# Chapter 3 The Accrual Basis of Accounting

THE LAW OF SOLID GROUND "Trust is the foundation of leadership."

-The 21 Irrefutable Laws of Leadership
Dr. John C. Maxwell

#### Learning Goals

- Describe the accrual basis of accounting.
- Use the accrual basis of accounting to analyze, record, and summarize transactions.
- 3 Describe and illustrate the end-of-the-period adjustment process.
- Prepare accrual-basis financial statements, including a classified balance sheet.

- Describe how the accrual basis of accounting enhances the interpretation of financial statements.
- Describe the accounting cycle for the accrual basis of accounting.
- Describe and illustrate how commonsized financial statements can be used to analyze and evaluate a company's performance.



# Wendy's

Wendy's was founded by Dave Thomas in 1969 in Columbus, Ohio, and was named after Dave's daughter. In 2001, Wendy's International had sales of \$2.3 billion. Wendy's market share of approximately 13 percent is third behind McDonald's 43 percent and Burger King's 19 percent. Wendy's has over 40,000 employees and 6,000 restaurants.

Wendy's operating philosophy is influenced by Dave's background. Growing up, Dave worked as a paperboy, golf caddy, grocery deliverer, and bowling alley pinsetter. Later, he enlisted in the Army, where he served as a manager of the Enlisted Men's Club. Eventually, he returned to Columbus, Ohio, where he helped a former boss turn around a Kentucky Fried Chicken franchise that had been losing money. In 1968, he sold his ownership interest in the KFC franchise to fulfill his life-long dream of opening his own restaurant.

How did Wendy's succeed in the highly competitive fast-food industry? First, Dave was innovative. His first restaurant featured a salad bar. This was a radical change in the fast-food industry. Second, Dave tried to create a family-friendly atmosphere in his restaurants by decorating with glass lamps and bentwood chairs. Third, Dave emphasized the importance of making each sandwich fresh, never frozen, and offering customers a choice of toppings. Finally, a highly successful series of advertising campaigns significantly contributed to Wendy's success.

The premise behind Wendy's advertising was an emphasis on food and quality. One of Wendy's most successful advertising campaigns appeared in the mid-1980s, using the slogan, "Where's the beef?" However, the advertising campaigns that established Dave Thomas as a household name were the campaigns that featured him cooking or serving hamburgers. Sales increased dramatically as the ads continued to run, and Dave became an icon.

Most advertising executives agree that the success of the ads was due to Dave being a "normal" person and not an actor. One executive, Bob Garfield, commented: "... such a perfect symbol of the brand, he represented ... the perennially bewildered guy with the wan smile who could always take refuge in something real, Wendy's hamburgers." But after Dave's death on January 8, 2002, analysts questioned whether Wendy's success could continue without him.

In this chapter, we continue our discussion of financial statements and financial reporting systems. In doing so, we focus on the accrual basis of accounting system that is used by all major businesses, such as Wendy's. Our discussions will include how to record transactions under accrual accounting, how to update accounting records and prepare accrual-basis financial statements, and how to prepare accounting records for the next period.

Source: "Wendy's Loses Its Legend, " by Bruce Horovitz and Theresa Howard, *USA Today*, January 9, 2002; "After Founder Dies, Wendy's Ponders New Ways to Pitch," by Stuart Elliott, *The New York Times*, January 9, 2002; "Dave Thomas, 69, Wendy's Founder, Dies," by Douglas Martin, *The New York Times*, January 9, 2002.

#### Your Need to Know

Do you subscribe to any magazines? Most of us subscribe to one or more magazines such as *Cosmopolitan*, *Sports Illustrated*, *Golf Digest*, *Fly Rod & Reel*, *Newsweek*, *Business Week*, *Barron's*, or *People*. Magazines usually require us to prepay the yearly subscription price before we receive any issues.

When should the magazine record this revenue from subscriptions? As we discussed in Chapter 2, under the cash basis of accounting a publisher records the revenue when the cash is received. However, large corporations publish most of the popular magazines. For example, AOL Time-Warner publishes over one hundred and thirty magazines including Fortune, Time, Entertainment Weekly, People, and Sports Illustrated. Large corporations such as AOL-Time Warner must follow generally accepted accounting principles that require the use of the accrual basis of accounting.

In this chapter, we will describe and illustrate how to account for transactions using the accrual basis of accounting. Under accrual accounting, revenues are recorded when they are earned, regardless of when the cash is actually received. Thus, AOL-Time Warner records revenues from magazine subscriptions each month as its magazines are published and delivered. Because all large companies use the accrual basis of accounting, a thorough understanding of accrual basis is important for your business studies and future career.

# The Accrual Basis of Accounting and the Matching Concept

Describe the accrual basis of accounting.

In Chapter 2, we illustrated the use of the cash basis of accounting for Family Health Care for the months of September and October. In these illustrations, we used many of the accounting concepts we described in Chapter 1. For example, under the business entity concept, we accounted for Family Health Care as a separate entity independent of the owner-manager, Dr. Lee Landry. Under the cost concept, we recorded the purchase of land at the amount that we paid for it. Consistent with the going concern concept, we did not revalue the land for increases or decreases in its market value, but retained the land in the accounting records at its original cost. We also employed the accounting period, full disclosure, objectivity, and the unit of measurement concepts in preparing financial statements for Family Health Care.

The one accounting concept that we did not emphasize in Chapter 2 was the matching concept. This is because we used the cash basis of accounting. Transactions were recorded only when cash was received or paid. For example, when \$6,000 of cash was received for Dr. Landry's initial investment in Family Health Care, the transaction was recorded as an increase in assets (cash) and an increase in stockholders' equity (capital stock). Likewise, when \$10,000 cash was received from First National Bank as a loan, the transaction was recorded as an increase in assets (cash) and an increase in liabilities (notes payable). The other transactions were recorded in a similar manner as cash was received or paid. This is how individuals normally record transactions. That is, we record only the receipts and payments of cash in our personal records.

Under the cash basis, the matching concept is not emphasized. Rather, the receipt or payment of cash governs the recording process. Revenues and expenses are matched with each other only if cash from revenues is received in the same period as cash is paid for expenses. While the cash basis may work reasonably well for individuals or small businesses, it does not work well for large businesses. This is because the timing of when cash is received or paid can vary widely with the result that net income may become meaningless under the cash basis. For example, a construction company might spend months or years developing land for a business complex or subdivision. During the development

of the land, the company would have to pay for materials, wages, insurance, and other construction items. At the same time, cash might not be received until portions of the development are sold. As a result, a series of net losses would be reported during development until some sales occur. Thus, the income statement under the cash basis might not provide a realistic picture of the company's operations. In fact, the development might be highly successful and the early losses misleading.

The accrual basis of accounting is designed to avoid misleading income statement results that could otherwise result from the timing of cash receipts and payments. At the same time, the accrual basis recognizes the importance of reporting cash flows through its emphasis on preparing the statement of cash flows.

Under the accrual basis of accounting, transactions are recorded as they occur and thus affect the accounting equation (assets, liabilities, and stockholders' equity). Since the receipt or payment of cash affects assets (cash), all cash receipts and payments are recorded in the accounts under the accrual basis or the cash basis. However, under the accrual basis, transactions are also recorded even though cash is not received or paid until a later point. For example, Family Health Care may provide services to patients who are covered by health insurance. It then files a claim with the insurance company for the payment. In this case, the services are said to be provided "on account." Likewise, a business may purchase supplies from a vendor, with terms that allow the business to pay for the purchase within a time period, such as ten days. In this case, the supplies are said to be purchased

"on account." Each of the preceding illustrations represents a business transaction that affects elements of the accounting equation and is therefore recorded under the accrual basis, *even though cash is not received or paid*.

