



# 2

# Financial Statements and Accounting Concepts/Principles

Financial statements are the product of the financial accounting process. They are the means of communicating economic information about the entity to individuals who want to make decisions and informed judgments about the entity's financial position, results of operations, and cash flows. Although each of the four principal financial statements has a unique purpose, they are interrelated, and all must be considered in order to get a complete financial picture of the reporting entity.

Users cannot make meaningful interpretations of financial statement data without understanding the concepts and principles that relate to the entire financial accounting process. It is also important for users to understand that these concepts and principles are broad in nature; they do not constitute an inflexible set of rules, but instead serve as guidelines for the development of sound financial reporting practices.

## LEARNING OBJECTIVES (LO)

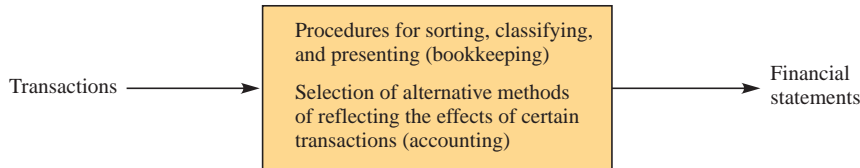
*After studying this chapter you should understand*

1. What transactions are.
2. The kind of information reported in each financial statement and how financial statements are related to each other.
3. The meaning and usefulness of the accounting equation.
4. The meaning of each of the captions on the financial statements illustrated in this chapter.
5. The broad, generally accepted concepts and principles that apply to the accounting process.
6. Why investors must carefully consider cash flow information in conjunction with accrual accounting results.
7. Several limitations of financial statements.
8. What a corporation's annual report is and why it is issued.
9. Business practices related to organizing a business, fiscal year, par value, and parent–subsidiary corporations.

## Financial Statements

### From Transactions to Financial Statements

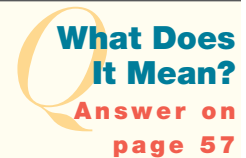
An entity's financial statements are the end product of a process that starts with **transactions** between the entity and other organizations and individuals. Transactions are economic interchanges between entities: for example, a sale/purchase, or a receipt of cash by a borrower and the payment of cash by a lender. The flow from transactions to financial statements can be illustrated as follows:



#### LO 1

Understand what transactions are.

1. What does it mean to say that there has been an accounting transaction between you and your school?



Transactions are summarized in **accounts**, and accounts are further summarized in the financial statements. In this sense, transactions can be seen as the bricks that build the financial statements. By learning about the form, content, and relationships among financial statements in this chapter, you will better understand the process of building those results—bookkeeping and transaction analysis—described in Chapter 4 and subsequent chapters.

Current generally accepted accounting principles and auditing standards require that the financial statements of an entity show the following for the reporting period:

- Financial position at the end of the period.
- Earnings for the period.
- Cash flows during the period.
- Investments by and distributions to owners during the period.

The financial statements that satisfy these requirements are, respectively, the:

- Balance sheet (or statement of financial position).
- Income statement (or statement of earnings, or profit and loss statement, or statement of operations).
- Statement of cash flows.
- Statement of changes in owners' equity (or statement of changes in capital stock and/or statement of changes in retained earnings).

In addition to the financial statements themselves, the annual report will probably include several accompanying notes (sometimes called the financial review) that include explanations of the accounting policies and detailed information about many of the amounts and captions shown on the financial statements. These notes are designed to assist the reader of the financial statements by disclosing as much relevant supplementary information as the company and its auditors deem necessary and appropriate. For [Intel Corporation](#), the notes to the 2008 financial statements are shown in the “Notes to Consolidated Financial Statements” section on pages 000–000 of the annual report in the appendix. One of this text's objectives is to enable you to

**LO 2**

Understand the kind of information reported in each financial statement and how the statements are related to each other.

read, interpret, and understand financial statement footnotes. Chapter 10 describes the explanatory notes to the financial statements in detail.

## Financial Statements Illustrated

Main Street Store, Inc., was organized as a corporation and began business during September 2010 (see *Business in Practice—Organizing a Business*). The company buys clothing and accessories from distributors and manufacturers and sells these items from a rented building. The financial statements of Main Street Store, Inc., at



### Business in Practice

#### Organizing a Business

There are three principal forms of business organization: proprietorship, partnership, and corporation.

A **proprietorship** is an activity conducted by an individual. Operating as a proprietorship is the easiest way to get started in a business activity. Other than the possibility of needing a local license, there aren't any formal prerequisites to beginning operations. Besides being easy to start, a proprietorship has the advantage, according to many people, that the owner is his or her own boss. A principal disadvantage of the proprietorship is that the owner's liability for business debts is not limited by the assets of the business. For example, if the business fails, and if, after all available business assets have been used to pay business debts, the business creditors are still owed money, the owner's personal assets can be claimed by business creditors. Another disadvantage is that the individual proprietor may have difficulty raising the money needed to provide the capital base that will be required if the business is to grow substantially. Because of the ease of getting started, every year many business activities begin as proprietorships.

The **partnership** is essentially a group of proprietors who have banded together. The unlimited liability characteristic of the proprietorship still exists, but with several partners the ability of the firm to raise capital may be improved. Income earned from partnership activities is taxed at the individual partner level; the partnership itself is not a tax-paying entity. Accountants, attorneys, and other professionals frequently operate their firms as partnerships. In recent years, many large professional partnerships, including the Big 4 accounting firms, have been operating under *limited liability partnership* (LLP) rules, which shield individual partners from unlimited personal liability.

Most large businesses, and many new businesses, use the corporate form of organization. The owners of the corporation are called **stockholders**. They have invested funds in the corporation and received shares of **stock** as evidence of their ownership. Stockholders' liability is limited to the amount invested; creditors cannot seek recovery of losses from the personal assets of stockholders. Large amounts of capital can frequently be raised by selling shares of stock to many individuals. It is also possible for all of the stock of a corporation to be owned by a single individual. A stockholder can usually sell his or her shares to other investors or buy more shares from other stockholders if a change in ownership interest is desired. A **corporation** is formed by having a charter and bylaws prepared and registered with the appropriate office in 1 of the 50 states. The cost of forming a corporation is usually greater than that of starting a proprietorship or forming a partnership. A major disadvantage of the corporate form of business is that corporations are tax paying entities. Thus any income distributed to shareholders has been taxed first as income of the corporation and then is taxed a second time as income of the individual shareholders.

A form of organization that has been approved in many states is the *limited liability company*. For accounting and legal purposes, this type of organization is treated as a corporation even though some of the formalities of the corporate form of organization are not present. Shareholders of small corporations may find that banks and major creditors usually require the personal guarantees of the principal shareholders as a condition for granting credit to the corporation. Therefore, the limited liability of the corporate form may be, in the case of small corporations, more theoretical than real.

## Fiscal Year

A firm's **fiscal year** is the annual period used for reporting to owners, the government, and others. Many firms select the calendar year as their fiscal year, but other 12-month periods can also be selected. Some firms select a reporting period ending on a date when inventories will be relatively low or business activity will be slow because this facilitates the process of preparing financial statements.

Many firms select fiscal periods that relate to the pace of their business activity. Food retailers, for example, have a weekly operating cycle, and many of these firms select a 52-week fiscal year (with a 53-week fiscal year every five or six years so their year-end remains near the same date every year). *Intel Corporation* has adopted this strategy; note, on page 000 in the appendix, that Intel's fiscal year ends on the last Saturday in December each year. (The next 53-week year will end on December 31, 2011.)

For internal reporting purposes, many firms use periods other than the month (e.g., 13 four-week periods). The firm wants the same number of operating days in each period so that comparisons between the same periods of different years can be made without having to consider differences in the number of operating days in the respective periods.



## Business in Practice

August 31, 2011, and for the fiscal year (see Business in Practice—Fiscal Year) ended on that date are presented in Exhibits 2-1 through 2-4.

As you look at these financial statements, you will probably have several questions concerning the nature of specific accounts and how the numbers are computed. For now, concentrate on the explanations and definitions that are appropriate and inescapable, and notice especially the characteristics of each financial statement. Many of your questions about specific accounts will be answered in subsequent chapters that explain the individual statements and their components in detail.

## Explanations and Definitions

**Balance Sheet.** The **balance sheet** is a listing of the organization's assets, liabilities, and owners' equity *at a point in time*. In this sense, the balance sheet is like a snapshot of the organization's financial position, frozen at a specific point in time. The balance sheet is sometimes called the **statement of financial position** because it summarizes the entity's resources (assets), obligations (liabilities), and owners' claims (owners' equity). The balance sheet for Main Street Store, Inc., at August 31, 2011, the end of the firm's first year of operations, is illustrated in Exhibit 2-1.

Notice the two principal sections of the balance sheet that are shown side by side: (1) assets and (2) liabilities and owners' equity. Observe that the dollar total of \$320,000 is the same for each side. This equality is sometimes referred to as the **accounting equation** or the **balance sheet equation**. It is the equality, or balance, of these two amounts from which the term *balance sheet* is derived.

$$\begin{array}{lcl} \text{Assets} & = & \text{Liabilities} + \text{Owners' equity} \\ \$320,000 & = & \$117,000 + \$203,000 \end{array}$$

Now we will provide some of those appropriate and inescapable definitions and explanations:

“**Assets** are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.”<sup>1</sup> In brief, assets represent the amount of

### LO 3

Understand the meaning and usefulness of the accounting equation.

<sup>1</sup> FASB, *Statement of Financial Accounting Concepts No. 6*, “Elements of Financial Statements” (Stamford, CT, 1985), para. 25. Copyright © by the Financial Accounting Standards Board, High Ridge Park, Stamford, CT 06905, U.S.A. Quoted with permission. Copies of the complete document are available from the FASB.

**Exhibit 2-1**

## Balance Sheet

MAIN STREET STORE, INC. Balance Sheet August 31, 2011			
Assets		Liabilities and Owners' Equity	
Current assets:		Current liabilities:	
Cash .....	\$ 34,000	Accounts payable .....	\$ 35,000
Accounts receivable .....	80,000	Other accrued liabilities .....	12,000
Merchandise inventory .....	170,000	Short-term debt .....	20,000
Total current assets .....	\$284,000	Total current liabilities .....	\$ 67,000
Plant and equipment:		Long-term debt .....	50,000
Equipment .....	40,000	Total liabilities .....	\$117,000
Less: Accumulated depreciation .....	(4,000)	Owners' equity .....	203,000
Total assets .....	<u>\$320,000</u>	Total liabilities and owners' equity .....	<u>\$320,000</u>

resources *owned* by the entity. Assets are frequently tangible; they can be seen and handled (like cash, merchandise inventory, or equipment), or evidence of their existence can be observed (such as a customer's acknowledgment of receipt of merchandise and the implied promise to pay the amount due when agreed upon—an account receivable).

“**Liabilities** are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.”<sup>2</sup> In brief, liabilities are amounts *owed* to other entities. For example, the accounts payable arose because suppliers shipped merchandise to Main Street Store, Inc., and this merchandise will be paid for at some point in the future. In other words, the supplier has an “ownership right” in the merchandise until it is paid for and thus has become a creditor of the firm by supplying merchandise on account.

**Owners' equity** is the ownership right of the owner(s) of the entity in the assets that remain after deducting the liabilities. (A car or house owner uses this term when referring to his or her **equity** as the market value of the car or house less the loan or mortgage balance.) Owners' equity is sometimes referred to as **net assets**. This can be shown by rearranging the basic accounting equation:

$$\begin{aligned}\text{Assets} - \text{Liabilities} &= \text{Owner' equity} \\ \text{Net assets} &= \text{Owner' equity}\end{aligned}$$

Another term sometimes used when referring to owners' equity is **net worth**. However, this term is misleading because it implies that the net assets are “worth” the amount reported on the balance sheet as owners' equity. *Financial statements prepared according to generally accepted principles of accounting do not purport to show the current market value of the entity's assets, except in a few restricted cases.*

### What Does It Mean?

Answers on  
page 57

2. What does it mean to refer to a balance sheet for the year ended August 31, 2011?
3. What does it mean when a balance sheet has been prepared for an organization?

<sup>2</sup>Ibid., para. 35.

