and posting an adjusting entry for depreciation and determining book value

On May 1, Chicago Gold Exchange paid cash of \$28,800 for computers that are expected to remain useful for four years. At the end of four years, the value of the computers is expected to be zero.

Requirements

1. Calculate the amount of depreciation for the month of May using the straight-line depreciation method.
2. Record the adjusting entry for depreciation on May 31.
3. Post the purchase of May 1 and the depreciation on May 31 to T-accounts for the following accounts: Computer Equipment, Accumulated Depreciation—Computer Equipment, and Depreciation Expense—Computer Equipment. Show their balances at May 31.
4. What is the computer equipment's book value on May 31?

S3-9 Journalizing and posting an adjusting entry for unearned revenue

Southern Magazine collects cash from subscribers in advance and then mails the magazines to subscribers over a one-year period.

Requirements

1. Record the journal entry to record the original receipt of \$150,000 cash.
2. Record the adjusting entry that *Southern Magazine* makes to record earning \$9,000 in subscription revenue that was collected in advance.
3. Using T-accounts, post the journal entry and adjusting entry to the accounts involved and show their balances after adjustments. (Ignore the Cash account.)

S3-10 Journalizing and posting an adjusting entry for accrued salaries expense

Pine Park Senior Center has a weekly payroll of \$25,000. December 31 falls on Wednesday, and Pine Park Senior Center will pay its employees the following Monday (January 5) for the previous full week. Assume Pine Park Senior Center has a five-day workweek and has an unadjusted balance in Salaries Expense of \$520,000.

Requirements

1. Record the adjusting entry for accrued salaries on December 31.
2. Post the adjusting entry to the accounts involved, and show their balances after adjustments.
3. Record the journal entry for payment of salaries made on January 5.

S3-11 Journalizing and posting an adjusting entry for accrued interest expense

Fly Away Travel borrowed \$26,000 on August 1, 2016, by signing a one-year note payable to Region One Bank. Fly Away's interest expense on the note payable for the remainder of the fiscal year (August through October) is \$494.

Requirements

1. Record the adjusting entry to accrue interest expense at October 31, 2016.
2. Post the adjusting entry to the T-accounts of the two accounts affected by the adjustment.

Learning Objective 3**Learning Objective 3****Learning Objective 3****Learning Objective 3**

Learning Objective 3**S3-12 Journalizing an adjusting entry for accrued revenue**

At the end of June, Gallio Dental had performed \$8,000 of dental services but has not yet billed customers.

Record the adjusting entry for accrued revenue.

Learning Objective 4**S3-13 Preparing an adjusted trial balance**

Simon's Tax Services had the following accounts and account balances after adjusting entries. Assume all accounts have normal balances.

Cash	\$?	Equipment	\$ 14,000
Land	22,000	Accounts Receivable	2,750
Utilities Payable	500	Office Supplies	800
Accounts Payable	4,500	Common Stock	24,100
Accumulated Depreciation—Equipment	1,800	Utilities Expense	1,050
Service Revenue	110,000	Unearned Revenue	1,600
Supplies Expense	1,300	Depreciation Expense—Equipment	2,100
Dividends	24,000	Salaries Expense	5,500

Prepare the adjusted trial balance for Simon's Tax Services as of December 31, 2016.

Learning Objective 5**S3-14 Determining the effects on financial statements**

In recording adjusting entries, Reagan Financial Advisors failed to record the adjusting entries for the following situations:

- Office supplies on hand, \$100.
- Accrued revenues, \$5,000.
- Accrued interest expense, \$250.
- Depreciation, \$800.
- Unearned revenue that has been earned, \$550.

Determine the effects on the income statement and balance sheet by identifying whether assets, liabilities, equity, revenue, and expenses are either overstated or understated. Use the following table. Adjustment *a* has been provided as an example.

Adjustment Not Recorded	Balance Sheet			Income Statement	
	Assets	Liabilities	Equity	Revenue	Expenses
(a)	Overstated		Overstated		Understated

S3-15 Preparing a partial worksheet

A New You Hair Stylists has begun the preparation of its worksheet as follows:

Learning Objective 6

	A	B	C	D	E	F	G
1	A NEW YOU HAIR STYLISTS						
2	Worksheet						
3	December 31, 2016						
4							
5	Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
6		Debit	Credit	Debit	Credit	Debit	Credit
7	Cash	\$ 500					
8	Office Supplies	700					
9	Equipment	17,600					
10	Accumulated Depreciation—Equipment		\$ 800				
11	Accounts Payable		400				
12	Interest Payable						
13	Note Payable		2,300				
14	Common Stock		6,600				
15	Service Revenue		13,000				
16	Rent Expense	4,000					
17	Supplies Expense						
18	Depreciation Expense—Equipment						
19	Interest Expense	300					
20	Total	\$ 23,100	\$ 23,100				
21							

Year-end data include the following:

- a. Office supplies on hand, \$200
- b. Depreciation, \$800
- c. Accrued interest expense, \$300

Complete A New You's worksheet through the adjusted trial balance section. In the adjustments section, mark each adjustment by letter.

S3A-16 Journalizing the alternative treatment of deferred expenses

On August 1, 2016, Blue Design paid \$66,000 for store rent covering the 12-month period ending July 31, 2017.

Requirements

1. Journalize the entry on August 1 by using the alternative treatment of deferred expenses.
2. Record the December 31, 2016 adjusting entry.

**Learning Objective 7
Appendix 3A****S3A-17 Journalizing the alternative treatment of deferred revenues**

On October 1, 2016, Amazing Landscaping collected \$30,000 in advance from customers for landscaping services. The service revenue will be earned monthly over the six-month period ending March 31, 2017.

Requirements

1. Journalize the entry on October 1 by using the alternative treatment of deferred revenues.
2. Record the December 31, 2016 adjusting entry.