In accounting, we often use the term "recognized" to refer to when a transaction is recorded. Thus, under the cash basis of accounting, transactions are not recognized until cash is received or paid. *Under the accrual basis of accounting, revenue is normally recognized when it is earned.* For Family Health Care, revenue is earned when services have been provided to the customer. At this point, the revenue earning process is complete, and the customer is legally obligated to pay for the services.

pay for the services.

Under the accrual basis, the matching concept plays an important role in determining when expenses are recorded. When revenues are earned and recorded, all expenses incurred in generating the revenues must also be recorded, regardless of whether cash has been paid. In this way, revenues and expenses are matched and the net income or net loss for the period can be determined. This is an application of the matching concept that we

J. C. Clark, Attorney at Law, drafted a will and estate documents for Max Winder on April 30. Clark billed Winder \$1,200 for these services on May 20 and received payment on June 4. In what month should Clark record the revenue under

should Clark record the revenue un the accrual and cash bases of accounting?

Accrual basis: April; Cash basis: June.

# Strategy in Business

### Not Cutting Corners

ave you ever ordered a hamburger from Wendy's and noticed that the meat patty is square? The square meat patty reflects a business strategy instilled in Wendy's by its founder, Dave

Thomas. Mr. Thomas' strategy was to offer high-quality products at a fair price in a friendly atmosphere, without "cutting corners"; hence, the square meat patty. In the highly competitive fast-food industry, Dave Thomas's strategy enabled Wendy's to grow to be the third largest fast-food restaurant in the world, with annual sales of over \$7 billion.

**Source:** "Dave Thomas, 69, Wendy's Founder, Dies," by Douglas Martin, *The New York Times*, January 9, 2002.

discussed in Chapter 1. That is, expenses are recognized and recorded in the same period as the related revenues that they generated.

The accrual basis recognizes liabilities at the time the business incurs the obligation to pay for the services or goods purchased. For example, the purchase of supplies on account would be recorded when the supplies are received and the business has incurred the obligation to pay for the supplies.

# Using the Accrual Basis of Accounting for Family Health Care's November Transactions

Use the accrual basis of accounting to analyze, record, and summarize transactions.

**Use the accrual basis**To illustrate the accrual basis of accounting, we will use the November 2003 Family Health
Care transactions. These transactions are as follows:

- a. On November 1, received \$1,800 from ILS Company as rent for the use of Family Health Care's land as a temporary parking lot from November 2003 through March 2004.
- b. On November 1, paid \$2,400 for an insurance premium on a two-year, general business policy.
- c. On November 1, paid \$6,000 for an insurance premium on a six-month medical malpractice policy.
- d. Dr. Landry invested an additional \$5,000 in the business in exchange for capital stock.
- e. Purchased supplies for \$240 on account.
- f. Purchased \$8,500 of office equipment. Paid \$1,700 cash as a down payment, with the remainder due in five monthly installments of \$1,360, beginning December 1.
- g. Provided services of \$6,100 to patients on account.
- h. Received \$5,500 for services provided to patients who paid cash.
- Received \$4,200 from insurance companies, which paid on patients' accounts for services that have been provided.
- j. Paid \$100 on account for supplies that had been purchased.
- k. Expenses paid during November were as follows: wages, \$2,790; rent, \$800; utilities, \$580; interest, \$100; miscellaneous, \$420.
- 1. Paid dividends of \$1,200 to stockholders (Dr. Landry).

In analyzing and recording the November transactions for Family Health Care, we use the same format as we used in Chapter 2. In so doing, we record increases and decreases for each financial statement element. These separate elements are referred to as **accounts**.

**Transaction a** *On November 1, received \$1,800 from ILS Company as rent for the use of Family Health Care's land as a temporary parking lot from November 2003 through March 2004.* In this transaction, Family Health Care entered into a rental agreement for the use of its land. The agreement required the payment of the rental fee of \$1,800 in advance. The rental agreement also gives ILS Company the option of renewing the agreement for another four months.

How does this transaction affect the accounts (elements) of the accounting equation and how should it be recorded? Since cash has been received, cash is increased by \$1,800, but what other account should be increased or decreased? Family Health Care has agreed to rent the land to ILS Company for five months and thus has incurred a liability to provide this service—rental of the land. If Family Health Care canceled the agreement on November 1, after accepting the \$1,800, it would have to repay that amount to ILS Company.

Thus, Family Health Care should record this transaction as an increase in cash and an increase in a liability for \$1,800. Because the liability relates to rental revenue, it is recorded as **unearned revenue**, as shown below.

		Asse	ts	=	Li	abili	ties	+	Stockh	olde	rs' Equity	
Bal.	Cash 7,320	+	Land 12,000	=	Notes Payable 10,000	+	Unearned Revenue	+	Capital Stock 6,000	+	Retained Earnings 3,320	
a.	1,800						1,800					Received rent in advance
Bal.	9,120		12,000		10,000		1,800		6,000		3,320	

As time passes, the liability will decrease and Family Health Care will earn rental revenue. For example, at the end of November, one-fifth of the \$1,800 (\$360) will have been earned. Later in this chapter, we will discuss how to record the \$360 of earned rent revenue at the end of November.

You should note that the beginning balances shown in the preceding equation are the ending balances from October. That is, the cash balance of \$7,320 is the ending cash balance as of October 31, 2003. Likewise, the other balances are carried forward from the preceding month. In this sense, the accounting equation represents a cumulative history of the financial results of the business.

**Transaction b** *On November 1, paid \$2,400 for an insurance premium on a two-year, general business policy.* This umbrella policy covers a variety of possible risks to the business, such as fire and theft. By paying the premium, Family Health Care has purchased an asset, insurance coverage, in exchange for cash. Thus, the mix of assets has changed. However, the prepaid insurance coverage is unique in that it expires with the passage of time. At the end of the two-year period, the asset will have completely expired. Such assets are called **prepaid expenses** or deferred expenses. Thus, the purchase of the insurance coverage is recorded as prepaid insurance, as shown below.

			Assets			=	Li	abil	ities	+	Stockh	olde	rs' Equity	
Bal.	Cash 9.120	+	Prepaid Insurance	+	Land 12.000	=	Notes Payable 10.000	+	Unearned Revenue 1.800	+	Capital Stock 6.000	+	Retained Earnings 3,320	
	-2,400		2,400		,000		. 0,000		.,000		0,000		0,020	Paid insurance for two years
Bal.	6,720		2,400		12,000		10,000		1,800		6,000		3,320	

Later in this illustration, we will discuss how such accounts are updated at the end of an accounting period to reflect the portion of the asset that has expired.

**Transaction c** *On November 1, paid \$6,000 for an insurance premium on a six-month medical malpractice policy.* This transaction is similar to transaction (b), except that Family Health Care has purchased medical malpractice insurance that is renewable every six months. The transaction is recorded as follows:

			Assets			=	Li	abil	ities	+	Stockh	olde	rs' Equity	
Bal.	Cash 6,720	+	Prepaid Insurance 2,400	+	Land 12,000		Notes Payable 10,000	+	Unearned Revenue 1,800	+	Capital Stock 6,000	+	Retained Earnings 3,320	
C.	-6,000		6,000											Paid insurance for 6 months
Bal.	720		8,400		12,000		10,000		1,800		6,000		3,320	

**Transaction d** *Dr. Landry invested an additional \$5,000 in the business in exchange for capital stock.* This transaction is similar to the one in which Dr. Landry initially established Family Health Care. It is recorded as shown below.