Each of the individual assets and liabilities reported by Main Street Stores, Inc., warrants a brief explanation. Each account (*caption* in the financial statements) will be discussed in more detail in later chapters. Your task at this point is to achieve a broad understanding of each account and to make sense of its classification as an asset or liability.

**Cash** represents cash on hand and in the bank or banks used by Main Street Store, Inc. If the firm had made any temporary cash investments to earn interest, these marketable securities probably would be shown as a separate asset because these funds are not as readily available as cash.

**Accounts receivable** represent amounts due from customers who have purchased merchandise on credit and who have agreed to pay within a specified period or when billed by Main Street Store, Inc.

**Merchandise inventory** represents the cost to Main Street Store, Inc., of the merchandise that it has acquired but not yet sold.

**Equipment** represents the cost to Main Street Store, Inc., of the display cases, racks, shelving, and other store equipment purchased and installed in the rented building in which it operates. The building is not shown as an asset because Main Street Store, Inc., does not own it.

**Accumulated depreciation** represents the portion of the cost of the equipment that is estimated to have been used up in the process of operating the business. Note that one-tenth (\$4,000/\$40,000) of the cost of the equipment has been depreciated. From this relationship, one might assume that the equipment is estimated to have a useful life of 10 years because this is the balance sheet at the end of the firm's first year of operations. **Depreciation** in accounting is the process of spreading the cost of an asset over its useful life to the entity—it is *not* an attempt to recognize the economic loss in value of an asset because of its age or use.

**Accounts payable** represent amounts owed to suppliers of merchandise inventory that was purchased on credit and will be paid within a specific period of time.

**Other accrued liabilities** represent amounts owed to various creditors, including any wages owed to employees for services provided to Main Street Store, Inc., through August 31, 2011, the balance sheet date.

**Short-term debt** represents amounts borrowed, probably from banks, that will be repaid within one year of the balance sheet date.

**Long-term debt** represents amounts borrowed from banks or others that will not be repaid within one year from the balance sheet date.

**Owners' equity**, shown as a single amount in Exhibit 2-1, is explained in more detail later in this chapter in the discussion of the statement of changes in owners' equity.

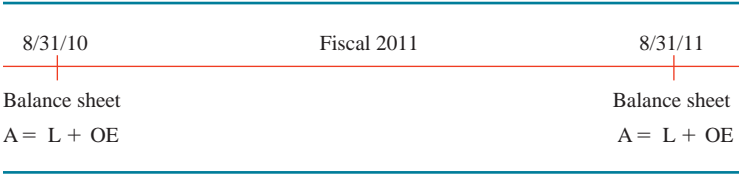
Notice that in Exhibit 2-1 some assets and liabilities are classified as "current." **Current assets** are cash and other assets that are likely to be converted into cash or used to benefit the entity within one year, and **current liabilities** are those liabilities that are likely to be paid with cash within one year of the balance sheet date. In this example, it is expected that the accounts receivable from the customers of Main Street Store, Inc., will be collected within a year and that the merchandise inventory will be sold within a year of the balance sheet date. This time-frame classification is important and, as will be explained later, is used in assessing the entity's ability to pay its obligations when they come due.

To summarize, the balance sheet is a listing of the entity's assets, liabilities, and owners' equity. A balance sheet can be prepared as of any date but is most frequently prepared as of the end of a fiscal reporting period (e.g., month-end or year-end). The

**LO 4**

Understand the meaning of each of the captions on the financial statements illustrated in Exhibits 2-1 through 2-4.

balance sheet as of the end of one period is the balance sheet as of the beginning of the next period. This can be illustrated on a time line as follows:



On the time line, Fiscal 2011 refers to the 12 months during which the entity carried out its economic activities.

**Income Statements.** The principal purpose of the **income statement**, or **statement of earnings**, or **profit and loss statement**, or **statement of operations**, is to answer the question “Did the entity operate at a **profit** for the period of time under consideration?” The question is answered by first reporting **revenues** from the entity’s operating activities (such as selling merchandise) and then subtracting the **expenses** incurred in generating those revenues and operating the entity. **Gains** and **losses** are also reported on the income statement. Gains and losses result from nonoperating activities, rather than from the day-to-day operating activities that generate revenues and expenses. The income statement reports results for a *period of time*, in contrast to the balance sheet focus on a single date. In this sense, the income statement is more like a movie than a snapshot; it depicts the results of activities that have occurred during a period of time.

The income statement for Main Street Store, Inc., for the year ended August 31, 2011, is presented in Exhibit 2-2. Notice that the statement starts with **net sales** (which are revenues) and that the various expenses are subtracted to arrive at **net income** in total and per share of common stock outstanding. Net income is the profit for the period; if expenses exceed net sales, a net loss results. The reasons for reporting earnings per share of common stock outstanding, and the calculation of this amount, will be explained in Chapter 9.

Now look at the individual captions on the income statement. Each warrants a brief explanation, which will be expanded in subsequent chapters. Your task at this point is to make sense of how each item influences the determination of net income.

**Exhibit 2-2**  
Income Statement

MAIN STREET STORE, INC. Income Statement For the Year Ended August 31, 2011	
Net sales.....	\$1,200,000
Cost of goods sold.....	850,000
Gross profit.....	\$ 350,000
Selling, general, and administrative expenses.....	311,000
Income from operations.....	\$ 39,000
Interest expense .....	9,000
Income before taxes .....	\$ 30,000
Income taxes .....	12,000
Net income.....	\$ 18,000
Earnings per share of common stock outstanding .....	\$ 1.80



*Net sales* represent the amount of sales of merchandise to customers, less the amount of sales originally recorded but canceled because the merchandise was subsequently returned by customers for one reason or another (wrong size, spouse didn't want it, and so on). The sales amount is frequently called *sales revenue*, or just *revenue*. Revenue results from selling a product or service to a customer.

**Cost of goods sold** represents the total cost of merchandise removed from inventory and delivered to customers as a result of sales. This is shown as a separate expense because of its significance and because of the desire to show gross profit as a separate item. A frequently used synonym is *cost of sales*.

**Gross profit** is the difference between net sales and cost of goods sold and represents the seller's maximum amount of "cushion" from which all other expenses of operating the business must be met before it is possible to have net income. Gross profit (sometimes referred to as *gross margin*) is shown as a separate item because it is significant to both management and nonmanagement readers of the income statement. The uses made of this amount will be explained in subsequent chapters.

*Selling, general, and administrative expenses* represent the operating expenses of the entity. In some income statements, these expenses will not be lumped together as in Exhibit 2-2 but will be reported separately for each of several operating expense categories, such as wages, advertising, and depreciation.

**Income from operations** represents one of the most important measures of the firm's activities. Income from operations (or operating income or earnings from operations) can be related to the assets available to the firm to obtain a useful measure of management's performance. A method of doing this is explained in Chapter 3.

*Interest expense* represents the cost of using borrowed funds. This item is reported separately because it is a function of how assets are financed, not how assets are used.

*Income taxes* are shown after all of the other income statement items have been reported because income taxes are a function of the firm's income before taxes.

**Earnings per share of common stock outstanding** is reported as a separate item at the bottom of the income statement because of its significance in evaluating the market value of a share of common stock. This measure, which is often referred to simply as *EPS*, will be explained in more detail in Chapter 9.

To review, the income statement summarizes the entity's income- (or loss-) producing activities *for a period of time*. Transactions that affect the income statement will also affect the balance sheet. For example, a sale made for cash increases sales revenue on the income statement and increases cash, an asset on the balance sheet. Likewise, wages earned by employees during the last week of the current year to be paid early in the next year are an expense of the current year. These wages will be deducted from revenues in the income statement and are considered a liability reported on the balance sheet at the end of the year. Thus the income statement is a link between the balance sheets at the beginning and end of the year. How this link is made is explained in the next section, which describes the statement of changes in owners' equity. The time line presented earlier can be expanded as follows:

8/31/10	Fiscal 2011	8/31/11
Balance sheet	Income statement for the year	Balance sheet
	Revenues	
	– Expenses	
A = L + OE	Net income	A = L + OE



**Exhibit 2-3**

Statement of Changes  
in Owners' Equity

MAIN STREET STORE, INC. Statement of Changes in Owner's Equity For the Year Ended August 31, 2011	
<b>Paid-In Capital:</b>	
Beginning balance .....	\$ -0-
Common stock, par value, \$10; 50,000 shares authorized 10,000 shares issued and outstanding .....	100,000
Additional paid-in capital .....	90,000
Balance, August 31, 2011 .....	<u>\$190,000</u>
<b>Retained Earnings:</b>	
Beginning balance .....	\$ -0-
Net income for the year .....	18,000
Less: Cash dividends of \$.50 per share. ....	(5,000)
Balance, August 31, 2011 .....	<u>\$ 13,000</u>
Total owners' equity .....	<u>\$203,000</u>

**Statement of Changes in Owners' Equity.** The statement of changes in owners' equity, or statement of changes in capital stock, or statement of changes in retained earnings, like the income statement, has a *period of time* orientation. This statement shows the detail of owners' equity and explains the changes that occurred in the components of owners' equity during the year.

Exhibit 2-3 illustrates this statement for Main Street Store, Inc., for the year ended August 31, 2011. Remember that these are the results of Main Street Store's first year of operations, so the beginning-of-the-year balances are zero. On subsequent years' statements, the beginning-of-the-year amount is the ending balance from the prior year.

Notice in Exhibit 2-3 that owners' equity is made up of two principal components: **paid-in capital** and **retained earnings**. These items are briefly explained here and are discussed in more detail in Chapter 8.

*Paid-in capital* represents the total amount invested in the entity by the owners—in this case, the stockholders. When the stock issued to the owners has a **par value** (see Business in Practice—Par Value), there will usually be two categories of paid-in capital: common stock and additional paid-in capital.

**Common stock** reflects the number of shares authorized by the corporation's charter, the number of shares that have been issued to stockholders, and the number of shares that are held by the stockholders. When the common stock has a par value or stated value, the amount shown for common stock in the financial statements will always be the par value or stated value multiplied by the number of shares issued. If the common stock does not have a par value or stated value, the amount shown for common stock in the financial statements will be the total amount invested by the owners.

**Additional paid-in capital** is the difference between the total amount invested by the owners and the par value or stated value of the stock. (If no-par-value stock without a stated value is issued to the owners, there won't be any additional paid-in capital because the total amount paid in, or invested, by the owners will be shown as common stock.)

Retained earnings is the second principal category of owners' equity, and it represents the cumulative net income of the entity that has been retained for use in the business. **Dividends** are distributions of earnings that have been made to the owners, so these reduce retained earnings. If retained earnings has a negative balance because



**Exhibit 2-4**Statement of Cash  
Flows

MAIN STREET STORE, INC. Statement of Cash Flows For the Year Ended August 31, 2011	
<b>Cash Flows from Operating Activities:</b>	
Net income . . . . .	\$ 18,000
Add (deduct) items not affecting cash:	
Depreciation expense . . . . .	4,000
Increase in accounts receivable . . . . .	(80,000)
Increase in merchandise inventory . . . . .	(170,000)
Increase in current liabilities . . . . .	67,000
Net cash used by operating activities . . . . .	<u>\$ (161,000)</u>
<b>Cash Flows from Investing Activities:</b>	
Cash paid for equipment . . . . .	<u>\$ (40,000)</u>
<b>Cash Flows from Financing Activities:</b>	
Cash received from issue of long-term debt . . . . .	\$ 50,000
Cash received from sale of common stock . . . . .	190,000
Payment of cash dividend on common stock . . . . .	<u>(5,000)</u>
Net cash provided by financing activities . . . . .	\$ 235,000
Net increase in cash for the year . . . . .	<u><u>\$ 34,000</u></u>

change in cash. The statement of cash flows is described in detail in Chapter 9. For now, make sense of the three principal activity groups that cause cash to change, and see how the amounts on this statement relate to the balance sheet in Exhibit 2-1.

The statement of cash flows for Main Street Store, Inc., for the year ended August 31, 2011, is illustrated in Exhibit 2-4. Notice that this statement, like the income statement and statement of changes in owners' equity, is *for a period of time*. Notice also the three activity categories: operating activities, investing activities, and financing activities.