**Learning Objective 7
Appendix 3A**

> Exercises

Learning Objectives 1, 2

E3-18 Comparing cash and accrual basis accounting and applying the revenue recognition principle

Momentous Occasions is a photography business that shoots videos at college parties. The freshman class pays \$1,000 in advance on March 3 to guarantee services for its party to be held on April 2. The sophomore class promises a minimum of \$2,800 for filming its formal dance and actually pays cash of \$4,100 on February 28 at the dance.

Answer the following questions about the correct way to account for revenue under the accrual basis:

- Considering the \$1,000 paid by the freshman class, on what date was revenue earned? Did the earnings occur on the same date cash was received?
- Considering the \$4,100 paid by the sophomore class, on what date was revenue earned? Did the earnings occur on the same date cash was received?

Learning Objectives 1, 2

- Cash basis \$(3,400)

E3-19 Comparing cash and accrual basis accounting and applying the revenue recognition principle and the matching principle

Yummy Catering completed the following selected transactions during May, 2016:

May 1	Prepaid rent for three months, \$2,100.
5	Received and paid electricity bill, \$400.
9	Received cash for meals served to customers, \$2,600.
14	Paid cash for kitchen equipment, \$3,900.
23	Served a banquet on account, \$2,800.
31	Made the adjusting entry for rent (from May 1).
31	Accrued salary expense, \$1,000.
31	Recorded depreciation for May on kitchen equipment, \$65.

Requirements

- Show whether each transaction would be handled as a revenue or an expense using both the cash basis and accrual basis accounting systems by completing the table provided. (Expenses should be shown in parentheses.) Also indicate the dollar amount of the revenue or expense. The May 1 transaction has been completed as an example.

Amount of Revenue (Expense) for May		
Date	Cash Basis Amount of Revenue (Expense)	Accrual Basis Amount of Revenue (Expense)
May 1	\$(1,800)	\$0

- After completing the table, calculate the amount of net income or net loss for Yummy Catering under the accrual basis and cash basis accounting systems for May.
- Considering your results from Requirement 2, which method gives the best picture of the true earnings of Yummy Catering? Why?

E3-20 Determining the amount of prepaid expenses

Consider the facts presented in the following table for Island View:

	Situation			
	A	B	C	D
Beginning Prepaid Rent	\$1,100	\$ 600	\$ 300	\$ 300
Payments for Prepaid Rent during the year	900	<i>b</i>	1,500	<i>f</i>
Total amount to account for	2,000	1,900	<i>c</i>	<i>e</i>
Subtract: Ending Prepaid Rent	600	300	<i>d</i>	100
Rent Expense	\$ <i>a</i>	\$1,600	\$1,600	\$1,200

Complete the table by filling in the missing values.

E3-21 Journalizing adjusting entries

Consider the following situations:

- Business receives \$3,200 on January 1 for 10-month service contract for the period January 1 through October 31.
- Total salaries for all employees is \$3,100 per month. Employees are paid on the 1st and 15th of the month.
- Work performed but not yet billed to customers for the month is \$1,500.
- The company pays interest on its \$8,000, 4% note payable of \$27 on the first day of each month.

Assume the company records adjusting entries monthly. Journalize the adjusting entries needed as of January 31.

E3-22 Journalizing adjusting entries

Consider the following independent situations at December 31:

- On July 1, a business collected \$6,600 rent in advance, debiting Cash and crediting Unearned Revenue. The tenant was paying one year's rent in advance. On December 31, the business must account for the amount of rent it has earned.
- Salaries expense is \$1,300 per day—Monday through Friday—and the business pays employees each Friday. This year, December 31 falls on a Thursday.
- The unadjusted balance of the Office Supplies account is \$2,600. Office supplies on hand total \$1,800.
- Equipment depreciation was \$200.
- On October 1, when the business prepaid \$6,000 for a two-year insurance policy, the business debited Prepaid Insurance and credited Cash.

Journalize the adjusting entry needed on December 31 for each situation. Use the letters to label the journal entries.

E3-23 Journalizing adjusting entries

Consider the following situations for Bookfield Welding Services:

- Depreciation for the current year includes equipment, \$2,700.
- Each Monday, Bookfield pays employees for the previous week's work. The amount of weekly payroll is \$3,500 for a seven-day workweek (Monday to Sunday). This year, December 31 falls on Thursday.

Learning Objective 3

Situation A. Rent Expense \$1,200

Learning Objective 3

b. DR Salaries Expense \$1,600

Learning Objective 3

e. DR Insurance Expense \$750

Learning Objective 3

c. DR Supplies Expense \$3,300

- c. The beginning balance of Office Supplies was \$2,600. During the year, Bookfield purchased office supplies for \$2,500, and at December 31 the office supplies on hand totaled \$1,800.
- d. Bookfield prepaid a two full years' insurance on October 1 of the current year, \$6,480. Record insurance expense for the year ended December 31.
- e. Bookfield had earned \$3,400 of unearned revenue.
- f. Bookfield had incurred (but not recorded) \$150 of interest expense on a note payable. The interest will not be paid until February 28.
- g. Bookfield billed customers \$9,000 for welding services performed.

Journalize the adjusting entry needed on December 31 for each situation. Use the letters to label the journal entries.

Learning Objective 3

- 3. Unearned Revenue bal. \$600 CR

E3-24 Journalizing adjusting entries and posting to T-accounts

The accounting records of Calvin Architects include the following selected, unadjusted balances at March 31: Accounts Receivable, \$1,200; Office Supplies, \$600; Prepaid Rent, \$2,400; Equipment, \$6,000; Accumulated Depreciation—Equipment, \$0; Salaries Payable, \$0; Unearned Revenue, \$500; Service Revenue, \$4,200; Salaries Expense, \$900; Supplies Expense, \$0; Rent Expense, \$0; Depreciation Expense—Equipment, \$0. The data developed for the March 31 adjusting entries are as follows:

- a. Service revenue accrued, \$500.
- b. Unearned revenue that has been earned, \$200.
- c. Office Supplies on hand, \$400.
- d. Salaries owed to employees, \$700.
- e. One month of prepaid rent has expired, \$600.
- f. Depreciation on equipment, \$90.