			Assets			=	Li	abili	ities	+	Stockh	olde	rs' Equity	
Bal.	Cash 720	+	Prepaid Insurance 8.400	+	Land 12.000	=	Notes Payable 10.000	+	Unearned Revenue 1.800	+	Capital Stock 6.000	+	Retained Earnings 3,320	
Dai.			0,400		12,000		10,000		1,600		0,000		3,320	
d.	5,000										5,000			Investment
Bal.	5,720		8,400		12,000		10,000		1,800		11,000		3,320	

**Transaction e** *Purchased supplies for \$240 on account.* This transaction is similar to transactions (b) and (c), in that purchased supplies are assets until they are used up in generating revenue. Family Health Care has purchased and received the supplies, with a promise to pay in the near future. Such liabilities that are incurred in the normal operations of the business are called **accounts payable**. The transaction is recorded by increasing the asset supplies and increasing the liability accounts payable, as shown below.

		Assets	=	=	Liabilitie	es	+ Stockhold	ers' Equity	,
	Prepaid			Notes	Accts.	Unearned	Capital	Retained	
Cash +	Ins.	+ Supplies +	- Land =	= Pay.	+ Pay	+ Revenue	+ Stock +	Earnings	
Bal. 5,720	8,400		12,000	10,000		1,800	11,000	3,320	
e.		240			240				Purchase of supplies
Bal. 5,720	8,400	240	12,000	10,000	240	1,800	11,000	3,320	

**Transaction f** *Purchased* \$8,500 *of office equipment. Paid* \$1,700 *cash as a down payment, with the remainder due in five monthly installments of* \$1,360, *beginning December 1.* In this transaction, the asset office equipment is increased by \$8,500, cash is decreased by \$1,700, and notes payable is increased by \$6,800. The transaction is recorded as follows:

				Assets			=	Liabilit	ies	+Stockho	olders' Equi	ty
			Prepaid	ł	Office		Notes	Accts.	Unearned	Capital	Retained	
		Cash +	- Ins.	+ Supplies	+ Equip. +	Land	= Pay.	+ Pay.	+ Revenue	+ Stock	+ Earnings	
Ва	al.	5,720	8,400	240		12,000	10,000	240	1,800	11,000	3,320	
f.	_	-1,700			8,500		6,800					Purchase of office equip.
Ва	al.	4.020	8,400	240	8.500	12.000	16.800	240	1.800	11.000	3.320	

**Transaction g** *Provided services of \$6,100 to patients on account.* This transaction is similar to the revenue transactions that we recorded in September and October, except that the services have been provided on account. Family Health Care will collect cash from the patients' insurance companies in the future. Such amounts that are to be collected in the future and that arise from the normal operations of a business are called **accounts receivable**. Since a valid claim exists against a third party, accounts receivable are assets and the transaction would be recorded as shown.

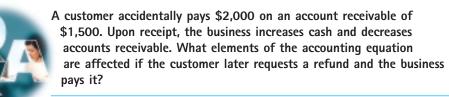
		Α	ssets		:	=	Liabilitie	:S	+ Stockhol	ders' Equi	ity
Caala	Accts.			Office	l land	Notes		Unearned		Retained	
	⊢ Kec. +		+ Supplies +			•	•				
Bal. 4,020		8,400	240	8,500	12,000	16,800	240	1,800	11,000	3,320	
g.	6,100									6,100	Fees earned
Bal. 4,020	6,100	8,400	240	8,500	12,000	16,800	240	1,800	11,000	9,420	

**Transaction h** *Received \$5,500 for services provided to patients who paid cash.* This transaction is similar to the revenue transactions that we recorded in September and October and is recorded as shown below.

		F	Assets		=	=	Liabilitie	es e	+ Stockho	olders' Equi	ty
Cash ⊢		Prepaid Ins.	+ Supplies +	Office - Equip.	+ Land =	Notes = Pay.		Unearned - Revenue			
Bal. 4,020	6,100	8,400	240	8,500	12,000	16,800	240	1,800	11,000	9,420	
h. 5,500										5,500	Fees earned
Bal. 9,520	6,100	8,400	240	8,500	12,000	16,800	240	1,800	11,000	14,920	

**Transaction i** Received \$4,200 from insurance companies, which paid on patients' accounts for services that have been provided. In this transaction, cash is increased and the accounts receivable is decreased by \$4,200. Thus, only the mix of assets changes, and the transaction is recorded as shown below.

			Asse	ts			=	Liabilitie	es -	- Stockho	olders' Equi	ty
		Accts.	Prepaid		Office		Notes	Accts.	Unearned	Capital	Retained	
	Cash ⊣	- Rec	+ Ins	+ Supp.	+ Equip. +	Land	= Pay	+ Pay. ⊣	- Revenue -	- Stock	+ Earnings	
Bal.	9,520	6,100	8,400	240	8,500	12,000	16,800	240	1,800	11,000	14,920	
i.	4,200	-4,200										Collected cash
Bal.	13,720	1,900	8,400	240	8,500	12,000	16,800	240	1,800	11,000	14,920	



Cash decreases by \$500, and accounts receivable increases by \$500.

**Transaction j** *Paid* \$100 on account for supplies that had been purchased. This transaction reduces the cash and the accounts payable by \$100, as shown below.

		Assets		=	Liabilities	+ Stockholders	s' Equity
Cash +	Accts.	Prepaid	Office		Accts. Unearned Pay. + Revenue		etained
Bal. 13,720	1,900			12,000 16,800	240 1,800		4,920
j100					-100		Paid on acct.
Bal. 13,620	1,900	8,400	240 8,500	12,000 16,800	140 1,800	11,000 1	4,920



Assume that you cancel a \$300 airline ticket that, though nonrefundable, may be applied to another ticket within one year. When should the airline transfer the \$300 from unearned revenue to revenue?

After one year, or when the \$300 is applied to another ticket and you use that ticket.

**Transaction k** *Expenses paid during November were as follows: wages, \$2,790; rent, \$800; utilities, \$580; interest, \$100; miscellaneous, \$420.* This transaction is similar to the expense transaction that we recorded for Family Health Care in September and October. It is recorded as shown below.

			Ass	ets			=	Liabilitie	es	+ Stockho	olders' Equi	ty
		Accts.	Prepaid		Office		Notes	Accts.	Unearned	Capital	Retained	
	Cash +	Rec.	+ Ins.	+ Supp	+ Equip. +	- Land	= Pay.	+ Pay	+ Revenue	+ Stock	+ Earnings	
Bal.	13,620	1,900	8,400	240	8,500	12,000	16,800	140	1,800	11,000	14,920	
k.	-4,690										-2,790	Wages exp.
											-800	Rent exp.
											-580	Utilities exp.
											-100	Interest exp.
											-420	Misc. exp.
Bal.	8,930	1,900	8,400	240	8,500	12,000	16,800	140	1,800	11,000	10,230	

**Transaction I** *Paid dividends of \$1,200 to stockholders (Dr. Landry).* This transaction is similar to the dividends transactions of September and October. It is recorded as shown below.

			Asse	ts			=	Liabilitie	s -	⊢ Stockho	olders' Equi	ty
		Accts.	Prepaid		Office		Notes	Accts.	Unearned	Capital	Retained	
	Cash +	Rec.	+ Ins	+ Supp.	+ Equip	- Land	= Pay.	+ Pay. ⊣	- Revenue -	+ Stock	+ Earnings	
Bal.	8,930	1,900	8,400	240	8,500	12,000	16,800	140	1,800	11,000	10,230	
J	<b>-1,200</b>										-1,200	Dividends
Bal.	7,730	1,900	8,400	240	8,500	12,000	16,800	140	1,800	11,000	9,030	

# The Adjustment Process

Describe and illustrate the end-of-the-period adjustment process.

The accrual basis of accounting requires the accounting records to be updated prior to preparing financial statements. This updating process, called the **adjustment process**, is necessary to properly match revenues and expenses. This is an application of the matching concept.

Adjustments are necessary because, at any point in time, some accounts (elements) of the accounting equation will not be up to date. For example, as time passes, prepaid insurance will expire and supplies will be used in operations. However, it is not efficient to record the daily expiration of prepaid insurance or the daily usage of supplies. Rather, the accounting records are normally updated just prior to preparing the financial statements.