*Cash flows from operating activities* are shown first, and net income is the starting point for this measure of cash flow. Using net income also directly relates the income statement (see Exhibit 2-2) to the statement of cash flows. Next, reconciling items are considered (i.e., items that must be added to or subtracted from net income to arrive at cash flows from operating activities).

**Depreciation expense** is added back to net income because, even though it was deducted as an expense in determining net income, *depreciation expense did not require the use of cash*. Remember—depreciation in accounting is the process of spreading the cost of an asset over its estimated useful life.

The increase in accounts receivable is deducted because this reflects sales revenues, included in net income, that have not yet been collected in cash.

The increase in merchandise inventory is deducted because cash was spent to acquire the increase in inventory.

The increase in current liabilities is added because cash has not yet been paid for this amount of products and services that have been received during the current fiscal period.

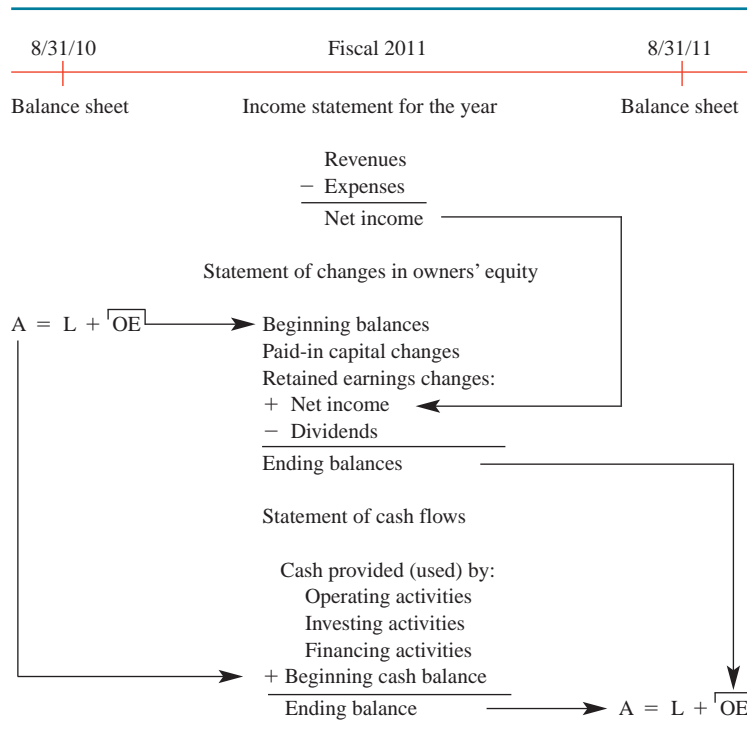
*Cash flows from investing activities* show the cash used to purchase long-lived assets. You should find the increase in equipment in the balance sheet (Exhibit 2-1), which shows the cost of the equipment owned at August 31, 2011. Because this is the first year of the firm's operations, the equipment purchase required the use of \$40,000 during the year.

*Cash flows from financing activities* include amounts raised from the sale of long-term debt and common stock, and dividends paid on common stock. You should find

each of these financing amounts in the balance sheet (Exhibit 2-1) or the statement of changes in owners' equity (Exhibit 2-3). For example, the \$190,000 received from the sale of stock is shown on the statement of changes in owners' equity (Exhibit 2-3) as the increase in paid-in capital during the year.

The net increase in cash for the year of \$34,000 is the amount of cash in the August 31, 2011, balance sheet. Check this out. This should make sense because the firm started its business during September 2010, so it had no cash to begin with.

The statement of cash flows results in a further expansion and modification of the time-line model:



4. What does it mean when a business owner says that she needs to look at her firm's set of four financial statements to really understand its financial position and results of operations?
5. What does it mean when a company that has a high net income doesn't have enough cash to pay its bills?

**What Does It Mean?**  
Answers on  
pages 57-58

## Comparative Statements in Subsequent Years

The financial statements presented on the previous pages for Main Street Store, Inc., show data as of August 31, 2011, and for the year then ended. Because this was the first year of the firm's operations, comparative financial statements are not possible. In subsequent years, however, comparative statements for the current year and the prior year should be presented so that users of the data can more easily spot changes in the firm's financial position and in its results of operations. Some companies present data for two prior years in their financial statements. Most companies will include

selected data from their balance sheets and income statements for at least 5 years, and sometimes for up to 25 years, as supplementary information in their annual report to stockholders. Intel Corporation's five-year selected financial data, which appear on page 00 in the appendix, illustrate the firm's consistency and financial stability.

## Illustration of Financial Statement Relationships

Exhibit 2-5 uses the financial statements of Main Street Store, Inc., to illustrate the financial statement relationships just discussed. Note that in Exhibit 2-5, the August 31, 2010, balance sheet has no amounts because Main Street Store, Inc., started business in September 2010. As you study this exhibit, note especially that net income for the year was an increase in retained earnings and is one of the reasons retained earnings changed during the year.

In subsequent chapters, the relationship between the balance sheet and income statement will be presented using the following diagram:

Balance sheet	Income Statement
Assets = Liabilities + Owners' equity	← Net Income = Revenues – Expenses

The arrow from net income in the income statement to owners' equity in the balance sheet indicates that net income affects retained earnings, which is a component of owners' equity.

The following examples also illustrate the relationships within and between the principal financial statements. Using the August 31, 2011, Main Street Store, Inc., data for assets and liabilities in the balance sheet equation of  $A = L + OE$ , owners' equity at August 31, 2011, can be calculated:

$$\begin{aligned} A &= L + OE \\ \$320,000 &= \$117,000 + OE \\ \$203,000 &= OE \end{aligned}$$

Remember, another term for owners' equity is *net assets*. This is shown clearly in the previous calculation because owners' equity is the difference between assets and liabilities.

Now suppose that during the year ended August 31, 2012, total assets increased \$10,000, and total liabilities decreased \$3,000. What was owners' equity at the end of the year? There are two ways of solving the problem. First, focus on the changes in the elements of the balance sheet equation:

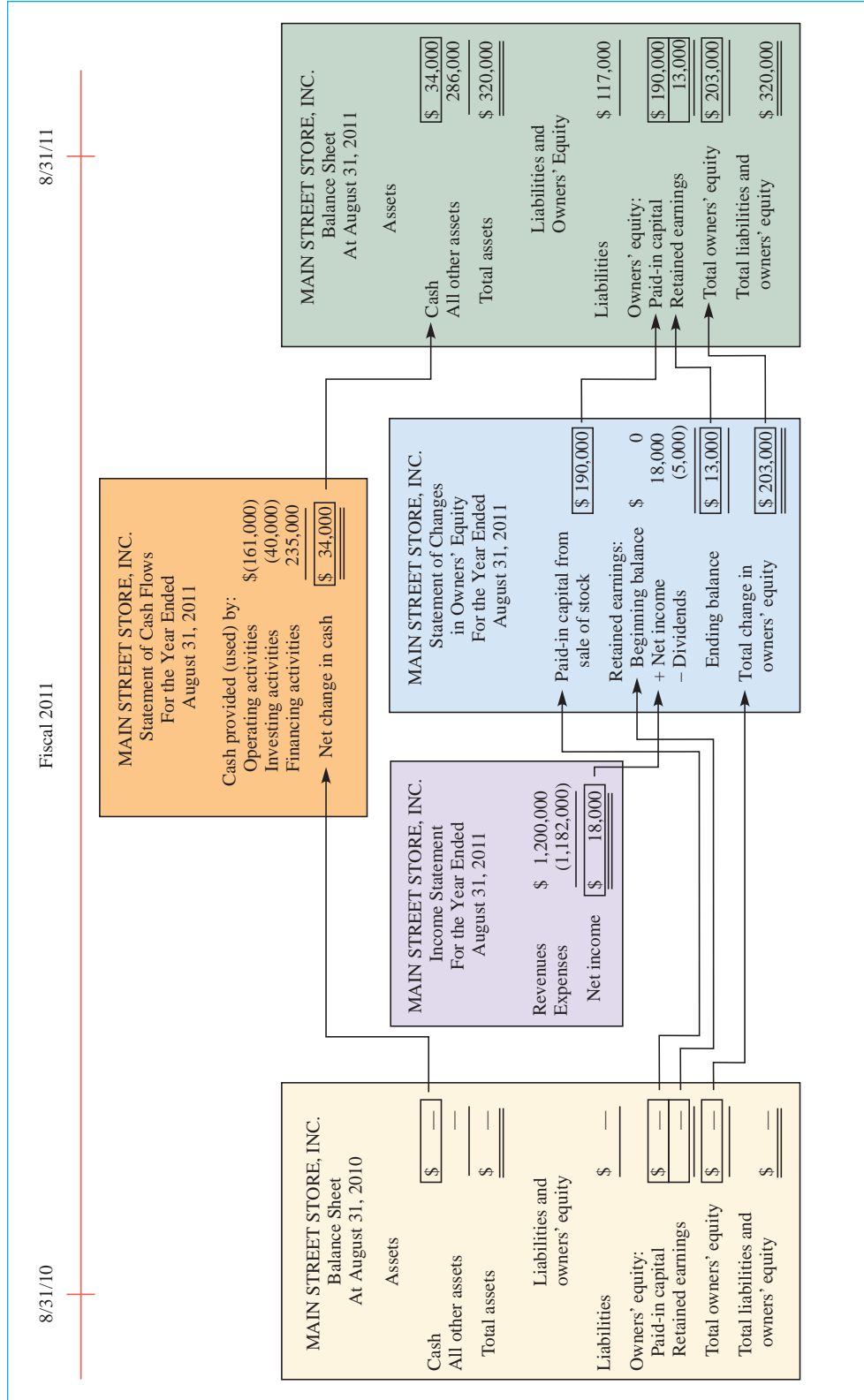
$$\begin{aligned} A &= L + OE \\ \text{Change: } +10,000 &= -3,000 + ? \end{aligned}$$

It is clear that for the equation to stay in balance, owners' equity must have increased by \$13,000. Because owners' equity was \$203,000 at the beginning of the year, it must have been \$216,000 at the end of the year.

The second approach to solving the problem is to calculate the amount of assets and liabilities at the end of the year and then solve for owners' equity at the end of the year, as follows:

$$\begin{array}{rcl} A & = & L + OE \\ \text{Beginning: } 320,000 & = & 117,000 + 203,000 \\ \text{Change: } +10,000 & = & -3,000 + ? \\ \hline \text{End: } 330,000 & = & 114,000 + ? \end{array}$$

# **Exhibit 2-5** Financial Statement Relationships



The ending owners' equity or net assets is  $\$330,000 - \$114,000 = \$216,000$ . Because ending owners' equity is  $\$216,000$ , it increased  $\$13,000$  during the year from August 31, 2011, to August 31, 2012.

Assume that during the year ended August 31, 2012, the owners invested an additional  $\$8,000$  in the firm, and that dividends of  $\$6,000$  were declared. How much net income did the firm have for the year ended August 31, 2012? Recall that net income is one of the items that affects the retained earnings component of owners' equity. What else affects retained earnings? That's right—dividends. Because owners' equity increased from  $\$203,000$  to  $\$216,000$  during the year, and the items causing that change were net income, dividends, and the additional investment by the owners, the amount of net income can be calculated as follows:

Owners' equity, beginning of year . . . . .	\$203,000
Increase in paid-in capital from additional investment by owners . . . . .	8,000
Net income . . . . .	?
Dividends . . . . .	<u>−6,000</u>
Owners' equity, end of year . . . . .	\$216,000

Solving for the unknown shows that net income was equal to  $\$11,000$ .

An alternative solution to determine net income for the year involves focusing on just the *changes* in owners' equity during the year, as follows:

Increase in paid-in capital from additional investment by owners . . . . .	\$ 8,000
Net income . . . . .	?
Dividends . . . . .	<u>−6,000</u>
Change in owners' equity for the year . . . . .	\$13,000

Again, solving for the unknown, we find that net income was equal to  $\$11,000$ .

The important points to remember here are:

- The balance sheet shows the amounts of assets, liabilities, and owners' equity at a point in time.
- The balance sheet equation must always be in balance.
- The income statement shows net income for a period of time.
- The retained earnings component of owners' equity changes over a period of time as a result of the firm's net income (or loss) and dividends for that period of time.