Requirements

1. Journalize the adjusting entries using the letter and March 31 date in the date column.
2. Post the adjustments to the T-accounts opened for you, entering each adjustment by letter. Show each account's adjusted balance.

Learning Objective 3

3. Office Supplies bal. \$1,100 DR

E3-25 Journalizing adjusting entries and posting to T-accounts

The unadjusted trial balance for First Class Maids Company, a cleaning service, is as follows:

FIRST CLASS MAIDS COMPANY		
Unadjusted Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 1,200	
Office Supplies	3,000	
Prepaid Insurance	700	
Equipment	20,000	
Accumulated Depreciation—Equipment		\$ 6,000
Accounts Payable		2,200
Salaries Payable		
Unearned Revenue		600
Common Stock		8,100
Dividends	3,000	
Service Revenue		17,000
Salaries Expense	6,000	
Supplies Expense		
Depreciation Expense—Equipment		
Insurance Expense		
Total	<u>\$ 33,900</u>	<u>\$ 33,900</u>

During the 12 months ended December 31, 2016, First Class Maids:

- a. used office supplies of \$1,900.
- b. used prepaid insurance of \$560.
- c. depreciated equipment, \$510.
- d. accrued salaries expense of \$250 that hasn't been paid yet.
- e. earned \$420 of unearned revenue.

Requirements

1. Open a T-account for each account using the unadjusted balances.
2. Journalize the adjusting entries using the letter and December 31 date in the date column.
3. Post the adjustments to the T-accounts, entering each adjustment by letter. Show each account's adjusted balance.

Learning Objective 4

Adjusted trial balance \$34,660 total

Learning Objective 5

Note: Exercise E3-26 should be used only in conjunction with Exercise E3-25.

E3-26 Preparing an adjusted trial balance

Refer to the data in Exercise E3-25, and prepare an adjusted trial balance.

E3-27 Identifying the impact of adjusting entries on the financial statements

Austin Acoustics recorded the following transactions during October 2016:

- a. Received \$2,500 cash from customer for three months of service beginning October 1, 2016, and ending December 31, 2016. The company recorded a \$2,500 debit to Cash and a \$2,500 credit to Unearned Revenue.
- b. Employees are paid \$3,000 on Monday following the five-day workweek. October 31, 2016, is on Friday.
- c. The company pays \$440 on October 1, 2016 for its six-month auto insurance policy. The company recorded a \$440 debit to Prepaid Insurance and a \$440 credit to Cash.
- d. The company purchased office furniture for \$8,300 on January 2, 2016. The company recorded a \$8,300 debit to Office Furniture and a \$8,300 credit to Accounts Payable. Annual depreciation for the furniture is \$1,000.
- e. The company began October with \$50 of office supplies on hand. On October 10, the company purchased office supplies on account of \$100. The company recorded a \$100 debit to Office Supplies and a \$100 credit to Accounts Payable. The company used \$120 of office supplies during October.
- f. The company received its electric bill on October 30 for \$325 but did not pay it until November 10.
- g. The company paid November's rent of \$2,500 on October 30. On October 30, the company recorded an \$2,500 debit to Rent Expense and an \$2,500 credit to Cash.

Indicate if an adjusting entry is needed for each item on October 31 for the month of October. Assuming the adjusting entry is not made, indicate which specific category or categories of accounts on the financial statements are misstated and if they are overstated or understated. Use the following table as a guide. Item *a* is completed as an example:

Item	Adjusting Entry Needed?	Specific Category of Accounts on the Balance Sheet	Over / Understated	Specific Category of Accounts on the Income Statement	Over / Understated
(a)	Yes	Liability Equity	Over Under	Revenue	Under

E3-28 Journalizing adjusting entries and analyzing their effect on the income statement

The following data at July 31, 2016, are given for KTR:

- a. Depreciation, \$200.
- b. Prepaid rent expires, \$100.
- c. Interest expense accrued, \$600.
- d. Employee salaries owed for Monday through Thursday of a five-day workweek; weekly payroll,
- e. Unearned revenue earned, \$1,600.
- f. Office supplies used, \$300.

Requirements

- 1. Journalize the adjusting entries needed on July 31, 2016.
- 2. Suppose the adjustments made in Requirement 1 were not made. Compute the overall overstatement or understatement of net income as a result of the omission of these adjustments.

Learning Objectives 3, 5

- 1. d. DR Salaries Expense \$10,400

E3-29 Using the worksheet to record the adjusting journal entries

The worksheet of Temp-2-Perm Employment Service follows but is incomplete.

Learning Objective 6

- 1. Adjustments \$3,300 total

	A	B	C	D	E	F	G
1	TEMP-2-PERM EMPLOYMENT SERVICE						
2	Worksheet						
3	April 30, 2016						
4							
5	Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
6		Debit	Credit	Debit	Credit	Debit	Credit
7	Cash	\$ 900					
8	Accounts Receivable	4,800					
9	Office Supplies	900					
10	Equipment	32,400					
11	Accumulated Depreciation—Equipment		\$ 13,600				
12	Salaries Payable						
13	Common Stock		24,300				
14	Dividends	4,900					
15	Service Revenue		9,400				
16	Salaries Expense	2,200					
17	Rent Expense	1,200					
18	Depreciation Expense—Equipment						
19	Supplies Expense						
20	Total	\$ 47,300	\$ 47,300				
21							

Requirements

- 1. Calculate and enter the adjustment amounts directly in the Adjustments columns. Use letters *a* through *d* to label the four adjustments.
- 2. Prepare each adjusting journal entry calculated in Requirement 1. Date the entries and include explanations.

Learning Objective 6

E3-30 Using the worksheet to prepare the adjusted trial balance

The worksheet of Moore's Landscaping Services follows but is incomplete.