You may wonder why we were able to prepare the September and October financial statements for Family Health Care in Chapter 2 without recording any adjustments. The answer is that in September and October, Family Health Care used the cash basis of accounting. Under the cash basis, no adjustments are necessary because transactions are only recorded as cash is received or paid. However, Family Health Care began using the accrual basis in November. Thus, we must now address the adjustment process.

#### Deferrals and Accruals

The financial statements are affected by two types of adjustments—deferrals and accruals. Whether a deferral or an accrual, each adjustment will affect a balance sheet account and an income statement account.

**Deferrals** are created by recording a transaction in a way that delays or defers the recognition of an expense or a revenue. Common examples of deferrals are described below.

- **Deferred expenses** or *prepaid expenses* are items that initially have been recorded as assets but are expected to become expenses over time or through the normal operations of the business. For Family Health Care, prepaid insurance is an example of a deferral that will normally require adjustment. Other examples include supplies, prepaid advertising, and prepaid interest. The tuition you pay at the beginning of each term is also an example of a deferred expense to you as a student. **McDonald's Corporation** reported over \$300 million of prepaid expenses and other current assets on a recent balance sheet.
- **Deferred revenues** or *unearned revenues* are items that initially have been recorded as liabilities but are expected to become revenues over time or through the normal operations of the business. For Family Health Care, unearned rent is an example of a deferred revenue. Other examples include tuition received in advance by a school, an annual retainer fee received by an attorney, premiums received in advance by an insurance company, and magazine subscriptions received in advance by a publisher. On a recent balance sheet, **Microsoft Corporation** reported almost \$5 billion of deferred revenue related to its software. Likewise, **AOL Time-Warner** reported over a billion dollars of deferred revenue on a recent balance sheet.

**Accruals** are created when a revenue or expense has not been recorded at the end of the accounting period. Accruals are normally the result of revenue being earned or an expense being incurred before any cash is received or paid. For example, employees may earn wages before the end of the year, but may be paid after year-end. That is, employee

### Ethics in Action

#### Free Issue

office supplies are often available to employees on a "free issue" basis. This means employees do not have to "sign" for the release of office supplies but

merely obtain the necessary supplies from a local storage area as needed. Just because supplies are easily available, however, doesn't mean they can be taken for personal use. There are many instances when employees have been terminated for taking supplies home for personal use.

wages may be paid and recorded every Friday, but the accounting period may end on a Tuesday. Thus, at the end of the accounting period, the company owes the employees for their wages on Monday and Tuesday that will be paid on the following Friday. At the end of the accounting period, these wages have been incurred by the company, but have not yet been recorded or paid. Thus, the amount of the wages for Monday and Tuesday is an accrual. Other examples of accruals are described below.

Accrued expenses or accrued liabilities are expenses that have been incurred but
have not been recorded in the accounts. An example of an accrued expense is accrued
interest on notes payable at the end of a period. Other examples include accrued utility expenses and taxes. On a recent balance sheet, Home Depot reported over \$600
million of accrued salaries and related expenses, almost \$300 million of sales taxes
payable, and over a billion dollars of other accrued expenses.



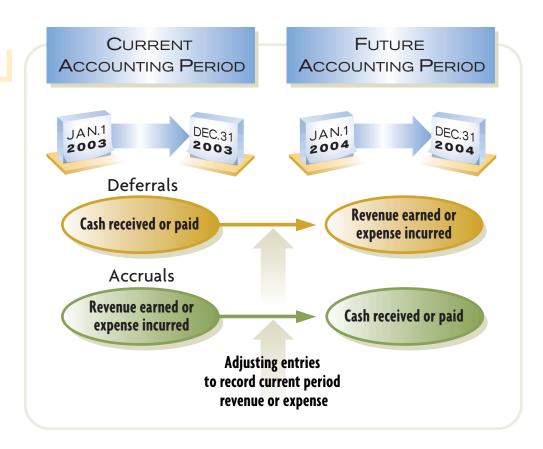
Assume that you take advantage of an offer by a local funeral home to prepay your funeral, burial, and related expenses. How would the funeral home account for the prepayment?

Increase cash and deferred (unearned) revenue.

Accrued revenues or accrued assets are revenues that
have been earned but have not been recorded in the accounts. An example of an accrued revenue is fees for services that an attorney has provided but has not billed to
the client at the end of the period. Other examples include unbilled commissions by a travel agent, accrued
interest on notes receivable, and accrued rent on property rented to others. On a recent balance sheet, General
Motors reported over \$5.8 billion of accounts receivable.

Exhibit 1 summarizes the nature of deferrals and accruals and the need for adjustments in order to prepare financial statements.

# Exhibit 1 Deferrals and Accruals



#### Adjustments for Family Health Care

We now analyze the financial statement accounts for Family Health Care at the end of November to determine whether any adjustments are necessary. Specifically, we will focus on the following adjustment data, which are typical for most businesses.

#### Deferred expenses:

- 1. Prepaid insurance expired, \$1,100.
- 2. Supplies used, \$150.
- 3. Depreciation on office equipment, \$160.

#### Deferred revenue:

4. Unearned revenue earned, \$360.

#### Accrued expense:

5. Wages owed but not paid to employees, \$220.

#### Accrued revenue:

6. Services provided but not billed to insurance companies, \$750.

**Adjustment 1 (Deferred Expense–Prepaid Insurance)** This first adjustment recognizes that a portion of the prepaid insurance purchased November 1 expired during November. Family Health Care prepaid two policies—a general business policy for \$2,400 (transaction b) and a malpractice policy for \$6,000 (transaction c). The general business policy is a two-year policy expiring at a rate of \$100 (\$2,400  $\div$  24) per month. The malpractice policy is a six-month policy that expires at a rate of \$1,000 (\$6,000  $\div$  6) per month. The total expired prepaid insurance is thus \$1,100 (\$100 + \$1,000). This adjustment is recorded as shown below.

	Assets						= Liabilities			ders' Equity
		lns. +				•	+ Pay	Unearned  Revenue +	- Stock +	- Earnings
Bal. 7,730	1,900	8,400	240	8,500	12,000	16,800	140	1,800	11,000	9,030
a1		-1,100								-1,100 Ins. exp.
Bal. 7,730	1,900	7,300	240	8,500	12,000	16,800	140	1,800	11,000	7,930

As of January 1, \$450 of supplies are on hand. During January, \$1,250 of supplies were purchased on account, and on January 31, \$175 of supplies are on hand. What is the supplies expense for January?

\$1,525 (\$450 + \$1,250 - \$175)

Adjustment 2 (Deferred Expense—Supplies) This adjustment recognizes the portion of the \$240 of supplies purchased during November that have been used. For November, \$150 of the supplies were used, leaving \$90 of supplies for use during the coming months. Thus, after recording the adjustment, the accounting records should show supplies expense of \$150 for November and supplies on hand (an asset) of \$90. The second adjustment is recorded as shown below.

	Assets						= Liabilities			+ Stockholders' Equity		
Cash +		Prepaid Ins.	+ Supp. +	Office Equip	+ Land	Notes = Pav.		Unearned - Revenue ∃	'	Retained + Earnings		
Bal. 7,730	1,900	7,300	240	8,500	12,000	16,800	•	1,800	11,000	7,930		
a2			<b>-150</b>							-150	Supplies exp.	
Bal. 7,730	1,900	7,300	90	8,500	12,000	16,800	140	1,800	11,000	7,780		

**Adjustment 3 (Deferred Expense—Depreciation)** This adjustment recognizes that fixed assets such as office equipment lose their ability to provide service over time. This reduction in the ability of a fixed asset to provide service is called **depreciation**. However, it is difficult to objectively determine the physical decline in the ability of fixed assets to provide service. For this reason, accountants estimate the amount of the cost of long-term assets that becomes expense over the asset's useful life. In a later chapter, we will discuss methods of estimating depreciation. In this chapter, we simply assume that the amount of November depreciation for the office equipment is \$160.