### What Does It Mean?

Answer on  
page 58

6. What does it mean to say that the balance sheet must be in balance after every transaction even though a lot of transactions affect the income statement?



Many financial statement relationships, like those illustrated here for the balance sheet and statement of changes in owners' equity, can be expressed as arithmetic models or formulas. Solving for unknown amounts will reinforce your understanding of the components and relationships depicted in these models. We suggest that you use the following problem-solving approach: (1) select the appropriate model to be applied, (2) write down the captions or components of the model, (3) plug all known amounts into the model, and (4) solve for the missing amount. This "select (the model), write, plug, and solve" technique is applicable to many of the problems that will be assigned in this course and may be utilized in other courses and situations as well.



### Study Suggestion

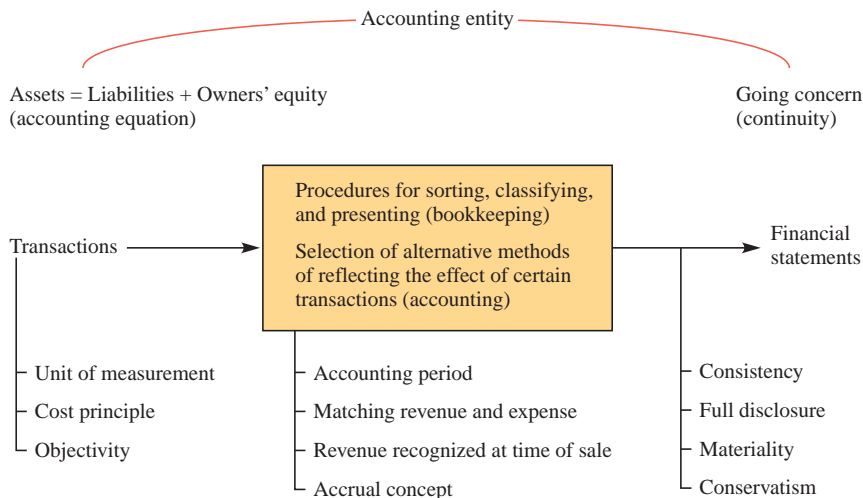
## Accounting Concepts and Principles

To understand the kinds of decisions and informed judgments that can be made from the financial statements, it is appropriate to understand some of the broad concepts and principles of accounting that have become generally accepted for financial accounting and reporting purposes. The terms *concepts* and *principles* are used interchangeably here. Some of these ideas relate directly to the financial accounting concepts introduced in Chapter 1, and others relate to the broader notion of generally accepted accounting principles. Again, it is important to recognize that these concepts and principles are more like practices that have been generally agreed upon over time than hard-and-fast rules or basic laws such as those encountered in the physical sciences.

These concepts and principles can be related to the basic model of the flow of data from transactions to financial statements illustrated earlier and shown here:

### LO 5

Understand the broad, generally accepted concepts and principles that apply to the accounting process.



## Concepts/Principles Related to the Entire Model

The basic accounting equation described earlier in this chapter is the mechanical key to the entire financial accounting process because the equation must be in balance after every transaction has been recorded in the accounting records. The method for recording transactions and maintaining this balance will be illustrated in Chapter 4.

*Accounting entity* refers to the entity for which the financial statements are being prepared. The entity can be a proprietorship, partnership, corporation, or even a group



### Study Suggestion

This chapter, titled “Financial Statements and Accounting Concepts/Principles,” presents two sets of interrelated topics that are themselves related. As illustrated in Exhibit 2-5, individual financial statements are most meaningful when considered as part of an integrated set of financial statements presented by a firm. Likewise, the individual concepts and principles discussed in this section of the chapter are most meaningful when considered in relation to each other. The challenge that lies ahead (in the financial accounting part of this book) is for you to see logical connections between the end-product financial statements and the underlying concepts and principles upon which they are based. Our suggestion? Bookmark Exhibit 2-5 on page 45 and the concepts/principles model shown on page 47. Learn the terminology presented in each of these illustrations and refer back to these pages as you encounter difficulties in subsequent chapters. You will be surprised at how far this basic knowledge will carry you.



### Business in Practice

#### Parent and Subsidiary Corporations

It is not unusual for a corporation that wants to expand its operations to form a separate corporation to carry out its plans. In such a case, the original corporation owns all of the stock of the new corporation; it has become the “parent” of a “**subsidiary**.” One parent may have several subsidiaries, and the subsidiaries themselves may be parents of subsidiaries. It is not necessary for the parent to own 100% of the stock of another corporation for the parent–subsidiary relationship to exist. If one corporation owns more than half of the stock of another, it is presumed that the majority owner can exercise enough control to create a parent–subsidiary relationship. When a subsidiary is not wholly owned, the other stockholders of the subsidiary are referred to as *minority stockholders*.

In most instances, the financial statements issued by the parent corporation will include the assets, liabilities, owners’ equity, revenues, expenses, and gains and losses of the subsidiaries. Financial statements that reflect the financial position, results of operations, and cash flows of a parent and one or more subsidiaries are called *consolidated financial statements*.

The fact that one corporation is a subsidiary of another is frequently transparent to the general public. For example, [Frito-Lay Company](#), [The Quaker Oats Company](#), and [Tropicana Products, Inc.](#), are all subsidiaries of [PepsiCo Inc.](#), but that relationship is usually irrelevant to users of the companies’ products.

of corporations (see Business in Practice—Parent and Subsidiary Corporations). The entity for which the accounting is being done is defined by the accountant; even though the entities may be related (such as an individual and the business she owns), the accounting is done for the defined entity.

The **going concern concept** refers to the presumption that the entity will continue to operate in the future—that it is not being liquidated. This continuity assumption is necessary because the amounts shown on the balance sheet for various assets do not reflect the liquidation value of those assets.

### Concepts/Principles Related to Transactions

In the United States, the dollar is the *unit of measurement* for all transactions. No adjustment is made for changes in the purchasing power of the dollar. No attempt is made to reflect qualitative economic factors in the measurement of transactions.

The *cost principle* refers to the fact that transactions are recorded at their original (historical) cost to the entity as measured in dollars. For example, if a parcel of land

were purchased by a firm for \$8,600 even though an appraisal showed the land to be worth \$10,000, the purchase transaction would be reflected in the accounting records and financial statements at its cost of \$8,600. If the land is still owned and being used 15 years later, even though its market value has increased to \$80,000, it continues to be reported in the balance sheet at its original cost of \$8,600.

*Objectivity* refers to accountants' desire to have a given transaction recorded the same way in all situations. This objective is facilitated by using the dollar as the unit of measurement and by applying the cost principle. As previously stressed, there are transactions for which the exercise of professional judgment could result in alternative recording results. These alternatives will be illustrated in subsequent chapters.

## Concepts/Principles Related to Bookkeeping Procedures and the Accounting Process

These concepts/principles relate to the *accounting period*—that is, the period of time selected for reporting results of operations and changes in financial position. Financial position will be reported at the end of this period (and the balance sheet at the beginning of the period will probably be included with the financial statements). For most entities, the accounting period will be one year in length.

*Matching revenue and expense* is necessary if the results of the firm's operations are to reflect accurately its economic activities during the period. The **matching concept** does not mean that revenues and expenses for a period are equal. Revenue is not earned without effort (businesses do not receive birthday gifts), and expenses are the measure of the economic efforts exerted to generate revenues. A fair presentation of the results of a firm's operations during a period of time requires that all expenses incurred in generating that period's revenues be deducted from the revenues earned. This results in an accurate measure of the net income or net loss for the period. This seems like common sense, but as we shall see, there are alternative methods of determining some of the expenses to be recognized in any given period. This concept of matching revenue and expense is very important and will be referred to again and again as accounting practices are discussed in the following chapters.

*Revenue is recognized at the time of sale*, which is when title to the product being sold passes from the seller to the buyer or when the services involved in the transaction have been performed. Passing of legal ownership (title) is the critical event, not the cash payment from buyer to seller.

**Accrual accounting** uses the *accrual concept* and results in recognizing revenue at the point of sale and recognizing expenses as they are incurred, even though the cash receipt or payment occurs at another time or in another accounting period. Thus many activities of the firm will involve two transactions: one that recognizes the revenue or expense and the other that reflects the receipt or payment of cash. The use of accrual procedures accomplishes much of the matching of revenues and expenses because most transactions between business firms (and between many firms and individuals) involve purchase/sale at one point in time and cash payment/receipt at some other point.

The results of accrual accounting frequently must be related to data in the statement of cash flows to understand an entity's past performance. This is illustrated in Business in Practice—Cash Flows versus Accrual Accounting.

The financial statement user relies on these concepts and principles related to the accounting period when making judgments and informed decisions about an entity's financial position and results of operations.

### LO 6

Understand why investors must carefully consider cash flow information in conjunction with accrual accounting results.



## Business in Practice

### Cash Flows versus Accrual Accounting

Despite the conceptual appeal of accrual accounting as the preferred (i.e., generally accepted) method of measuring income, many financial analysts also closely examine a company's recent cash flow history in making their predictions about future earnings prospects. Cash flows are highly reliable because they are *real*—in an economic sense they have already happened—and are less subject to manipulation by management to achieve short-term results or to confuse investors about the company's profitability for the period. *(All accounting measures, including cash flows and net income, are historic in nature. Yet there are a number of alternative methods that can be used—at least temporarily—to accelerate the reporting of revenues or to defer the reporting of expenses and thus manipulate net income of the current period. Some of these methods will be discussed in Chapters 5–10.)*

Enron provided a dramatic example of the difference between cash flows and accrual accounting income. The total reported net income during the six quarters leading up to Enron's demise was \$1,808 million, while the total operating cash flows during this period were \$3,442 million, broken down as follows:

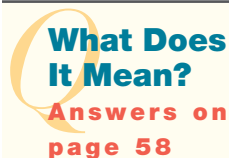
	Quarters in 2000 and 2001 (amounts in millions)*					
	2Q2001	1Q2001	4Q2000	3Q2000	2Q2000	1Q2000
Net income	\$404	\$425	\$ 182	\$170	\$289	\$338
Operating cash flows	−873	−464	4,652	674	−90	−457

Although this erratic (even bizarre) cash flow pattern did not provide any immediate answers to Enron's financial problems, it certainly should have suggested that something wasn't right. Financial fraud is always easier to spot after the fact; yet it's hard to imagine that basic financial information of this nature, which was readily available to the investing public, would have escaped the attention of so many financial analysts.

What should you take away from the Enron example? At this point, understand that decision makers can benefit by giving proper attention to *all* information communicated in the financial statements (balance sheet, income statement, statement of cash flows, and statement of changes in owners' equity). Accrual accounting data should be considered together with cash flow data; each stream of data tells a story about the company's past. It's up to you to decide which story is most relevant to the decision being made.

\*These data are provided in a Motley Fool article titled "Lessons from the Enron Debacle," which can be accessed by using the search facility at [www.fool.com](http://www.fool.com). You will need to register as a member if you have not done so previously, but the service is free.

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7. What does matching of revenue and expense in the income statement mean?
8. What does the accrual concept mean?

### Concepts/Principles Related to Financial Statements

*Consistency* in financial reporting is essential if meaningful trend comparisons are to be made using an entity's financial statements for several years. It is inappropriate to change from one generally accepted alternative of accounting for a particular type of

transaction to another generally accepted method, unless both the fact that the change has been made and the effect of the change on the financial statements are explicitly described in the financial statements or the accompanying notes and explanations.

*Full disclosure* means that the financial statements and notes or explanations should include all necessary information to prevent a reasonably astute user of the financial statements from being misled. This is a tall order—one that the Securities and Exchange Commission has helped to define over the years. This requirement for full disclosure is one reason that the notes and explanations are usually considered an integral part of the financial statements.