Adjusted trial balance
\$216,070 total

	A	B	C	D	E	F	G
1	MOORE'S LANDSCAPING SERVICES						
2	Worksheet						
3	December 31, 2016						
4							
5	Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
6		Debit	Credit	Debit	Credit	Debit	Credit
7	Cash	\$ 27,500					
8	Accounts Receivable	6,600		(h) \$ 2,500			
9	Office Supplies	520			(b) \$ 380		
10	Prepaid Rent	2,900			(a) 1,450		
11	Equipment	55,000					
12	Accumulated Depreciation—Equipment				(c) 900		
13	Trucks	60,000					
14	Accumulated Depreciation—Trucks				(d) 1,000		
15	Accounts Payable		\$ 4,100				
16	Utilities Payable		750				
17	Salaries Payable				(f) 5,000		
18	Interest Payable				(g) 150		
19	Unearned Revenue		5,000	(e) 3,500			
20	Notes Payable		30,000				
21	Common Stock		76,670				
22	Dividends	12,000					
23	Service Revenue		90,000		(e, h) 6,000		
24	Rent Expense	11,600		(a) 1,450			
25	Salaries Expense	25,600		(f) 5,000			
26	Supplies Expense			(b) 380			
27	Utilities Expense	4,800					
28	Depreciation Expense—Equipment			(c) 900			
29	Depreciation Expense—Trucks			(d) 1,000			
30	Interest Expense			(g) 150			
31	Total	\$ 206,520	\$ 206,520	\$ 14,880	\$ 14,880		
32							

Calculate and enter the adjusted account balances in the Adjusted Trial Balance columns.

E3A-31 Understanding the alternative treatment of prepaid expenses

At the beginning of the year, office supplies of \$800 were on hand. During the year, Rocket Air Conditioning Service paid \$6,000 for more office supplies. At the end of the year, Rocket has \$500 of office supplies on hand.

Requirements

1. Record the adjusting entry assuming that Rocket records the purchase of office supplies by initially debiting an asset account. Post the adjusting entry to the Office Supplies and Supplies Expense T-accounts. Make sure to include the beginning balance and purchase of office supplies in the Office Supplies T-account.
2. Record the adjusting entry assuming that Rocket records the purchase of office supplies by initially debiting an expense account. Post the adjusting entry to the Office Supplies and Supplies Expense T-accounts. Make sure to include the beginning balance in the Office Supplies T-account and the purchase of office supplies in the Supplies Expense T-account.
3. Compare the ending balances of the T-accounts under both approaches. Are they the same?

**Learning Objectives 3, 7
Appendix 3A**

2. CR Office Supplies \$300

E3A-32 Understanding the alternative treatment of unearned revenues

At the beginning of the year, Dapper Advertising owed customers \$2,400 for unearned revenue collected in advance. During the year, Dapper received advance cash receipts of \$7,500 and earned \$15,000 of service revenue (exclusive of any amount earned from advance payments). At year-end, the liability for unearned revenue is \$2,600 and unadjusted service revenue is \$15,000.

Requirements

1. Record the adjusting entry assuming that Dapper records the cash receipt of unearned revenue by initially crediting a liability account. Post the adjusting entry to the Unearned Revenue and Service Revenue T-accounts. Make sure to include the beginning balance and additional unearned revenue in the Unearned Revenue T-account.
2. Record the adjusting entry assuming that Dapper records the cash receipt of unearned revenue by initially crediting a revenue account. Post the adjusting entry to the Unearned Revenue and Service Revenue T-accounts. Make sure to include the beginning balance in the Unearned Revenue T-account and the additional unearned revenue in the Service Revenue T-account.
3. Compare the ending balances of the T-accounts under both approaches. Are they the same?

**Learning Objectives 3, 7
Appendix 3A**

2. DR Service Revenue \$200

> Problems Group A

Learning Objective 3

1. b. DR Insurance Expense \$1,250

P3-33A Journalizing adjusting entries and subsequent journal entries

Lorring Landscaping has collected the following data for the December 31 adjusting entries:

- a. Each Friday, Lorring pays employees for the current week's work. The amount of the weekly payroll is \$7,500 for a five-day workweek. This year, December 31 falls on a Wednesday. Lorring will pay its employees on January 2.
- b. On January 1 of the current year, Lorring purchases an insurance policy that covers two years, \$2,500.
- c. The beginning balance of Office Supplies was \$3,900. During the year, Lorring purchased office supplies for \$5,400, and at December 31 the office supplies on hand total \$2,600.
- d. During December, Lorring designed a landscape plan and the client prepaid \$5,000. Lorring recorded this amount as Unearned Revenue. The job will take several months to complete, and Lorring estimates that the company has earned 60% of the total revenue during the current year.
- e. At December 31, Lorring had earned \$4,500 for landscape services completed for Turnkey Appliances. Turnkey has stated that it will pay Lorring on January 10.
- f. Depreciation for the current year includes Equipment, \$3,300; and Trucks, \$2,100.
- g. Lorring has incurred \$400 of interest expense on a \$900 interest payment due on January 15.

Requirements

1. Journalize the adjusting entry needed on December 31 for each of the items affecting Lorring Landscaping. Assume Lorring records adjusting entries only at the end of the year.
2. Journalize the subsequent journal entries for adjusting entries *a*, *d*, and *g*.

Learning Objectives 3, 5

1. d. DR Depreciation Expense
\$8,000

P3-34A Journalizing adjusting entries and identifying the impact on financial statements

Taylor Fishing Charters has collected the following data for the December 31 adjusting entries:

- a. The company received its electric bill on December 20 for \$225 but will not pay it until January 5. (Use the Utilities Payable account.)
- b. Taylor purchased a nine-month boat insurance policy on November 1 for \$9,000. Taylor recorded a debit to Prepaid Insurance.
- c. As of December 31, Taylor had earned \$2,000 of charter revenue that has not been recorded or received.
- d. Taylor's fishing boat was purchased on January 1 at a cost of \$44,500. Taylor expects to use the boat for five years and that it will have a residual value of \$4,500. Determine annual depreciation assuming the straight-line depreciation method is used.
- e. On October 1, Taylor received \$8,000 prepayment for a deep-sea fishing charter to take place in December. As of December 31, Taylor has completed the charter.