To maintain a record of the initial cost of a fixed asset for tax and other purposes, the fixed asset (office equipment) is not reduced directly. Instead, an offsetting or contra asset account, called **accumulated depreciation**, is included in the accounting equation. Thus, the third adjustment is recorded as shown.

			Assets			=	= Liabilitie			es + Stockholders' Equity		
		Prepaid		Office					Unearned		Ret.	
Cash +	- Rec. ⊣	- Ins.	+ Supp.	+ Equip	– Dep. ⊣	⊦ Land =	= Pay.	+ Pay. +	Revenue -	- Stock +	Earn.	
Bal. 7,730	1,900	7,300	90	8,500		12,000	16,800	140	1,800	11,000	7,780	
a3					160						−160 Dep. exp.	
Bal. 7,730	1,900	7,300	90	8,500	160	12,000	16,800	140	1,800	11,000	7,620	

Note that the accumulated depreciation account is subtracted in determining the total assets. To highlight the effect of this account, its balance is shown in color. We should also note three other points related to Adjustment 3. First, land is not depreciated, since it usually does not lose its ability to provide service. Second, the cost of the equipment can be thought of as a deferred expense, since it is recognized as an expense over the equipment's useful life. Third, the cost of the fixed asset less the balance of its accumulated depreciation is called the asset's *carrying value* or *book value*. For example, the carrying value of the office equipment, after the preceding adjustment, is \$8,340 (\$8,500 – \$160).

**Adjustment 4 (Deferred Revenue—Unearned Rent)** This adjustment recognizes that a portion of the unearned revenue is earned by the end of November. That is, of the \$1,800 received for rental of the land for five months (November through March), one-fifth, or \$360, would have been earned as of November 30. The fourth adjustment recognizes this decrease in the unearned revenue and the increase in the rental revenue, as shown below.

Assets							=	Liabilitie	S	+ Stockhol	ders' Equity
	Accts.	Prepaid		Office	Acc.		Notes	Accts.	Unearned	Capital	Ret.
Cash -	+ Rec. +	Ins.	+ Supp.	+ Equip	– Dep. ⊣	- Land	= Pay.	+ Pay. +	Revenue	+ Stock +	Earn.
Bal. 7,730	1,900	7,300	90	8,500	160	12,000	16,800	140	1,800	11,000	7,620
a4									-360		360 Rental rev.
Bal. 7,730	1,900	7,300	90	8,500	160	12,000	16,800	140	1,440	11,000	7,980

Adjustment 5 (Accrued Expense—Wages) This adjustment recognizes that as of November 30, employees of Family Health Care may have worked one or more days for which they have not been paid. It is rare that the employees are paid the same day that the accounting period ends. Thus, at the end of an accounting period, it is normal for businesses to owe wages to their employees. This is what we defined as an accrued expense earlier in our discussion. The fifth adjustment is recorded by increasing wages payable, a liability, and deducting wages expense from retained earnings, as shown.

Assets							= Liabilities				+ Stockholders' Equity		
	Accts.	Prepaid		Office	Acc.		Notes	Accts.	Wages	Unearned	Capital	Retained	I
Cash -	+ Rec. +	Ins.	+ Supp.	+ Equip.	– Dep. +	- Land	= Pay.	+ Pay	+ Pay	+ Revenue	+ Stock	+ Earnings	
Bal. 7,730	1,900	7,300	90	8,500	160	12,000	16,800	140		1,440	11,000	7,980	
a5									220			-220	Wages exp.
Bal. 7,730	1,900	7,300	90	8,500	160	12,000	16,800	140	220	1,440	11,000	7,760	



During August, wages expense of \$18,950 was reported on the income statement. If wages payable at August 1 was \$1,100, and wages of \$18,500 were paid during August, how much was accrued wages payable on August 31?

1,550 (18,500 - 1,100 = 17,400; 18,950 - 17,400 = 1,550)

**Adjustment 6 (Accrued Revenue—Fees Earned)** This adjustment recognizes that Family Health Care has provided services to patients that have not yet been billed. Such services are usually provided near the end of the month. This adjustment is recorded by increasing accounts receivable and fees earned, as shown below.

	Assets							Liabilities			+ Stockho	uity	
Cash -		Prepaid - Ins.		Office + Equip						Unearned + Revenue			
Bal. 7,730	1,900	7,300	90				16,800		220	1,440	11,000	7,760	
a6	750											750	Fees earned
Bal. 7,730	2,650	7,300	90	8,500	160	12,000	16,800	140	220	1,440	11,000	8,510	

Family Health Care's transactions for November and the related adjustments are summarized in Exhibit 2. We will prepare Family Health Care's November financial statements using this summary.

### Ethics in Action

### The Round Trip

common type of fraud involves artificially inflating revenue. One fraudulent method of inflating revenue is called "round tripping." Under this scheme, a selling company (S)

"lends" money to a customer company (C). The money is then used by C to purchase a product from S. Thus, S sells product to C and is paid with the money just loaned to C! This looks like a sale in the

accounting records, but in reality, S is shipping product for free. The fraud is exposed when it is determined that there was no intent to repay the original loan.

Exhibit 2
Family Health Care Summary of Transactions and Adjustments for November