*Materiality* means that absolute exactness, even if that idea could be defined, is not necessary in the amounts shown in the financial statements. Because of the numerous estimates involved in accounting, amounts reported in financial statements may be approximate, but they will not be “wrong” enough to be misleading. The financial statements of publicly owned corporations usually show amounts rounded to the nearest thousand, hundred thousand, or even million dollars. This rounding does not impair the informational content of the financial statements and probably makes them easier to read. A management concept related to materiality is the cost–benefit relationship. Just as a manager would not spend \$500 to get \$300 worth of information, the incremental benefit of increased accuracy in accounting estimates is frequently not worth the cost of achieving the increased accuracy.

*Conservatism* in accounting relates to making judgments and estimates that result in lower profits and asset valuation estimates rather than higher profits and asset valuation estimates. Accountants try to avoid wishful thinking or pie-in-the-sky estimates that could result in overstating profits for a current period. This is not to say that accountants always look at issues from a gloom-and-doom viewpoint; rather, they seek to be realistic but are conservative when in doubt.

## Limitations of Financial Statements

Financial statements report quantitative economic information; they do not reflect qualitative economic variables. Thus the value to the firm of a management team or of the morale of the workforce is not included as a balance sheet asset because it cannot be objectively measured. Such qualitative attributes of the firm are frequently relevant to the decisions and informed judgments that the financial statement user is making, but they are not communicated in the financial statements. It’s unfortunate that the accounting process does not capture these kinds of data because often a company’s human resources and information resources are its most valuable assets. Many highly valued Internet and high-tech companies have little, if any, fixed assets or inventory—sometimes the “product” they intend to offer comes in the form of a service that has not yet made it through the research, design, and testing phases. In fact, a common saying about such companies is that their assets “walk out the door every night.” The accounting profession is not yet comfortable with the idea of trying to measure these kinds of intangible assets, even though fairly reliable appraisal techniques are available, such as those endorsed in the Uniform Standards of Professional Appraisal Practice (USPAP).

As already emphasized, the cost principle requires assets to be recorded at their original cost. The balance sheet does not generally show the current market value or the replacement cost of the assets. Some assets are reported at the lower of their cost or market value, and in some cases market value may be reported parenthetically, but asset values are not generally increased to reflect current value. For example, the trademark of a firm has virtually no cost; its value has developed over the years as the firm has

### LO 7

Understand several limitations of financial statements.

successfully met customers' needs. Thus trademarks usually are excluded from the balance sheet listing of assets even though they clearly have economic value to the firm.

Estimates are used in many areas of accounting; when the estimate is made, about the only fact known is that the estimate is probably not equal to the "true" amount. It is hoped that the estimate is near the true amount (the concept of materiality); it usually is. For example, recognizing depreciation expense involves estimating both the useful life to the entity of the asset being depreciated and the probable salvage value of the asset to the entity when it is disposed of. The original cost minus the salvage value is the amount to be depreciated or recognized as expense over the asset's life. Estimates also must be made to determine pension expense, warranty costs, and numerous other expense and revenue items to be reflected in the current year's income statement because they relate to the economic activity of the current year. These estimates also affect balance sheet accounts. So even though the balance sheet balances to the penny, do not be misled by this aura of exactness. Accountants do their best to make their estimates as accurate as possible, but estimates are still estimates.

The principle of consistency suggests that an entity should not change from one generally accepted method of accounting for a particular item to another generally accepted method of accounting for the same item, but it is possible that two firms operating in the same industry may follow different methods. This means that *comparability* between firms may not be appropriate, or if comparisons are made, the effects of any differences between the accounting methods followed by the firms must be understood.

Related to the use of the original cost principle is the fact that financial statements are not adjusted to show the impact of inflation. Land acquired by a firm 50 years ago is still reported at its original cost, even though it may have a significantly higher current value because of inflation. Likewise, depreciation expense and the cost of goods sold—both significant expense elements of the income statement of many firms—reflect original cost, not replacement cost. This weakness is not significant when the rate of inflation is low, but the usefulness of financial statements is seriously impaired when the inflation rate rises to double digits. In 1980, the FASB began to require that large, publicly owned companies report certain inflation-adjusted data as supplementary information in the footnotes to the financial statements. In 1986, the FASB discontinued the requirement that this information be presented, but it encouraged further supplementary disclosures of the effects of inflation and changes in specific prices. This is a very controversial issue that will become more important if the rate of inflation rises significantly in the future.

Financial statements do not reflect **opportunity cost**, which is an economic concept relating to income forgone because an opportunity to earn income was not pursued. For example, if an individual or organization maintains a non-interest-bearing checking account balance that is \$300 more than that required to avoid any service charges, the opportunity cost associated with that \$300 is the interest that could otherwise be earned on the money if it had been invested. Financial accounting does not give formal recognition to opportunity cost; however, financial managers should be aware of the concept as they plan the utilization of the firm's resources.

### What Does It Mean?

Answer on  
page 58

9. What does it mean when some investors state that a corporation's published financial statements don't tell the whole story about a firm's financial position and results of operations?



To obtain the most recent annual report for your favorite company via the Internet, please refer to Exercise 1-1 (part b) for alternative methods of doing so. Intel's annual report now includes the entire 10-K report that is filed with the SEC each year, and thus is more than 100 pages long! As a result, the appendix material for Intel's 2008 Annual Report excludes certain sections that are not heavily referenced in this text. To obtain a complete copy of Intel's current annual report, please visit [www.intel.com](http://www.intel.com), click on "Investor Relations," and then follow the links to the relevant Adobe Acrobat files that can be saved and/or printed.

Technological advances in recent years have allowed publicly traded companies to make considerable improvements to their online reporting of financial results. In 2009 Intel took a giant step forward by using the SEC's default electronic delivery process of e-proxy materials, thus becoming the first company to provide both an online annual report (for 2008) and a proxy statement in well-formed HTML. By cutting its print run from 4.2 million to about 400,000 copies, Intel saved nearly \$2 million in printing and mailing costs, avoided 4 million pounds of carbon dioxide equivalent, and prevented the release of more than 13 million gallons of wastewater—in one year alone! Intel also became the first U.S. company to allow all shareholders to attend, ask questions, and cast their votes live on the Web at its 2009 annual meeting.



### Business on the Internet

## The Corporation's Annual Report

The annual report is the document distributed to shareholders that contains the reporting firm's financial statements for the fiscal year, together with the report of the external auditor's examination of the financial statements. The annual report document can be as simple as a transmittal letter from the president or chairman of the board of directors along with the financial statements, or as fancy as a glossy, 100-page booklet that showcases the firm's products, services, and personnel, as well as its financial results.

In addition to the financial statements described here and the explanatory comments (or footnotes or financial review) described more fully in Chapter 10, some other financial data are usually included in the annual report. Highlights for the year, including net revenues, diluted earnings per share, and return on average stockholders' equity, often appear inside the front cover or on the first page of the report. Intel Corporation also has highlighted various financial results in the Management's Discussion and Analysis section of its 2008 annual report (see the Business on the Internet box on this page for instructions about how to access these data). Most firms also include a historical summary of certain financial data for at least the past five years. This summary usually is located near the back of the annual report. Many specific aspects of Intel's annual report will be referred to in subsequent chapters.

### LO 8

Understand what a corporation's annual report is and why it is issued.

## Demonstration Problem

Visit the text Web site at [www.mhhe.com/marshall9e](http://www.mhhe.com/marshall9e) to view a demonstration problem for this chapter.



## Summary

Financial statements communicate economic information that helps individuals make decisions and informed judgments.

The bookkeeping and accounting processes result in an entity's numerous transactions with other entities being reflected in the financial statements. The financial statements presented by an entity are the balance sheet, income statement, statement of changes in owners' equity, and statement of cash flows.

The balance sheet is a listing of the entity's assets, liabilities, and owners' equity at a point in time. Assets are probable future economic benefits (things or claims against others) controlled by the entity. Liabilities are amounts owed by the entity. An entity's owners' equity is the difference between its assets and liabilities. This relationship is known as the *accounting equation*. Current assets are cash and those assets likely to be converted to cash or used to benefit the entity within one year of the balance sheet date, such as accounts receivable and inventories. Current liabilities are expected to be paid or otherwise satisfied within one year of the balance sheet date. The balance sheet as of the end of a fiscal period is also the balance sheet as of the beginning of the next fiscal period.

The income statement reports the results of an entity's operating activities for a period of time. Revenues are reported first, and expenses are subtracted to arrive at net income or net loss for the period.

The statement of changes in owners' equity describes changes in paid-in capital and retained earnings during the period. Retained earnings are increased by the amount of net income and decreased by dividends to stockholders (and by any net loss for the period). It is through retained earnings that the income statement is linked to the balance sheet.

The statement of cash flows summarizes the impact on cash of the entity's operating, investing, and financing activities during the period. The bottom line of this financial statement is the change in cash from the amount shown in the balance sheet at the beginning of the period (e.g., fiscal year) to that shown in the balance sheet at the end of the period.

Financial statements usually are presented on a comparative basis so users can easily spot significant changes in an entity's financial position (balance sheet) and results of operations (income statement).

The financial statements are interrelated. Net income for the period (from the income statement) is added to retained earnings, a part of owners' equity (in the balance sheet). The statement of changes in owners' equity explains the difference between the amounts of owners' equity at the beginning and the end of the fiscal period. The statement of cash flows explains the change in the amount of cash from the beginning to the end of the fiscal period.

Accounting concepts and principles reflect generally accepted practices that have evolved over time. They can be related to a schematic model of the flow of data from transactions to the financial statements. Pertaining to the entire model are the accounting entity concept, the accounting equation, and the going concern concept.

Transactions are recorded in currency units (e.g., the U.S. dollar) without regard to purchasing power changes. Thus transactions are recorded at an objectively determinable original cost amount.

The concepts and principles for the accounting period involve recognizing revenue when a sale of a product or service is made and then relating to that revenue all

of the expenses incurred in generating the revenue of the period. This matching of revenues and expenses is a crucial and fundamental concept to understand if accounting itself is to be understood. The accrual concept is used to implement the matching concept by recognizing revenues when earned and expenses when incurred, regardless of whether cash is received or paid in the same fiscal period.

The concepts of consistency, full disclosure, materiality, and conservatism relate primarily to financial statement presentation.

There are limitations to the information presented in financial statements. These limitations are related to the concepts and principles that have become generally accepted. Thus subjective qualitative factors, current values, the impact of inflation, and opportunity cost are not usually reflected in financial statements. In addition, many financial statement amounts involve estimates. Permissible alternative accounting practices may mean that interfirm comparisons are not appropriate.

Corporations and other organizations include financial statements in an annual report made available to stockholders, employees, potential investors, and others interested in the entity. Refer to the financial statements on pages 000–000 of the [Intel Corporation](#) annual report in the appendix, as well as to the financial statements of other annual reports, to see how the material discussed in this chapter applies to real companies.

## Key Terms and Concepts

**account (p. 33)** A record in which transactions affecting individual assets, liabilities, owners' equity, revenues, and expenses are recorded.

**accounting equation (p. 35)**  $\text{Assets} = \text{Liabilities} + \text{Owners' equity}$  ( $A = L + OE$ ). The fundamental relationship represented by the balance sheet and the foundation of the bookkeeping process.

**accounts payable (p. 37)** A liability representing an amount payable to another entity, usually because of the purchase of merchandise or services on credit.

**accounts receivable (p. 37)** An asset representing a claim against another entity, usually arising from selling goods or services on credit.

**accrual accounting (p. 49)** Accounting that recognizes revenues and expenses as they occur, even though the cash receipt from the revenue or the cash disbursement related to the expense may occur before or after the event that causes revenue or expense recognition.

**accrued liabilities (p. 37)** Amounts that are owed by an entity on the balance sheet date.

**accumulated depreciation (p. 37)** The sum of the depreciation expense that has been recognized over time. Accumulated depreciation is a contra asset—an amount that is subtracted from the cost of the related asset on the balance sheet.

**additional paid-in capital (p. 40)** The excess of the amount received from the sale of stock over the par value of the shares sold.

**assets (p. 35)** Probable future economic benefits obtained or controlled by an entity as a result of past transactions or events.

**balance sheet (p. 35)** The financial statement that is a listing of the entity's assets, liabilities, and owners' equity at a point in time. Sometimes this statement is called the *statement of financial position*.