Requirements

1. Journalize the adjusting entries needed on December 31 for Taylor Fishing Charters. Assume Taylor records adjusting entries only at the end of the year.
2. If Taylor had not recorded the adjusting entries, indicate which specific category of accounts on the financial statements would be misstated and if the misstatement is overstated or understated. Use the following table as a guide.

Adjusting Entry	Specific Category of Accounts on the Balance Sheet	Over / Understated	Specific Category of Accounts on the Income Statement	Over / Understated
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P3-35A Journalizing and posting adjustments to the T-accounts and preparing an adjusted trial balance

The unadjusted trial balance of Adveta Air Purification System at December 31, 2016, and the data needed for the adjustments follow.

Learning Objectives 3, 4

3. Adjusted trial balance \$69,750 total

ADVETA AIR PURIFICATION SYSTEM Unadjusted Trial Balance December 31, 2016			
Account Title	Balance		
	Debit	Credit	
Cash	\$ 7,800		
Accounts Receivable	19,800		
Prepaid Rent	2,600		
Office Supplies	1,100		
Equipment	19,900		
Accumulated Depreciation—Equipment		\$ 4,100	
Accounts Payable		3,000	
Salaries Payable			
Unearned Revenue		2,800	
Common Stock		39,600	
Dividends	9,300		
Service Revenue		15,400	
Salaries Expense	3,100		
Rent Expense			
Depreciation Expense—Equipment			
Advertising Expense	1,300		
Supplies Expense			
Total	<u>\$ 64,900</u>	<u>\$ 64,900</u>	

Adjustment data at December 31 follow:

- a. On December 15, Adveta contracted to perform services for a client receiving \$2,800 in advance. Adveta recorded this receipt of cash as Unearned Revenue. As of December 31, Adveta has completed \$1,800 of the services.
- b. Adveta prepaid two months of rent on December 1.

- c. Adveta used \$600 of office supplies.
- d. Depreciation for the equipment is \$700.
- e. Adveta received a bill for December's online advertising, \$1,000. Adveta will not pay the bill until January. (Use Accounts Payable.)
- f. Adveta pays its employees on Monday for the previous week's wages. Its employees earn \$1,500 for a five-day workweek. December 31 falls on Wednesday this year.
- g. On October 1, Adveta agreed to provide a four-month air system check (beginning October 1) for a customer for \$3,000. Adveta has completed the system check every month, but payment has not yet been received and no entries have been made.

Requirements

1. Journalize the adjusting entries on December 31.
2. The T-accounts, along with their unadjusted balances have been opened for you. Post the adjusting entries to the T-accounts.
3. Prepare the adjusted trial balance.
4. How will Adveta Air Purification System use the adjusted trial balance?

Learning Objectives 3, 4

3. Adjusted trial balance \$555,220
total

P3-36A Journalizing and posting adjustments to the four-column accounts and preparing an adjusted trial balance

The unadjusted trial balance of Lexington Inn Company at December 31, 2016, and the data needed for the adjustments follow.

LEXINGTON INN COMPANY		
Unadjusted Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 11,900	
Accounts Receivable	13,900	
Prepaid Insurance	3,500	
Office Supplies	1,100	
Building	515,000	
Accumulated Depreciation—Building		\$ 350,000
Accounts Payable		4,500
Salaries Payable		
Unearned Revenue		2,500
Common Stock		175,620
Dividends	2,170	
Service Revenue		18,200
Salaries Expense	2,500	
Insurance Expense		
Depreciation Expense—Building		
Advertising Expense	750	
Supplies Expense		
Total	\$ 550,820	\$ 550,820

Adjustment data at December 31 follow:

- As of December 31, Lexington had \$600 of Prepaid Insurance remaining.
- At the end of the month, Lexington had \$700 of office supplies remaining.
- Depreciation on the building is \$3,500.
- Lexington pays its employees weekly on Friday. Its employees earn \$1,500 for a five-day workweek. December 31 falls on Wednesday this year.
- On November 20, Lexington contracted to perform services for a client receiving \$2,500 in advance. Lexington recorded this receipt of cash as Unearned Revenue. As of December 31, Lexington has \$1,500 still unearned.

Requirements

- Journalize the adjusting entries on December 31.
- The four-column ledger accounts have been opened for you using the unadjusted trial balance adjusting entries to the ledger accounts.
- Prepare the adjusted trial balance.
- Assuming the adjusted trial balance has total debits equal to total credits, does this mean that entries have been recorded correctly? Explain.

P3-37A Using the worksheet to record the adjusting journal entries

Gullo Theater Production Company’s partially completed worksheet as of December 31, 2016, follows.

Learning Objective 6

2. d. CR Accumulated Depreciation \$3,800

	A	B	C	D	E	F	G
1	GULLO THEATER PRODUCTION COMPANY						
2	Worksheet						
3	December 31, 2016						
4							
5	Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
6		Debit	Credit	Debit	Credit	Debit	Credit
7	Cash	\$ 3,600					
8	Accounts Receivable	5,800					
9	Office Supplies	1,900					
10	Prepaid Insurance	1,050					
11	Equipment	32,000					
12	Accumulated Depreciation—Equipment		\$ 7,400				
13	Accounts Payable		4,800				
14	Salaries Payable						
15	Common Stock		14,650				
16	Dividends	27,000					
17	Service Revenue		74,000				
18	Depreciation Expense—Equipment						
19	Supplies Expense						
20	Utilities Expense	4,500					
21	Salaries Expense	25,000					
22	Insurance Expense						
23	Total	\$ 100,850	\$ 100,850				
24							

Requirements

- Analyze the worksheet to determine the adjusting entries that account for the differences between the unadjusted trial balance and the adjusted trial balance. Complete the worksheet. Use letters *a* through *e* to label the five adjustments.
- Journalize the adjusting entries.