Cash		Assets											=		
Bal.   9,120   2,400   2,400   12,000		7,320	+		+		+	Supp.	+		_		+		=
Bal.         6,720         2,400         12,000           c.         -6,000         6,000         12,000           Bal.         5,000         12,000         12,000           d.         5,000         12,000         12,000           e.         240         12,000         12,000           f.         -1,700         8,400         240         8,500         12,000           g.         6,100         8,400         240         8,500         12,000           g.         6,100         8,400         240         8,500         12,000           h.         5,500         12,000         12,000         12,000         12,000           h.         5,500         6,100         8,400         240         8,500         12,000           h.         5,500         6,100         8,400         240         8,500         12,000           bal.         13,720         1,900         8,400         240         8,500         12,000           j.         -100         1,900         8,400         240         8,500         12,000           k.         -4,690         1,900         8,400         240         8,500         12,000	Bal.	9,120				2.400								12,000	
Bal.         720 d.         8,400 d.         12,000 d.           Bal.         5,720 s.         8,400 d.         240 d.           Bal.         5,720 s.         8,400 d.         240 d.         12,000 d.           Bal.         5,720 s.         8,400 d.         240 d.         8,500 d.         12,000 d.           Bal.         4,020 s.         8,400 d.         240 d.         8,500 d.         12,000 d.           Bal.         4,020 s.         6,100 d.         8,400 d.         240 d.         8,500 d.         12,000 d.           Bal.         9,520 d.         6,100 d.         8,400 d.         240 d.         8,500 d.         12,000 d.           Bal.         13,720 d.         1,900 d.         8,400 d.         240 d.         8,500 d.         12,000 d.           bal.         13,820 d.         1,900 d.         8,400 d.         240 d.         8,500 d.         12,000 d.           bal.         7,730 d.         1,900 d.         8,400 d.         240 d.         8,500 d.         12,000 d.           bal.         7,730 d.         1,900 d.         7,300 d.         240 d.         8,500 d.         12,000 d.           bal.         7,730 d.         1,900 d.         7,300 d.         90 d.         8,5	Bal.	6,720				2,400								12,000	
Bal.         5,720         8,400         240           Bal.         5,720         8,400         240         12,000           f.         -1,700         8,500         12,000           Bal.         4,020         8,400         240         8,500         12,000           Bal.         4,020         6,100         8,400         240         8,500         12,000           bal.         9,520         6,100         8,400         240         8,500         12,000           i.         4,200         -4,200         8,400         240         8,500         12,000           i.         4,200         -4,200         8,400         240         8,500         12,000           j.         -100         8,400         240         8,500         12,000           k.         -4,690         8,400         240         8,500         12,000           l.         -1,200         8,400         240         8,500         12,000           al.         7,730         1,900         8,400         240         8,500         12,000           al.         -1,200         -1,100         8,500         12,000         12,000           al.	Bal.	720												12,000	
Bal.         5,720         8,400         240         8,500         12,000           f.         -1,700         8,500         12,000           g.         6,100         8,400         240         8,500         12,000           Bal.         4,020         6,100         8,400         240         8,500         12,000           Bal.         9,520         6,100         8,400         240         8,500         12,000           Bal.         13,720         1,900         8,400         240         8,500         12,000           Bal.         13,620         1,900         8,400         240         8,500         12,000           k.         -4,690         1,900         8,400         240         8,500         12,000           Bal.         7,730         1,900         8,400         240         8,500         12,000           Bal.         7,730         1,900         7,300         240         8,500         12,000           a2.         -150         -150         -150         12,000           Bal.         7,730         1,900         7,300         90         8,500         12,000           a3.         -160         12,000 </td <td>Bal.</td> <td></td> <td></td> <td></td> <td></td> <td>8,400</td> <td></td> <td>240</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>12,000</td> <td></td>	Bal.					8,400		240						12,000	
g.         6,100           Bal.         4,020         6,100         8,400         240         8,500         12,000           bal.         9,520         6,100         8,400         240         8,500         12,000           Bal.         13,720         1,900         8,400         240         8,500         12,000           Bal.         13,620         1,900         8,400         240         8,500         12,000           k.         -4,690         1,900         8,400         240         8,500         12,000           Bal.         7,730         1,900         8,400         240         8,500         12,000           Bal.         7,730         1,900         8,400         240         8,500         12,000           a1.         -1,100         -1,100         -1,100         -1,100         -1,100         -1,200           Bal.         7,730         1,900         7,300         240         8,500         12,000           a2.         -150         -160         -1,000         -1,000         -1,000         -1,000           Bal.         7,730         1,900         7,300         90         8,500         160         12,000     <	Bal.					8,400		240		8,500				12,000	
Bal.         4,020 h.         6,100 s.,5500         8,400         240 s.,500         12,000 h.         12,		4,020		6,100		8,400		240		8,500				12,000	
i.       4,200       -4,200         Bal.       13,720       1,900       8,400       240       8,500       12,000         Bal.       13,620       1,900       8,400       240       8,500       12,000         k.       -4,690       1,900       8,400       240       8,500       12,000         Bal.       7,730       1,900       8,400       240       8,500       12,000         a1.       -1,100       -1,100       -1,100       -1,100       -1,100       -1,100         Bal.       7,730       1,900       7,300       240       8,500       12,000         a2.       -150       -150       -150       -150       -150         Bal.       7,730       1,900       7,300       90       8,500       12,000         a3.	Bal.			6,100		8,400		240		8,500				12,000	
j.       -100         Bal.       13,620       1,900       8,400       240       8,500       12,000         k.       -4,690       1,900       8,400       240       8,500       12,000         l.       -1,200       1,900       8,400       240       8,500       12,000         a1.       -1,100       240       8,500       12,000         a2.       -150       12,000       12,000         a3.       160       12,000         a4.       8,500       160       12,000         a4.       160       12,000         a4.       8,500       160       12,000         a5.       1,900       7,300       90       8,500       160       12,000         a5.       1,900       7,300       90       8,500       160       12,000         a5.       1,900       7,300       90       8,500       160       12,000         a6.       7,730       1,900       7,300       90       8,500       160       12,000	Bal. i.					8,400		240		8,500				12,000	
k.       -4,690         Bal.       8,930   1,900   1,900   1,900   1,000	Bal. j.			1,900		8,400		240		8,500				12,000	
I.     -1,200       Bal.     7,730     1,900     8,400     240     8,500     12,000       a1.     -1,100     1,900     240     8,500     12,000       a2.     -150       Bal.     7,730     1,900     7,300     90     8,500     12,000       a3.     160       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a4.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a5.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a6.     750				1,900		8,400		240		8,500				12,000	
a1.     -1,100       Bal.     7,730     1,900     7,300     240     8,500     12,000       a2.     -150       Bal.     7,730     1,900     7,300     90     8,500     160       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a4.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a5.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a6.     750	Bal.			1,900		8,400		240		8,500				12,000	
a2.     -150       Bal.     7,730     1,900     7,300     90     8,500     12,000       a3.     160       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a4.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a5.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a6.     750		7,730		1,900				240		8,500				12,000	
a3.     160       Bal. 7,730 1,900 24.     7,300 90 8,500 160 12,000       Bal. 7,730 1,900 7,300 90 8,500 160 12,000       a5.       Bal. 7,730 1,900 7,300 90 8,500 160 12,000       a6. 750		7,730		1,900		7,300				8,500				12,000	
a4.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a5.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a6.     750		7,730		1,900		7,300		90		8,500		160		12,000	
Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a5.       Bal.     7,730     1,900     7,300     90     8,500     160     12,000       a6.     750	Bal.	7,730		1,900		7,300		90		8,500		160		12,000	
Bal. 7,730 1,900 7,300 90 8,500 160 12,000 a6. 750	Bal.	7,730		1,900		7,300		90		8,500		160		12,000	
	Bal.	7,730				7,300		90		8,500		160		12,000	
20. 7,000 2,000 100 12,000	Bal.	7,730		2,650		7,300		90		8,500		160		12,000	

(continued)

#### Exhibit 2

#### Concluded

 			Liabilit	ties			+	Stockh	olders'	Equity	
Notes Pay. 10,000	+	Accts. Pay.	+	Wages Pay.	+	Unearned Revenue	+	Capital Stock 6,000	+	Ret. Earn. 3,320	D l
10.000						1,800		0.000		2 200	Rental revenue
10,000						1,800		6,000		3,320	Paid insurance
10,000						1,800		6,000		3,320	Paid insurance
10,000						1,800		6,000 5,000		3,320	Investment
10,000		240				1,800		11,000		3,320	Purchase of supplies
10,000 6,800		240				1,800		11,000		3,320	Purchase of office equipment
16,800		240				1,800		11,000		3,320 6,100	Fees earned
16,800		240				1,800		11,000		9,420 5,500	Fees earned
16,800		240				1,800		11,000		14,920	Collected cash
16,800		240 100				1,800		11,000		14,920	Paid on account
16,800		140				1,800		11,000		14,920 -2,790 -800 -580 -100 -420	Wages expense Rent expense Utilities expense Interest expense Misc. expense
16,800		140				1,800		11,000		10,230 -1,200	Dividends
16,800		140				1,800		11,000		9,030 -1,100	Ins. expense
16,800		140				1,800		11,000		7,930 150	Supplies expense
16,800		140				1,800		11,000		7,780 160	Depreciation expense
16,800		140				1,800 -360		11,000		7,620 360	Rental revenue
16,800		140		220		1,440		11,000		7,980 -220	Wages expense
16,800		140		220		1,440		11,000		7,760 750	Fees earned
16,800		140		220		1,440		11,000		8,510	

### Financial Statements

Prepare accrualbasis financial statements, including a classified balance sheet.

In Chapter 2, we prepared financial statements for Family Health Care for September and October. These financial statements were prepared using the cash basis of accounting. In this section, we describe and illustrate financial statements for November, using the accrual basis of accounting. These financial statements are shown in Exhibit 3. They are based on the summary of transactions and adjustments shown in Exhibit 2.

The income statement is prepared by summarizing the revenue and expense transactions listed under the retained earnings column of Exhibit 2. The operating income is determined by deducting the operating expenses from the fees earned from normal operations. The other income—rental revenue—is then added to determine the net income for November.