**balance sheet equation (p. 35)** Another term for the *accounting equation*.

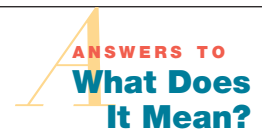
**cash (p. 37)** An asset on the balance sheet that represents the amount of cash on hand and balances in bank accounts maintained by the entity.

**common stock (p. 40)** The class of stock that represents residual ownership of the corporation.

- corporation (p. 34)** A form of organization in which ownership is evidenced by shares of stock owned by stockholders; its features, such as limited liability of the stockholders, make this the principal form of organization for most business activity.
- cost of goods sold (p. 39)** Cost of merchandise sold during the period; an expense deducted from net sales to arrive at gross profit. A frequently used synonym is *cost of sales*.
- current assets (p. 37)** Cash and those assets that are likely to be converted to cash or used to benefit the entity within one year of the balance sheet date.
- current liabilities (p. 37)** Those liabilities due to be paid within one year of the balance sheet date.
- depreciation (p. 37)** The accounting process of recognizing the cost of an asset that is used up over its useful life to the entity.
- depreciation expense (p. 42)** The expense recognized in a fiscal period for the depreciation of an asset.
- dividend (p. 40)** A distribution of earnings to the owners of a corporation.
- earnings per share of common stock outstanding (p. 39)** Net income available to the common stockholders divided by the average number of shares of common stock outstanding during the period. Usually referred to simply as *EPS*.
- equity (p. 36)** The ownership right associated with an asset. *See owners' equity*.
- expenses (p. 38)** Outflows or other using up of assets or incurring a liability during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's major operations.
- fiscal year (p. 35)** The annual period used for reporting to owners.
- gains (p. 38)** Increases in net assets from incidental transactions that are not revenues or investments by owners.
- going concern concept (p. 48)** A presumption that the entity will continue in existence for the indefinite future.
- gross profit (p. 39)** Net sales less cost of goods sold. Sometimes called *gross margin*.
- income from operations (p. 39)** The difference between gross profit and operating expenses. Also referred to as *operating income*.
- income statement (p. 38)** The financial statement that summarizes the entity's revenues, expenses, gains, and losses for a period of time and thereby reports the entity's results of operations for that period of time.
- liabilities (p. 36)** Probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.
- losses (p. 38)** Decreases in net assets from incidental transactions that are not expenses or distributions to owners.
- matching concept (p. 49)** The concept that expenses incurred in generating revenues should be deducted from revenues earned during the period for which results are being reported.
- merchandise inventory (p. 37)** Items held by an entity for sale to customers in the normal course of business.
- net assets (p. 36)** The difference between assets and liabilities; also referred to as *owners' equity*.
- net income (p. 38)** The excess of revenues and gains over expenses and losses for a fiscal period.
- net sales (p. 38)** Gross sales, less sales discounts and sales returns and allowances.
- net worth (p. 36)** Another term for *net assets* or *owners' equity*, but not as appropriate because the term *worth* may be misleading.
- opportunity cost (p. 52)** An economic concept relating to income forgone because an opportunity to earn income was not pursued.
- owners' equity (p. 36)** The equity of the entity's owners in the assets of the entity. Sometimes called *net assets*; the difference between assets and liabilities.
- paid-in capital (p. 40)** The amount invested in the entity by the owners.

- par value (p. 40)** An arbitrary value assigned to a share of stock when the corporation is organized. Sometimes used to refer to the stated value or face amount of a security.
- partnership (p. 34)** A form of organization indicating ownership by two or more individuals or corporations without the limited liability and other features of a corporation.
- profit (p. 38)** The excess of revenues and gains over expenses and losses for a fiscal period; another term for *net income*.
- profit and loss statement (p. 38)** Another term for the *income statement*.
- proprietorship (p. 34)** A form of organization indicating individual ownership without the limited liability and other features of a corporation.
- retained earnings (p. 40)** Cumulative net income that has not been distributed to the owners of a corporation as dividends.
- revenues (p. 38)** Inflows of cash or increases in other assets, or the settlement of liabilities during a period, from delivering or producing goods, rendering services, or performing other activities that constitute the entity's major operations.
- statement of cash flows (p. 41)** The financial statement that explains why cash changed during a fiscal period. Cash flows from operating, investing, and financing activities are shown.
- statement of changes in capital stock (p. 40)** The financial statement that summarizes changes during a fiscal period in capital stock and additional paid-in capital. This information may be included in the statement of changes in owners' equity.
- statement of changes in owners' equity (p. 40)** The financial statement that summarizes the changes during a fiscal period in capital stock, additional paid-in capital, retained earnings, and other elements of owners' equity.
- statement of changes in retained earnings (p. 40)** The financial statement that summarizes the changes during a fiscal period in retained earnings. This information may be included in the statement of changes in owners' equity.
- statement of earnings (p. 38)** Another term for the *income statement*; it shows the revenues, expenses, gains, and losses for a period of time and thereby the entity's results of operations for that period of time.
- statement of financial position (p. 35)** Another term for the *balance sheet*; a listing of the entity's assets, liabilities, and owners' equity at a point in time.
- statement of operations (p. 38)** Another term for the *income statement*.
- stock (p. 34)** The evidence of ownership of a corporation.
- stockholders (p. 34)** The owners of a corporation's stock; sometimes called *shareholders*.
- subsidiary (p. 48)** A corporation whose stock is more than 50 percent owned by another corporation.
- transactions (p. 33)** Economic interchanges between entities that are accounted for and reflected in financial statements.

1. It means that there has been some sort of economic interchange; for example, you have agreed to pay tuition in exchange for classes.
2. It means the person doing this is really mixed up because the balance sheet presents data as of a point in time. It's a balance sheet *as of* August 31, 2011.
3. It means that the organization's financial position *at a point in time* has been determined and summarized.
4. It means that each individual financial statement provides unique information but focuses on only a part of the big picture, so all four statements need to be reviewed to achieve a full understanding of the firm's financial position and results of operations.



5. It means that revenues have been earned from selling products or providing services but that the accounts receivable from those revenues have not yet been collected—or if the receivables have been collected, the cash has been used for some purpose other than paying bills.
6. It means that transactions affecting the income statement also affect the owners' equity section of the balance sheet as well as the asset and/or liability sections of the balance sheet.
7. It means that all expenses incurred in generating revenue for the period are subtracted from those revenues to determine net income. Matching does not mean that revenues equal expenses.
8. It means that revenues and expenses are recognized in the accounting period in which they are earned or incurred, even though cash may be received or paid in a different accounting period.
9. It means that there may be both qualitative (for example, workforce morale) and quantitative (for example, opportunity cost) factors that are not reflected in the financial statements.



## Self-Study Material

Visit the text Web site at [www.mhhe.com/marshall9e](http://www.mhhe.com/marshall9e) to take a self-study quiz for this chapter.

## Self-Study Quiz

**Matching** Following is a list of the key terms and concepts introduced in the chapter, along with a list of corresponding definitions. Match the appropriate letter for the key term or concept to each definition provided (items 1–15). Note that not all key terms and concepts will be used. Solutions are provided at the end of this chapter.

- |                             |                                       |
|-----------------------------|---------------------------------------|
| a. Accumulated depreciation | p. Earnings per share of common stock |
| b. Balance sheet            | q. Paid-in capital                    |
| c. Accrued liabilities      | r. Common stock                       |
| d. Current assets           | s. Additional paid-in capital         |
| e. Current liabilities      | t. Retained earnings                  |
| f. Merchandise inventory    | u. Dividends                          |
| g. Revenues                 | v. Par value                          |
| h. Expenses                 | w. Going concern concept              |
| i. Gains                    | x. Matching concept                   |
| j. Losses                   | y. Accrual concept                    |
| k. Net sales                | z. Opportunity cost                   |
| l. Cost of goods sold       | aa. Annual report                     |
| m. Gross profit             | bb. Income statement                  |
| n. Income from operations   |                                       |
| o. Net income               |                                       |

- \_\_\_ 1. The difference between the total amount invested by the owners and the par value or stated value of the stock issued.
- \_\_\_ 2. Outflows or using up of assets or incurrence of liabilities during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's major operations.
- \_\_\_ 3. The financial statement that is a list of the entity's assets, liabilities, and owners' equity at a point in time.
- \_\_\_ 4. A document distributed to stockholders that contains the financial statements for the fiscal year of the reporting firm with the report of the external auditor's examination of the financial statements.
- \_\_\_ 5. A distribution of earnings to the owners of a corporation.
- \_\_\_ 6. An arbitrary value assigned to a share of stock when the corporation is organized.
- \_\_\_ 7. Net income available to the common stockholders divided by the average number of shares of common stock outstanding during the period.
- \_\_\_ 8. Items held by an entity for sale to potential customers in the normal course of business.
- \_\_\_ 9. Inflows of cash or increases in other assets, or settlement of liabilities during a period from delivering or producing goods, rendering services, or other activities that constitute the entity's major operations.
- \_\_\_ 10. Cash and those assets likely to be converted to cash or used to benefit the entity within one year of the balance sheet date.
- \_\_\_ 11. Cumulative net income that has not been distributed to the owners of a corporation as dividends.
- \_\_\_ 12. The difference between gross profit and operating expenses. Also referred to as *operating income* and *earnings from operations*.
- \_\_\_ 13. Increases in net assets from incidental transactions and other events affecting an entity during a period except those that result from revenues or investments by owners.
- \_\_\_ 14. A presumption that the entity will continue in existence for the indefinite future.
- \_\_\_ 15. Net sales less cost of goods sold.

**Multiple Choice** For each of the following questions, circle the best response. Solutions are provided at the end of this chapter.

1. Which of the following is *not* a correct expression of the accounting equation?
  - a.  $\text{Assets} - \text{Liabilities} = \text{Owners' equity}$
  - b.  $\text{Net assets} = \text{Liabilities} + \text{Owners' equity}$
  - c.  $\text{Assets} = \text{Liabilities} + \text{Owners' equity}$
  - d.  $\text{Net assets} = \text{Owners' equity}$
2. Partnerships, as contrasted with corporations, can be characterized as being relatively
  - a. easier to form, less risky to be an owner of, and easier to raise large amounts of capital for.
  - b. easier to form, more risky to be an owner of, and harder to raise large amounts of capital for.

- c. harder to form, more risky to be an owner of, and harder to raise large amounts of capital for.
  - d. harder to form, less risky to be an owner of, and easier to raise large amounts of capital for.
  - e. None of the above is accurate.
- 3. The owners' equity section of a balance sheet contains two major components:
  - a. Common Stock and Additional Paid-in Capital.
  - b. Paid-in Capital and Retained Earnings.
  - c. Common Stock and Retained Earnings.
  - d. Net Income and Dividends.
  - e. Additional Paid-in Capital and Net Income.
- 4. Which of the following accounts is *not* an asset?
  - a. Cash.
  - b. Inventory.
  - c. Accounts Payable.
  - d. Equipment.
  - e. Land.
- 5. Which of the following financial statement descriptions is inaccurate?
  - a. Balance Sheet—shows the organization's financial position for a period of time.
  - b. Income Statement—shows what the organization's earnings were for a period time.
  - c. Statement of Cash Flows—shows what the organization's receipts and disbursements were for a period of time.
  - d. Statement of Owners' Equity—shows the investments by and distributions to owners for a period of time.
  - e. All of the above descriptions are accurate.
- 6. If total assets were \$21,000 and total liabilities were \$12,000 at the beginning of the year, and if net income for the year was \$5,000, what is total owners' equity at the end of the year?
  - a. \$4,000.
  - b. \$5,000.
  - c. \$9,000.
  - d. \$14,000.
- 7. At the beginning of the year, owners' equity totaled \$119,000. During the year, net income was \$35,000 and dividends of \$29,000 were declared and paid. Owners' equity at the end of the year was
  - a. \$113,000.
  - b. \$125,000.
  - c. \$148,000.
  - d. \$154,000.
- 8. The principle stating that all expenses incurred while earning revenues should be identified with the revenues when they are earned and reported for the same time period is the
  - a. cost principle.
  - b. revenue principle.
  - c. expense principle.
  - d. matching principle.
  - e. timing principle.