Learning Objectives 3, 7
Appendix 3A

4. Dec 31, CR Insurance Expense
\$7,500

P3A-38A Understanding the alternative treatment of prepaid expenses and unearned revenues

Night Flyer Pack'n Mail completed the following transactions during 2016:

Nov. 1	Paid \$2,000 store rent covering the four-month period ending February 28, 2017.
Nov. 1	Paid \$12,500 insurance covering the five-month period ending March 31, 2017.
Dec. 1	Collected \$4,500 cash in advance from customers. The service revenue will be earned \$1,500 monthly over the three-month period ending February 28, 2017.
Dec. 1	Collected \$9,000 cash in advance from customers. The service revenue will be earned \$1,800 monthly over the five-month period ending April 30, 2017.

Requirements

1. Journalize the transactions assuming that Night Flyer debits an asset account for prepaid expenses and credits a liability account for unearned revenues.
2. Journalize the related adjusting entries at December 31, 2016.
3. Post the journal and adjusting entries to the T-accounts, and show their balances at December 31, 2016. (Ignore the Cash account.)
4. Repeat Requirements 1–3. This time, debit an expense account for prepaid expenses and credit a revenue account for unearned revenues.
5. Compare the account balances in Requirements 3 and 4. They should be equal.

> Problems Group B

Learning Objective 3

1. b. DR Insurance Expense \$2,000

P3-39B Journalizing adjusting entries and subsequent journal entries

Laughton Landscaping has collected the following data for the December 31 adjusting entries:

- a. Each Friday, Laughton pays employees for the current week's work. The amount of the weekly payroll is \$6,000 for a five-day workweek. This year, December 31 falls on a Tuesday. Laughton will pay its employees on January 3.
- b. On January 1 of the current year, Laughton purchases an insurance policy that covers two years, \$4,000.
- c. The beginning balance of Office Supplies was \$4,100. During the year, Laughton purchased office supplies for \$5,500, and at December 31 the office supplies on hand total \$2,200.
- d. During December, Laughton designed a landscape plan and the client prepaid \$4,000. Laughton recorded this amount as Unearned Revenue. The job will take several months to complete, and Laughton estimates that the company has earned 50% of the total revenue during the current year.
- e. At December 31, Laughton had earned \$4,500 for landscape services completed for Tomball Appliances. Tomball has stated that it will pay Laughton on January 10.
- f. Depreciation for the current year includes Equipment, \$3,000; and Trucks, \$1,700.
- g. Laughton has incurred \$800 of interest expense on a \$1,200 interest payment due on January 15.

Requirements

1. Journalize the adjusting entry needed on December 31 for each of the items affecting Laughton Landscaping. Assume Laughton records adjusting entries only at the end of the year.
2. Journalize the subsequent journal entries for adjusting entries *a*, *d*, and *g*.

P3-40B Journalizing adjusting entries and identifying the impact on financial statements

Stewart Fishing Charters has collected the following data for the December 31 adjusting entries:

- a. The company received its electric bill on December 20 for \$150 but will not pay it until January 5. (Use the Utilities Payable account.)
- b. Stewart purchased a nine-month boat insurance policy on November 1 for \$8,100. Stewart recorded a debit to Prepaid Insurance.
- c. As of December 31, Stewart had earned \$4,000 of charter revenue that has not been recorded or received.
- d. Stewart’s fishing boat was purchased on January 1 at a cost of \$80,500. Stewart expects to use the boat for five years and that it will have a residual value of \$5,500. Determine annual depreciation assuming the straight-line depreciation method is used.
- e. On October 1, Stewart received \$5,000 prepayment for a deep-sea fishing charter to take place in December. As of December 31, Stewart has completed the charter.

Requirements

1. Journalize the adjusting entries needed on December 31 for Stewart Fishing Charters. Assume Stewart records adjusting entries only at the end of the year.
2. If Stewart had not recorded the adjusting entries, indicate which specific category of accounts on the financial statements would be misstated and if the misstatement is overstated or understated.

Learning Objectives 3, 5

1. d. DR Depreciation Expense \$15,000

Adjusting Entry	Specific Category of Accounts on the Balance Sheet	Over / Understated	Specific Category of Accounts on the Income Statement	Over / Understated

Learning Objectives 3, 4

3. Adjusted trial balance \$71,700 total

P3-41B Journalizing and posting adjustments to the T-accounts and preparing an adjusted trial balance

The unadjusted trial balance of Avery Air Purification System at December 31, 2016, and the data needed for the adjustments follow.

AVERY AIR PURIFICATION SYSTEM		
Unadjusted Trial Balance		
December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 7,400	
Accounts Receivable	19,300	
Prepaid Rent	2,700	
Office Supplies	1,100	
Equipment	20,000	
Accumulated Depreciation—Equipment		\$ 4,000
Accounts Payable		3,100
Salaries Payable		
Unearned Revenue		2,600
Common Stock		40,100
Dividends	9,900	
Service Revenue		15,400
Salaries Expense	3,400	
Rent Expense		
Depreciation Expense—Equipment		
Advertising Expense	1,400	
Supplies Expense		
Total	<u>\$ 65,200</u>	<u>\$ 65,200</u>

Adjustment data at December 31 follow:

- a. On December 15, Avery contracted to perform services for a client receiving \$2,600 in advance. Avery recorded this receipt of cash as Unearned Revenue. As of December 31, Avery has completed \$1,200 of the services.
- b. Avery prepaid two months of rent on December 1.
- c. Avery used \$650 of office supplies during the month.
- d. Depreciation for the equipment is \$500.
- e. Avery received a bill for December's online advertising, \$600. Avery will not pay the bill until January. (Use Accounts Payable.)
- f. Avery pays its employees weekly on Monday for the previous week's wages. Its employees earn \$5,500 for a five-day workweek. December 31 falls on Wednesday this year.
- g. On October 1, Avery agreed to provide a four-month air system check (beginning October 1) for a customer for \$2,800. Avery has completed the system check every month, but payment has not yet been received and no entries have been made.