As reported on the income statement, *revenues* are the increases in the stockholders' equity as a result of providing services or selling products to customers. Examples of revenues include fees earned, fares earned, commissions revenue, interest revenue, and rent revenue.

Revenues from the primary operations of the business are normally reported separately from other revenue. For example, Family Health Care has two types of revenues for November, fees earned and rental revenue. Since the primary operation of the business is providing services to patients, rent revenue is reported under the heading of "Other income."

Expenses on the income statement are assets used up or services consumed in the process of generating revenues. Expenses are matched against their related revenues to determine the net income or net loss for a period. Examples of typical expenses include wages expense, rent expense, utilities expense, supplies expense, and miscellaneous expense. Expenses not related to the primary operations of the business are sometimes reported as "Other expense." Interest expense is an example of an expense often reported separately as an Other expense.

The retained earnings statement is prepared by adding the November net income (from the income statement), less the November dividends, to the beginning amount of retained earnings. This ending amount of retained earnings is included on the balance sheet.

#### Exhibit 3

Family Health Care Financial Statements for November

Family Health Care, P.C. Income Statement For the Month Ended November 30, 2003		
Fees earned		\$12,350
Operating expenses:		
Wages expense	\$3,010	
Insurance expense	1,100	
Rent expense	800	
Utilities expense	580	
Depreciation expense	160	
Supplies expense	150	
Interest expense	100	
Miscellaneous expenses	420	
Total operating expenses		6,320
Operating income		\$ 6,030
Other income:		
Rental revenue		360
Net income		\$ 6,390

#### Exhibit 3

#### Continued

Family Health Care, P.C. Retained Earnings Statement For the Month Ended November 30, 2003		
Retained earnings, November 1, 2003	\$6,390 _1,200	\$3,320 5,190 \$8,510

Family Health Care, P.C. Balance Sheet November 30, 2003		
Assets		
Current assets:  Cash	\$ 7,730 2,650 7,300 90	\$17,770
Fixed assets:  Office equipment \$8,500  Less accumulated depreciation 160  Land Total fixed assets  Total assets	\$ 8,340 12,000	20,340 \$38,110
Liabilities		
Current liabilities: Accounts payable	\$ 140 220 6,800 	\$ 8,600
Notes payable		10,000 \$18,600
Stockholders' Equity		
Capital stock	\$11,000 <u>8,510</u>	19,510 \$38,110

The capital stock amount on the balance sheet results from adding the additional investment during November to the beginning amount of capital stock. The other balance sheet amounts are the ending balances shown in Exhibit 2.

The balance sheet shown in Exhibit 3 is a classified balance sheet. As the term implies, a **classified balance sheet** is prepared with various sections, subsections, and captions that aid in its interpretation and analysis. In the following paragraphs, we describe some of these sections and subsections.

#### Exhibit 3

Concluded

Family Health Care, P.C. Statement of Cash Flows For the Month Ended November 30, 200	)3	
Cash flows from operating activities:		
Cash received from patients	\$ 9,700	Φ 44 500
Cash received from rental of land	1,800	\$ 11,500
Insurance premiums	\$(8,400)	
Supplies	(100)	
Wages	(2,790)	
Rent	(800)	
Utilities	(580)	
Interest	(100)	(
Miscellaneous expense	(420)	(13,190)
Net cash flow used in operating activities		\$ (1,690)
Cash flows from investing activities:		(1,700)
Purchase of office equipment		(1,700)
Additional issuance of capital stock	\$ 5,000	
Deduct cash dividends	(1,200)	
Net cash flow from financing activities	(1,200)	3,800
Net increase in cash		\$ 410
November 1, 2003 cash balance		7,320
November 30, 2003 cash balance		\$ 7,730

Assets are resources such as physical items or rights that are owned by the business. Examples of physical assets include cash, supplies, buildings, equipment, and land. Examples of rights are patent rights or rights to services (prepaid items). Physical assets of a long-term nature are referred to as **fixed assets**. Rights that are long-term in nature are called **intangible assets**.

Assets are normally divided into classes in preparing a classified balance sheet. Three of these classes are (1) current assets, (2) fixed assets, and (3) intangible assets.

Cash and other assets that are expected to be converted to cash or sold or used up within one year or less, through the normal operations of the business, are called **current assets**. In addition to cash, the current assets normally include accounts receivable, notes receivable, supplies, and other prepaid expenses. Accounts receivable and notes receivable are current assets because they will usually be converted to cash within one year or less. **Notes receivable** are written claims against debtors who promise to pay the amount of the note and interest at an agreed-upon rate. A note receivable is the creditor's view of a note payable transaction. As shown in Exhibit 3, Family Health Care has current assets of cash, accounts receivable, prepaid insurance, and supplies as of November 30, 2003.

The fixed assets section may also be labeled as property, plant, and equipment, or plant assets. Fixed assets include equipment, machinery, buildings, and land. Except for land, such fixed assets depreciate over a period of time, as we discussed earlier in this chapter. The cost less accumulated depreciation for each major type of fixed asset is normally reported on the classified balance sheet. As of November 30, 2003, Family Health Care's fixed assets consist of office equipment and land.

Intangible assets represent rights, such as patent rights, copyrights, and goodwill. Goodwill arises from such factors as name recognition, location, product quality, reputation, and managerial skill. Goodwill is reported on the balance sheet when these factors are

recognized through a purchase of a company at a premium price. For example, goodwill was recognized when eBay, Inc., purchased PayPal, Inc.

**Liabilities** are amounts owed to outsiders (creditors). Liabilities are often identified on the balance sheet by titles that include the word *payable*. Examples of liabilities include notes payable and wages payable.

Liabilities are normally divided into two classes on a classified balance sheet. These classes are (1) current liabilities and (2) long-term liabilities.

Liabilities that will be due within a short time (usually one year or less) and that are to be paid out of current assets are called **current liabilities**. The most common current liabilities are notes payable and accounts payable. Other current liabilities reported on the classified balance sheet include wages payable, interest payable, taxes payable, and unearned revenue.

Liabilities that will not be due for a long time (usually more than one year) are called **long-term liabilities**. Long-term liabilities are reported below the current liabilities. As long-term liabilities come due and are to be paid within one year, they are reported as current liabilities. If they are to be renewed rather than paid, they would continue to be classified as long-term. When an asset is pledged as security for a long-term liability, the obligation may be called a *mortgage note payable* or a *mortgage payable*.

Family Health Care's current and long-term liabilities as of November 30, 2003, are shown in Exhibit 3. You should note that \$6,800 of the notes payable is due within the next year and therefore is reported as a current liability. The remainder of the notes payable, \$10,000, is not due until 2009 and thus is reported as a long-term liability. Family Health Care's other current liabilities consist of accounts payable, wages payable, and unearned revenue.

**Stockholders' equity** is the stockholders' rights to the assets of the business. For a corporation, the stockholders' equity consists of capital stock and retained earnings. The

stockholders' equity section of a classified balance sheet reports each of these two financial statement accounts separately.

The statement of cash flows is prepared by summarizing the cash transactions shown in the cash column of Exhibit 2. The net cash flow from operations is computed by listing the cash receipts from revenue transactions and subtracting the cash payments for operating transactions. The purchase of the office equipment is treated as a separate cash outflow from investment activities. The receipt of the additional investment and the payment of dividends are reported as cash flows from financing activities.

### INTERNATIONAL PERSPECTIVE



#### Bayerische Motoren Werke Aktiengesellschaft

(better known as BMW!) reports fixed assets first on its balance sheet, followed by current assets. It also reports stockholders' equity before the liabilities.

# Interpreting Accrual and Cash Basis Income

Describe how the accrual basis of accounting enhances the interpretation of financial statements.