9. Corporate annual reports do *not* ordinarily include
- a transmittal letter from the president or chairman of the board of directors.
  - financial statements for the most recent year.
  - explanatory notes and comments about the financial statements.
  - the internal auditor's report and opinion about the financial statements.
  - a historical summary of selected financial data for the past five years or more.
10. Which of these is *not* a limitation of financial statements?
- Qualitative data are not reflected in financial statements.
  - Market values of assets are not generally reported.
  - Estimates are commonly used and are sometimes inaccurate.
  - It may be difficult to compare firms in the same industry because they often use different accounting methods.
  - All of the above are limitations of financial statements.

## Exercises



**Identify accounts by category and financial statement(s)** Listed here are a number of financial statement captions. Indicate in the spaces to the right of each caption the category of each item and the financial statement(s) on which the item can usually be found. Use the following abbreviations:

### Exercise 2.1 LO 2, 4

Category		Financial Statement	
Asset	A	Balance sheet	BS
Liability	L	Income statement	IS
Owners' equity	OE		
Revenue	R		
Expense	E		
Gain	G		
Loss	LS		
Cash		_____	_____
Accounts payable		_____	_____
Common stock		_____	_____
Depreciation expense		_____	_____
Net sales		_____	_____
Income tax expense		_____	_____
Short-term investments		_____	_____
Gain on sale of land		_____	_____
Retained earnings		_____	_____
Dividends payable		_____	_____
Accounts receivable		_____	_____
Short-term debt		_____	_____

**Exercise 2.2** **Identify accounts by category and financial statement(s)** Listed here are a number of financial statement captions. Indicate in the spaces to the right of each caption the category of each item and the financial statement(s) on which the item can usually be found. Use the following abbreviations:

**LO 2, 4**

Category		Financial Statement	
Asset	A	Balance sheet	BS
Liability	L	Income statement	IS
Owners' equity	OE		
Revenue	R		
Expense	E		
Gain	G		
Loss	LS		
Accumulated depreciation		_____	_____
Long-term debt		_____	_____
Equipment		_____	_____
Loss on sale of short-term investments		_____	_____
Net income		_____	_____
Merchandise inventory		_____	_____
Other accrued liabilities		_____	_____
Dividends paid		_____	_____
Cost of goods sold		_____	_____
Additional paid-in capital		_____	_____
Interest income		_____	_____
Selling expenses		_____	_____

**Exercise 2.3** **Understanding financial statement relationships** The information presented here represents selected data from the December 31, 2010, balance sheets and income statements for the year then ended for three firms:

**LO 2, 3**

	Firm A	Firm B	Firm C
Total assets, 12/31/10 . . . . .	\$420,000	\$540,000	\$325,000
Total liabilities, 12/31/10 . . . . .	215,000	145,000	?
Paid-in capital, 12/31/10 . . . . .	75,000	?	40,000
Retained earnings, 12/31/10 . . . . .	?	310,000	?
Net income for 2010 . . . . .	?	83,000	113,000
Dividends declared and paid during 2010 . . .	50,000	19,000	65,000
Retained earnings, 1/1/10 . . . . .	78,000	?	42,000

**Required:**

Calculate the missing amounts for each firm.

**Exercise 2.4** **Understanding financial statement relationships** The information presented here represents selected data from the December 31, 2010, balance sheets and income statements for the year then ended for three firms:

**LO 2, 3**

	Firm A	Firm B	Firm C
Total assets, 12/31/10 . . . . .	?	\$435,000	\$155,000
Total liabilities, 12/31/10 . . . . .	\$80,000	?	75,000
Paid-in capital, 12/31/10 . . . . .	55,000	59,000	45,000
Retained earnings, 12/31/10 . . . . .	?	186,000	?
Net income for 2010 . . . . .	68,000	110,000	25,500
Dividends declared and paid during 2010 . .	12,000	?	16,500
Retained earnings, 1/1/10 . . . . .	50,000	124,000	?

**Required:**

Calculate the missing amounts for each firm.

**Calculate retained earnings** From the following data, calculate the retained earnings balance as of December 31, 2010:

**Exercise 2.5****LO 2, 3**

Retained earnings, December 31, 2009 . . . . .	\$311,800
Cost of equipment purchased during 2010 . . . . .	32,400
Net loss for the year ended December 31, 2010 . . . . .	4,700
Dividends declared and paid in 2010 . . . . .	18,500
Decrease in cash balance from January 1, 2010, to December 31, 2010 . .	13,600
Decrease in long-term debt in 2010 . . . . .	14,800

**excel**  
**TUTOR**

**Calculate retained earnings** From the following data, calculate the retained earnings balance as of December 31, 2009:

**Exercise 2.6****LO 2, 3**

Retained earnings, December 31, 2010 . . . . .	\$841,200
Decrease in total liabilities during 2010 . . . . .	183,200
Gain on the sale of buildings during 2010 . . . . .	64,400
Dividends declared and paid in 2010 . . . . .	18,000
Proceeds from sale of common stock in 2010 . . . . .	197,600
Net income for the year ended December 31, 2010 . . . . .	90,400

**Calculate dividends using the accounting equation** At the beginning of its current fiscal year, Willie Corp.'s balance sheet showed assets of \$12,400 and liabilities of \$7,000. During the year, liabilities decreased by \$1,200. Net income for the year was \$3,000, and net assets at the end of the year were \$6,000. There were no changes in paid-in capital during the year.

**Exercise 2.7****LO 2, 3****Required:**

Calculate the dividends, if any, declared during the year.

(Hint: Set up an accounting equation for the beginning of the year, changes during the year, and at the end of the year. Enter known data and solve for the unknowns.)

Here is a possible worksheet format:

	A	=	L	+	OE	
					PIC	RE
Beginning:		=		+	+	
Changes:	_____	=	_____	+	_____	_____
Ending:		=		+	+	

### Exercise 2.8

LO 2, 3

**Excel**  
TUTOR

**Calculate net income (or loss) using the accounting equation** At the beginning of the current fiscal year, the balance sheet for Davis Co. showed liabilities of \$320,000. During the year liabilities decreased by \$18,000, assets increased by \$65,000, and paid-in capital increased from \$30,000 to \$192,000. Dividends declared and paid during the year were \$25,000. At the end of the year, owners' equity totaled \$429,000.

#### Required:

Calculate net income (or loss) for the year.

(Hint: Set up an accounting equation for the beginning of the year, changes during the year, and at the end of the year. Enter known data and solve for the unknowns. Remember, net income [or loss] may not be the only item affecting retained earnings.)

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## Problems

### Problem 2.9

LO 2, 3, 6

**Calculate cash available upon liquidation of business** Circle-Square, Ltd., is in the process of liquidating and going out of business. The firm's balance sheet shows \$22,800 in cash, accounts receivable of \$114,200, inventory totaling \$61,400, plant and equipment of \$265,000, and total liabilities of \$305,600. It is estimated that the inventory can be disposed of in a liquidation sale for 80% of its cost, all but 5% of the accounts receivable can be collected, and plant and equipment can be sold for \$190,000.

#### Required:

Calculate the amount of cash that would be available to the owners if the accounts receivable are collected, the other assets are sold as described, and the liabilities are paid off in full.

### Problem 2.10

LO 2, 3, 6

**Calculate cash available upon liquidation of business** Kimber Co. is in the process of liquidating and going out of business. The firm's accountant has provided the following balance sheet and additional information:

Assets		
Cash . . . . .	\$ 18,400	
Accounts receivable . . . . .	62,600	
Merchandise inventory . . . . .	114,700	
Total current assets . . . . .		\$195,700
Land . . . . .	\$51,000	
Buildings & equipment . . . . .	343,000	
Less: Accumulated depreciation . . . . .	(195,000)	
Total land, buildings, & equipment . . . . .		199,000
Total assets . . . . .		<u>\$394,700</u>

<b>Liabilities and Owners' Equity</b>		
Accounts payable . . . . .	\$ 46,700	
Notes payable . . . . .	<u>58,500</u>	
Total current liabilities . . . . .		\$105,200
Long-term debt . . . . .		<u>64,800</u>
<b>Owners' Equity</b>		
Common stock, no par . . . . .	\$110,000	
Retained earnings . . . . .	<u>114,700</u>	
Total owners' equity . . . . .		<u>224,700</u>
Total liabilities and owners' equity . . . . .		<u>\$394,700</u>

It is estimated that all but 12% of the accounts receivable can be collected, and that the merchandise inventory can be disposed of in a liquidation sale for 85% of its cost. Buildings and equipment can be sold at \$40,000 above book value (the difference between original cost and accumulated depreciation shown on the balance sheet), and the land can be sold at its current appraisal value of \$65,000. In addition to the liabilities included in the balance sheet, \$2,400 is owed to employees for their work since the last pay period, and interest of \$5,250 has accrued on notes payable and long-term debt.

**Required:**

- Calculate the amount of cash that will be available to the stockholders if the accounts receivable are collected, the other assets are sold as described, and all liabilities and other claims are paid in full.
- Briefly explain why the amount of cash available to stockholders (computed in part *a*) is different from the amount of total owners' equity shown in the balance sheet.

**Understanding and analyzing financial statement relationships—sales/service organization** Pope's Garage had the following accounts and amounts in its financial statements on December 31, 2010. Assume that all balance sheet items reflect account balances at December 31, 2010, and that all income statement items reflect activities that occurred during the year then ended.

**Problem 2.11**

**LO 2, 3, 4**

Accounts receivable . . . . .	\$ 33,000
Depreciation expense . . . . .	12,000
Land . . . . .	27,000
Cost of goods sold . . . . .	90,000
Retained earnings . . . . .	59,000
Cash . . . . .	9,000
Equipment . . . . .	71,000
Supplies . . . . .	6,000
Accounts payable . . . . .	23,000
Service revenue . . . . .	20,000
Interest expense . . . . .	4,000
Common stock . . . . .	10,000
Income tax expense . . . . .	12,000
Accumulated depreciation . . . . .	45,000
Long-term debt . . . . .	40,000
Supplies expense . . . . .	14,000
Merchandise inventory . . . . .	31,000
Sales revenue . . . . .	140,000

**Required:**

- Calculate the total current assets at December 31, 2010.
- Calculate the total liabilities and owners' equity at December 31, 2010.
- Calculate the earnings from operations (operating income) for the year ended December 31, 2010.
- Calculate the net income (or loss) for the year ended December 31, 2010.
- What was the average income tax rate for Pope's Garage for 2010?
- If \$16,000 of dividends had been declared and paid during the year, what was the January 1, 2010, balance of retained earnings?

**Problem 2.12****LO 2, 3, 4**

**Understanding and analyzing financial statement relationships—merchandising organization** Gary's TV had the following accounts and amounts in its financial statements on December 31, 2010. Assume that all balance sheet items reflect account balances at December 31, 2010, and that all income statement items reflect activities that occurred during the year then ended.

Interest expense . . . . .	\$ 36,000
Paid-in capital . . . . .	80,000
Accumulated depreciation . . . . .	24,000
Notes payable (long-term) . . . . .	280,000
Rent expense . . . . .	72,000
Merchandise inventory . . . . .	840,000
Accounts receivable . . . . .	192,000
Depreciation expense . . . . .	12,000
Land . . . . .	128,000
Retained earnings . . . . .	900,000
Cash . . . . .	144,000
Cost of goods sold . . . . .	1,760,000
Equipment . . . . .	72,000
Income tax expense . . . . .	240,000
Accounts payable . . . . .	92,000
Sales revenue . . . . .	2,480,000

**Required:**

- Calculate the difference between current assets and current liabilities for Gary's TV at December 31, 2010.
- Calculate the total assets at December 31, 2010.
- Calculate the earnings from operations (operating income) for the year ended December 31, 2010.
- Calculate the net income (or loss) for the year ended December 31, 2010.
- What was the average income tax rate for Gary's TV for 2010?
- If \$256,000 of dividends had been declared and paid during the year, what was the January 1, 2010, balance of retained earnings?