Requirements

1. Journalize the adjusting entries on December 31.
2. The T-accounts, along with their unadjusted balances have been opened for you. Post the adjusting entries to the T-accounts.
3. Prepare the adjusted trial balance.
4. How will Avery Air Purification System use the adjusted trial balance?

P3-42B Journalizing and posting adjustments to the four-column accounts and preparing an adjusted trial balance

The unadjusted trial balance of Pikeville Inn Company at December 31, 2016, and the data needed for the adjustments follow.

PIKEVILLE INN COMPANY		
Unadjusted Trial Balance December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 11,200	
Accounts Receivable	14,600	
Prepaid Insurance	4,600	
Office Supplies	700	
Building	525,000	
Accumulated Depreciation—Building		\$ 240,000
Accounts Payable		2,400
Salaries Payable		
Unearned Revenue		1,600
Common Stock		300,530
Dividends	1,550	
Service Revenue		17,100
Salaries Expense	3,100	
Insurance Expense		
Depreciation Expense—Building		
Advertising Expense	880	
Supplies Expense		
Total	\$ 561,630	\$ 561,630

Adjustment data at December 31 follow:

- a. As of December 31, Pikeville Inn had \$500 of Prepaid Insurance remaining.
- b. At the end of the month, Pikeville Inn had \$400 of office supplies remaining.
- c. Depreciation on the building is \$4,100.
- d. Pikeville Inn pays its employees on Friday for the weekly salaries. Its employees earn \$1,000 for a five-day workweek. December 31 falls on Wednesday this year.
- e. On November 20, Pikeville Inn contracted to perform services for a client receiving \$1,600 in advance. Pikeville Inn recorded this receipt of cash as Unearned Revenue. As of December 31, Pikeville Inn has \$1,100 still unearned.

Learning Objectives 3, 4

3. Adjusted trial balance \$566,330 total

Requirements

1. Journalize the adjusting entries on December 31.
2. The four-column ledger accounts have been opened for you using the unadjusted trial balance adjusting entries to the ledger accounts.
3. Prepare the adjusted trial balance.
4. Assuming the adjusted trial balance has total debits equal to total credits, does this mean that entries have been recorded correctly? Explain.

Learning Objective 6**P3-43B Using the worksheet to record the adjusting journal entries**

Gullo Theater Production Company's partially completed worksheet as of December 31, 2016, follows.

2. d. CR Accumulated Depreciation
\$4,000

	A	B	C	D	E	F	G
1	GULLO THEATER PRODUCTION COMPANY						
2	Worksheet						
3	December 31, 2016						
4							
5	Account Names	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
6		Debit	Credit	Debit	Credit	Debit	Credit
7	Cash	\$ 3,800					
8	Accounts Receivable	6,300					
9	Office Supplies	1,900					
10	Prepaid Insurance	4,000					
11	Equipment	30,000					
12	Accumulated Depreciation—Equipment		\$ 8,900				
13	Accounts Payable		3,200				
14	Salaries Payable						
15	Common Stock		19,400				
16	Dividends	27,500					
17	Service Revenue		74,000				
18	Depreciation Expense—Equipment						
19	Supplies Expense						
20	Utilities Expense	4,500					
21	Salaries Expense	27,500					
22	Insurance Expense						
23	Total	\$ 105,500	\$ 105,500				
24							

Requirements

1. Analyze the worksheet to determine the adjusting entries that account for the differences between the unadjusted trial balance and the adjusted trial balance. Complete the worksheet. Use letters *a* through *e* to label the five adjustments.
2. Journalize the adjusting entries.

P3A-44B Understanding the alternative treatment of prepaid expenses and unearned revenues

Speedy Pack'n Mail completed the following transactions during 2016:

Nov. 1	Paid \$5,200 store rent covering the four-month period ending February 28, 2017.
1	Paid \$9,600 insurance covering the six-month period ending April 30, 2017.
Dec. 1	Collected \$5,400 cash in advance from customers. The service revenue will be earned \$1,800 monthly over the three-month period ending February 28, 2017.
1	Collected \$10,000 cash in advance from customers. The service revenue will be earned \$2,000 monthly over the five-month period ending April 30, 2017.

.....
Learning Objectives 3, 7
Appendix 3A

4. Dec 31, CR Insurance Expense
 \$6,400

Requirements

1. Journalize the transactions assuming that Speedy Pack'n Mail debits an asset account for prepaid expenses and credits a liability account for unearned revenues.
2. Journalize the related adjusting entries at December 31, 2016.
3. Post the journal and adjusting entries to the T-accounts, and show their balances at December 31, 2016. (Ignore the Cash account.)
4. Repeat Requirements 1–3. This time debit an expense account for prepaid expenses and credit a revenue account for unearned revenues.
5. Compare the account balances in Requirements 3 and 4. They should be equal.

> Continuing Problem

P3-45 Preparing adjusting entries and preparing an adjusted trial balance

This problem continues the Daniels Consulting situation from Problem P2-41 of Chapter 2. You will need to use the unadjusted trial balance and posted T-accounts that you prepared in Problem P2-41. The unadjusted trial balance at December 31, 2016, is duplicated below:

DANIELS CONSULTING		
Unadjusted Trial Balance		
December 31, 2016		
Account Title	Balance	
	Debit	Credit
Cash	\$ 17,950	
Accounts Receivable	2,100	
Office Supplies	800	
Equipment	3,600	
Furniture	3,000	
Accounts Payable		\$ 3,600
Unearned Revenue		2,400
Common Stock		20,000
Dividends	1,000	
Service Revenue		4,600
Rent Expense	2,000	
Utilities Expense	150	
Total	\$ 30,600	\$ 30,600

At December 31, the business gathers the following information for the adjusting entries:

- a. Accrued service revenue, \$1,500.
- b. Earned \$600 of the service revenue collected in advance on December 21.
- c. Office supplies on hand, \$300.
- d. Depreciation on equipment, \$60; Depreciation on furniture, \$50.
- e. Accrued \$685 expense for administrative assistant's salary.