**Problem 2.13****LO 2, 3, 4**

**Prepare an income statement, balance sheet, and statement of changes in owners' equity; analyze results** The following information was obtained from the records of Breanna, Inc.:

Accounts receivable . . . . .	\$ 10,000
Accumulated depreciation . . . . .	52,000
Cost of goods sold . . . . .	128,000
Income tax expense . . . . .	8,000
Cash . . . . .	65,000
Sales . . . . .	200,000
Equipment . . . . .	120,000
Selling, general, and administrative expenses . . . . .	34,000
Common stock (9,000 shares) . . . . .	90,000
Accounts payable . . . . .	15,000
Retained earnings, 1/1/10 . . . . .	23,000
Interest expense . . . . .	6,000
Merchandise inventory . . . . .	37,000
Long-term debt . . . . .	40,000
Dividends declared and paid during 2010 . . . . .	12,000

Except as otherwise indicated, assume that all balance sheet items reflect account balances at December 31, 2010, and that all income statement items reflect activities that occurred during the year ended December 31, 2010. There were no changes in paid-in capital during the year.

### Required:

- Prepare an income statement and statement of changes in owners' equity for the year ended December 31, 2010, and a balance sheet at December 31, 2010, for Breanna, Inc.

Based on the financial statements that you have prepared for part **a**, answer the questions in parts **b–e**. Provide brief explanations for each of your answers and state any assumptions you believe are necessary to ensure that your answers are correct.

- What is the company's average income tax rate?
- What interest rate is charged on long-term debt?
- What is the par value per share of common stock?
- What is the company's dividend policy (i.e., what proportion of the company's earnings are used for dividends)?

**Prepare an income statement, balance sheet, and statement of changes in owners' equity; analyze results** The following information was obtained from the records of Shae, Inc.:

### Problem 2.14

LO 2, 3, 4

**Excel**

Merchandise inventory . . . . .	\$264,000
Notes payable (long-term) . . . . .	300,000
Sales . . . . .	900,000
Buildings and equipment . . . . .	504,000
Selling, general, and administrative expenses . . . . .	72,000
Accounts receivable . . . . .	120,000
Common stock (42,000 shares) . . . . .	210,000
Income tax expense . . . . .	84,000
Cash . . . . .	192,000
Retained earnings, 1/1/10 . . . . .	129,000
Accrued liabilities . . . . .	18,000
Cost of goods sold . . . . .	540,000

(continued)



Accumulated depreciation . . . . .	216,000
Interest expense . . . . .	48,000
Accounts payable . . . . .	90,000
Dividends declared and paid during 2010 . . . . .	39,000

Except as otherwise indicated, assume that all balance sheet items reflect account balances at December 31, 2010, and that all income statement items reflect activities that occurred during the year ended December 31, 2010. There were no changes in paid-in capital during the year.

**Required:**

- a. Prepare an income statement and statement of changes in owners' equity for the year ended December 31, 2010, and a balance sheet at December 31, 2010, for Shae, Inc.

Based on the financial statements that you have prepared for part **a**, answer the questions in parts **b–e**. Provide brief explanations for each of your answers and state any assumptions you believe are necessary to ensure that your answers are correct.

- b. What is the company's average income tax rate?
- c. What interest rate is charged on long-term debt?
- d. What is the par value per share of common stock?
- e. What is the company's dividend policy (i.e., what proportion of the company's earnings is used for dividends)?

**Problem 2.15**

LO 2, 3

**Transaction analysis—nonquantitative** Indicate the effect of each of the following transactions on total assets, total liabilities, and total owners' equity. Use + for increase, – for decrease, and (NE) for no effect. The first transaction is provided as an illustration.

	Assets	Liabilities	Owners' Equity
a. Borrowed cash on a bank loan . . . . .	+	+	NE
b. Paid an account payable . . . . .			
c. Sold common stock . . . . .			
d. Purchased merchandise inventory on account. . . . .			
e. Declared and paid dividends . . . . .			
f. Collected an account receivable . . . . .			
g. Sold merchandise inventory on account at a profit. . . . .			
h. Paid operating expenses in cash . . . . .			
i. Repaid principal and interest on a bank loan . . . . .			

**Problem 2.16**

LO 2, 3, 6

**Transaction analysis—quantitative; analyze results** Kenisha Morgan owns and operates Morgan's Furniture Emporium, Inc. The balance sheet totals for assets, liabilities, and owner's equity at August 1, 2010, are as indicated. Described here are several transactions entered into by the company throughout the month of August.

**Required:**

- a. Indicate the amount and effect (+ or –) of each transaction on total assets, total liabilities, and total owner's equity, and then compute the new totals for each category. The first transaction is provided as an illustration.

	Assets	= Liabilities	+ Owner's Equity
August 1, 2010, totals . . . . .	\$700,000	\$550,000	\$150,000
August 3, borrowed \$24,000 in cash from the bank . . . . .	+ 24,000	+ 24,000	
New totals . . . . .	\$724,000	\$574,000	\$150,000
August 7, bought merchandise inventory valued at \$38,000 on account . . . . .			
New totals . . . . .			
August 10, paid \$14,000 cash for operating expenses . . . . .			
New totals . . . . .			
August 14, received \$100,000 in cash from sales of merchandise that had cost \$66,000. . . . .			
New totals . . . . .			
August 17, paid \$28,000 owed on accounts payable . . . . .			
New totals . . . . .			
August 21, collected \$34,000 of accounts receivable . . . . .			
New totals . . . . .			
August 24, repaid \$20,000 to the bank plus \$400 interest . . . . .			
New totals . . . . .			
August 29, paid Kenisha Morgan a cash dividend of \$10,000 . . . . .			
New totals . . . . .			

- b. What was the amount of net income (or loss) during August? How much were total revenues and total expenses during August?
- c. What were the net changes during the month of August in total assets, total liabilities, and total owner's equity?
- d. Explain to Kenisha Morgan which transactions caused the net change in her owner's equity during August.
- e. Explain why dividend payments are not an expense, but interest is an expense.
- f. Explain why the money borrowed from the bank increased assets but did not increase net income.
- g. Explain why paying off accounts payable and collecting accounts receivable do not affect net income.

**Complete the balance sheet** A partially completed balance sheet for Blue Co., Inc., as of January 31, 2011, follows. Where amounts are shown for various items, the amounts are correct.

**Problem 2.17**  
**LO 2, 3, 5**

Assets		Liabilities and Owners' Equity	
Cash.....	\$ 700	Note payable.....	\$ _____
Accounts receivable .....	_____	Accounts payable .....	3,400
Land .....	_____		
Automobile .....	_____	Total liabilities .....	\$ _____
Less: Accumulated .....		Owners' equity	
depreciation.....	_____	Common stock.....	\$ 8,000
		Retained earnings.....	_____
		Total owners' equity .....	\$ _____
Total assets.....	\$ _____	Total liabilities + owners' equity	\$ _____

**Required:**

Using the following data, complete the balance sheet.

- Blue Co.'s records show that current and former customers owe the firm a total of \$4,000; \$600 of this amount has been due for more than a year from two customers who are now bankrupt.
- The automobile, which is still being used in the business, cost \$18,000 new; a used car dealer's Blue Book shows that it is now worth \$10,000. Management estimates that the car has been used for one-third of its total potential use.
- The land cost Blue Co. \$11,000; it was recently assessed for real estate tax purposes at a value of \$15,000.
- Blue Co.'s president isn't sure of the amount of the note payable, but he does know that he signed a note.
- Since Blue Co. was formed, net income has totaled \$33,000, and dividends to stockholders have totaled \$19,500.

**Problem 2.18****LO 2, 3, 5, 6**

**Complete the balance sheet using cash flow data** Following is a partially completed balance sheet for Epsico, Inc., at December 31, 2010, together with comparative data for the year ended December 31, 2009. From the statement of cash flows for the year ended December 31, 2010, you determine the following:

Net income for the year ended December 31, 2010, was \$26.

Dividends paid during the year ended December 31, 2010, were \$8.

Cash increased \$8 during the year ended December 31, 2010.

The cost of new equipment acquired during 2010 was \$15; no equipment was disposed of.

There were no transactions affecting the land account during 2010, but it is estimated that the fair market value of the land at December 31, 2010, is \$42.

**Required:**

Complete the balance sheet at December 31, 2010.

EPSICO, INC. Balance Sheets December 31, 2010 and 2009				
	2010	2009	2010	2009
<b>Assets</b>			<b>Liabilities and Owners' Equity</b>	
Current assets:			Current liabilities:	
Cash	\$	\$ 30	Note payable	\$ 49    \$ 40
Accounts receivable	126	120	Accounts payable	123    110
Inventory	241	230		
Total current assets	\$	\$380	Total current liabilities	\$172    \$150
			Long-term debt	80
Land	\$	\$ 25	Total liabilities	\$    \$230
Equipment		375	<b>Owners' Equity</b>	
Less: Accumulated depreciation	(180)	(160)	Common stock	\$200    \$200
Total land & equipment	\$	\$240	Retained earnings	190
			Total owners' equity	\$    \$390
			Total liabilities and owners' equity	
Total assets	\$	\$620		\$    \$620

**Understanding income statement relationships—Levi Strauss & Co.** Following are selected data from the November 30, 2008, and November 25, 2007, consolidated balance sheets and income statements for the years then ended for Levi Strauss & Co. and Subsidiaries. All amounts are reported in thousands.

**Problem 2.19**  
**LO 2, 4**

	2008	2007
Net revenues . . . . .	\$4,400,914	\$
Cost of goods sold . . . . .	?	2,318,883
Gross profit . . . . .	2,139,802	2,042,046
Selling, general, administrative, and other operating expenses, net . . . . .	?	1,401,005
Operating income . . . . .	?	?
Interest expense and other expenses, net . . . . .	156,903	265,415
Income before income taxes . . . . .	368,169	?
Income tax expense (benefit) . . . . .	?	(84,759)
Net income . . . . .	\$ 229,285	\$ 460,385
As at November 30 and 25, respectively:		
Total assets . . . . .	\$2,776,875	\$ ?
Total liabilities . . . . .	3,125,800	3,244,575
Total stockholders' deficit . . . . .	?	(393,909)

**Required:**

Calculate the missing amounts for each year.

**Problem 2.20****LO 2, 4**

**Understanding income statement relationships—Apple Inc.** Selected data from the September 27, 2008, and September 29, 2007, consolidated balance sheets and income statements for the years then ended for Apple Inc. follow. All amounts are reported in millions.

	2008	2007
Net Sales . . . . .	\$32,479	\$24,006
Cost of sales . . . . .	21,334	15,852
Research and development expenses . . . . .	1,109	782
Selling, general, and administrative expenses . . . . .	3,761	2,963
Operating income . . . . .	?	?
Other income, net . . . . .	?	599
Provision for income taxes . . . . .	2,061	?
Net income . . . . .	<u>\$4,834</u>	<u>\$3,496</u>

**Required:**

- Calculate the amount of Apple's gross profit for each year. Has gross profit as a percentage of sales changed significantly during the past year?
- Calculate the amount of Apple's operating income for each year. Has operating income as a percentage of sales changed significantly during the past year?
- After completing parts **a** and **b**, calculate the other missing amounts for each year.

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ACCOUNTING

**Case****Case 2.21****LO 2, 4, 6, 7**

**Prepare a personal balance sheet and projected income statement; explain financial statement relationships.**

- Prepare a personal balance sheet for yourself as of today. Work at identifying your assets and liabilities; use rough estimates for amounts.
- Prepare a projected income statement for yourself for the current semester. Work at identifying your revenues and expenses, again using rough estimates for amounts.
- Explain how your projected income statement for the semester is likely to impact your financial position (i.e., balance sheet) at the end of the semester. (*Note: You are not required to prepare a projected balance sheet.*)
- Identify the major sources (and uses) of cash that you are expecting to receive (and spend) this semester. (*Note: You are not required to prepare a projected statement of cash flows.*)
- Give three possible explanations why a full-time college student might incur a substantial net loss during the fall semester of her junior year, yet have more cash at the end of the semester than she had at the beginning.

## Solutions to Self-Study Material

Matching: 1. s, 2. h, 3. b, 4. aa, 5. u, 6. v, 7. p, 8. f, 9. g, 10. d, 11. t, 12. n, 13. i, 14. w, 15. m

Multiple choice: 1. b, 2. b, 3. b, 4. c, 5. a, 6. d, 7. b, 8. d, 9. d, 10. e