Requirements

1. Journalize and post the adjusting entries using the T-accounts that you completed in Problem P2-41. In the T-accounts, denote each adjusting amount as *Adj.* and an account balance as *Balance*.
2. Prepare an adjusted trial balance as of December 31, 2016.

> Practice Set

P3-46 Preparing adjusting entries and preparing an adjusted trial balance

This problem continues the Crystal Clear Cleaning situation from Problem P2-42 of Chapter 2. Start from the unadjusted trial balance that Crystal Clear Cleaning prepared at November 30, 2017:

CRYSTAL CLEAR CLEANING		
Unadjusted Trial Balance		
November 30, 2017		
Account Title	Balance	
	Debit	Credit
Cash	\$138,150	
Accounts Receivable	2,600	
Cleaning Supplies	220	
Prepaid Rent	2,000	
Prepaid Insurance	1,800	
Equipment	3,200	
Truck	7,000	
Accounts Payable		\$ 1,470
Unearned Revenue		12,000
Notes Payable		96,000
Common Stock		42,000
Dividends	200	
Service Revenue		4,800
Salaries Expense	350	
Advertising Expense	500	
Utilities Expense	250	
Total	<u>\$156,270</u>	<u>\$156,270</u>

Consider the following adjustment data:

- Cleaning supplies on hand at the end of November were \$30.
- One month's combined depreciation on all depreciable assets was estimated to be \$270.
- One month's interest expense is \$240.

Requirements

- Using the data provided from the trial balance, the previous adjustment information, and the information from Chapter 2 (P2-42), prepare all required adjusting journal entries at November 30.
- Prepare an adjusted trial balance as of November 30 for Crystal Clear Cleaning.

CRITICAL THINKING

> Decision Case 3-1

One year ago, Tyler Stasney founded Swift Classified Ads. Stasney remembers that you took an accounting course while in college and comes to you for advice. He wishes to know how much net income his business earned during the past year in order to decide whether to keep the company going. His accounting records consist of the T-accounts from his ledger, which were prepared by an accountant who moved to another city. The ledger at December 31 follows. The accounts have *not* been adjusted.

Cash	Accounts Payable	Common Stock	Salaries Expense
Dec. 31 5,800	21,500 Dec. 31	20,000 Dec. 31	Dec. 31 17,000
Accounts Receivable	Unearned Revenue	Dividends	Depreciation Expense—Equipment
Dec. 31 12,000	4,000 Dec. 31	Dec. 31 28,000	
Prepaid Rent	Salaries Payable	Service Revenue	Rent Expense
Jan. 2 2,800		59,500 Dec. 31	
Office Supplies			Utilities Expense
Jan. 2 2,600			Dec. 31 800
Equipment			Supplies Expense
Jan. 2 36,000			
Accumulated Depreciation—Equipment			

Stasney indicates that at year-end, customers owe the business \$1,600 for accrued service revenue. These revenues have not been recorded. During the year, Swift Classified Ads collected \$4,000 service revenue in advance from customers, but the business earned only \$900 of that amount. Rent expense for the year was \$2,400, and the business used up \$1,700 of the supplies. Swift determines that depreciation on its equipment was \$5,000 for the year. At December 31, the business owes an employee \$1,200 accrued salary.

Help Swift Classified Ads compute its net income for the year. Advise Stasney whether to continue operating Swift Classified Ads.

> Ethical Issue 3-1

The net income of Steinbach & Sons, a landscaping company, decreased sharply during 2016. Mort Steinbach, owner and manager of the company, anticipates the need for a bank loan in 2017. Late in 2016, Steinbach instructs the company's accountant to record \$2,000 service revenue for landscape services for the Steinbach family, even

though the services will not be performed until January 2017. Steinbach also tells the accountant *not* to make the following December 31, 2016, adjusting entries:

Salaries owed to employees	\$ 900
Prepaid insurance that has expired	400

Requirements

1. Compute the overall effects of these transactions on the company's reported net income for 2016.
2. Why is Steinbach taking this action? Is his action ethical? Give your reason, identifying the parties helped and the parties harmed by Steinbach's action.
3. As a personal friend, what advice would you give the accountant?

> Fraud Case 3-1

XM, Ltd. was a small engineering firm that built high-tech robotic devices for electronics manufacturers. One very complex device was partially completed at the end of 2016. Barb McLauren, head engineer, knew the experimental technology was a failure and XM would not be able to complete the \$20,000,000 contract next year. However, the corporation was getting ready to be sold in January. She told the controller that the device was 80% complete at year-end and on track for successful completion the following spring; the controller accrued 80% of the contract revenue at December 31, 2016. McLauren sold the company in January 2017 and retired. By mid-year, it became apparent that XM would not be able to complete the project successfully and the new owner would never recoup his investment.

Requirements

1. For complex, high-tech contracts, how does a company determine the percentage of completion and the amount of revenue to accrue?
2. What action do you think was taken by XM in 2017 with regard to the revenue that had been accrued the previous year?

> Financial Statement Case 3-1

Starbucks Corporation—like all other businesses—makes adjusting entries at year-end in order to measure assets, liabilities, revenues, and expenses properly. Examine Starbucks Corporation's Balance Sheet and Income Statement. Visit <http://www.pearsonglobaleditions.com/Horngren> to view a link to Starbucks Corporation's Fiscal 2013 Annual Report.

Requirements

1. Which asset accounts might Starbucks record adjusting entries for?
2. Which liability accounts might Starbucks record adjusting entries for?
3. Review Note 1 (Property, Plant, and Equipment) in the Notes to Consolidated Financial Statements. How are property, plant, and equipment carried on the balance sheet? How is depreciation of these assets calculated? What is the range of useful lives used when depreciating these assets?

> Communication Activity 3-1

In 75 words or fewer, explain adjusting journal entries.

MyAccountingLab

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> Quick Check Answers

1. a 2. a 3. b 4. c 5. a 6. a 7. b 8. d 9. c 10A. b