The financial statements of Family Health Care for November illustrate the major differences between the accrual and cash bases of accounting. Note that the \$6,390 net income reported in the November income statement is different from the negative \$1,690 net cash flow from operating activities reported on the November statement of cash flows.\(^1\) This is in contrast to September and October when these amounts were the same. Under the cash basis of accounting, which Family Health Care used in those months, the net cash flow from operations is the same as the net income. In November, however, Family Health Care began using the accrual basis of accounting.

<sup>1</sup> The difference between the net cash flows from operations and the net income can be reconciled by considering the effects of accruals and deferrals. Such a reconciliation is shown in the appendix at the end of this chapter.

The difference between the net income (or loss) and the net cash flow from operating activities can be significant. To illustrate, we have summarized these amounts for Family Health Care below.

	Net Cash Flow from Operations	Net Income
September	\$2,600	\$2,600
October	3,220	3,220
November	(1,690)	6,390

Under the cash basis, the cash flow from operating activities and the net income for November would be reported as a negative amount (loss) of \$1,690. This normally would be interpreted as an unfavorable trend and could imply that Family Health Care is failing. In fact, the accrual basis better reflects what is really happening to Family Health Care. Since September, revenues have more than doubled, increasing from \$5,500 to \$12,350, and net income has more than doubled. Thus, the accrual basis reflects Family Health Care as a profitable, rapidly expanding business.

Such differences between the cash basis and the accrual basis illustrate why generally accepted accounting principles require the accrual basis for all but the very smallest businesses. You should recognize, however, that the net cash flow from operating activities is an important amount that is useful to readers of the financial statements. For this reason, generally accepted accounting principles require reporting cash flows. In the long run, a business will go bankrupt if it continually experiences negative cash flows from operations, even though it may report net income. A business must generate positive cash flows from operations in order to survive. In the case of Family Health Care, the negative cash flow from operations for November was due in large measure to prepaying insurance premiums of \$8,400. Thus, the negative cash flow from operations is temporary for Family Health Care and not a matter of major concern. This illustrates why the financial statements must be analyzed and interpreted together, rather than individually. For example, long-run profitability is best analyzed by focusing on the net income reported under the accrual basis, while the availability of cash to pay debts as they become due is best analyzed by focusing on the net cash flow from operating activities.

# The Accounting Cycle

Describe the accounting cycle for the accrual basis of accounting.

The process that begins with analyzing transactions and ends with preparing the accounting records for the next accounting period is called the **accounting cycle**. The most important output of the accounting cycle is the financial statements. The basic steps in the accounting cycle are listed below.

- 1. *Identifying, analyzing, and recording* the effects of transactions on the accounting equation (financial statement accounts).
- 2. Identifying, analyzing, and recording adjustment data.
- 3. *Preparing* financial statements.
- 4. *Preparing* the accounting records for the next accounting period.

We have described and illustrated Steps 1–3 in this chapter. In this section, we complete the discussion of the accounting cycle by describing how the accounting records are prepared for the next accounting period.<sup>2</sup>

<sup>2</sup> An additional illustration of the complete accounting cycle for Family Health Care is shown in the Illustrative Application Problem at the end of this chapter.

In prior illustrations, we have recorded and accumulated revenue, expense, and dividend transactions under retained earnings, with separate notations describing them. At the end of an accounting period, we then reviewed retained earnings and summarized the revenues and expenses so that they could be reported in the income statement. Likewise, the dividends were summarized in the retained earnings statement.

Because of the volume of transactions during a period, most businesses record revenues, expenses, and dividends as separate elements (accounts) of the accounting equation, as shown in Exhibit 4. This makes the information for preparing the financial statements more readily available. After the financial statements have been prepared, the balances of the revenue, expense, and dividend accounts are transferred to retained earnings. This process, which is shown in Exhibit 4 for Family Health Care, is called the **closing process**. In this way, these accounts begin each period with zero balances, and the transactions of each period are kept separate from one another.

Exhibit 4
Family Health Care Closing Process for November

	Ret. Earn	– Dividends ⊣	Fees - Earned -	Rental + Rev	Wages - Exp	Ins. – Exp	Rent – Exp	Util. – Exp	Dep. – Exp.	Supp. – Exp.	Int. – Exp.	Misc. – Exp.
Bal., Nov. 1, 2003 Revenue closing	3,320 12,710	1,200	12,350 -12,350	360 -360	3,010	1,100	800	580	160	150	100	420
Expense closing	-6,320				-3,010	-1,100	-800	-580	-160	<b>-150</b>	-100	-420
Dividends closing	9,710 -1,200	1,200 -1,200	0	0	0	0	0	0	0	0	0	0
Bal. after closing	8,510	0	0	0	0	0	0	0	0	0	0	0

The net amount of the revenue and expense balances transferred to retained earnings is the net income or net loss for the period. In this example, Family Health Care had a net income of 6,390 (12,710 - 6,320). Because the balances of the revenue, expense, and dividend accounts are transferred to retained earnings, they are sometimes called temporary accounts.

### Common-Sized Financial Statements

Describe and illustrate how commonsized financial statements can be used to analyze and evaluate a company's performance.

Common-sized financial statements are often useful in comparing one company to another. In **common-sized financial statements**, all items are expressed in percentages. Such statements are useful in comparing the current period with prior periods, individual businesses, or one business with industry percentages. Industry data are often available from trade associations or financial information services.

To illustrate, common-sized income statement and balance sheet data for Wendy's and McDonald's Corporation are shown in Exhibit 5.<sup>3</sup> The income statement data is expressed as a percent of revenues, thus Exhibit 5 indicates revenues for both companies as 100%. This, in turn, allows for analysis of the income statement components on

<sup>3</sup> The financial statements for Wendy's and McDonald's shown in Exhibit 5 were adapted from 10-K Securities and Exchange Commission filings.

#### Exhibit 5

Common-Sized Financial Statements: Wendy's and McDonald's

Income Statements for th	e Year Ending December 31,	2001
	Wendy's	McDonald's
Revenues	100.0%	100.0%
Operating expenses	86.2%	81.8%
Operating income	13.8%	18.2%
Other expenses	0.9%	2.5%
Income before taxes	12.9%	15.7%
Income taxes	4.8%	4.7%
Net income	8.1%	11.0%

	Wendy's	McDonald's
Currents assets:		
Cash	5.4%	1.9%
Accounts receivable	4.0%	3.9%
Inventories, prepaid, and other assets	3.4%	2.3%
Total current assets	12.8%	8.1%
Property, plant, and equipment	79.0%	76.7%
Other long-term assets	8.2%	15.2%
Total assets	100.0%	100.0%
Current liabilities:		
Accounts payable	5.4%	3.1%
Other liabilities	8.9%	6.9%
Total current liabilities	14.3%	10.0%
Long-term liabilities	36.1%	47.9%
Stockholders' equity	49.6%	42.1%
Total liabilities and stockholders' equity	100.0%	100.0%

a common basis. Without a common basis it is difficult to compare companies. For example, Wendy's total operating expenses are \$1,926,545,000 compared to McDonald's \$10,913,300,000. So, does this mean that Wendy's has an advantage because of its lower total operating expenses? Exhibit 5 reveals that this is not the case. In fact, Wendy's operating expenses are 86.2% of sales in comparison to 81.8% for McDonald's. As a result, Wendy's operating income is significantly less as a percent of sales, 13.8%, compared to McDonald's 18.2%.

Based upon Exhibit 5, further analyses are called for to determine why Wendy's operating expenses as a percent of sales are significantly higher than McDonald's. For example, the higher operating expenses may be related to the fact that 19.2% of Wendy's revenues come from its franchise restaurants while 26.5% of McDonald's revenues come from franchised restaurants.

Exhibit 5 also reports common-sized balance sheet information for Wendy's and McDonald's. The balance sheet data are expressed as a percent of total assets. Exhibit 5 indicates that Wendy's keeps a higher percent of its assets in the form of cash and equivalents, 5.4%, as compared to 1.9% for McDonald's. Wendy's also has a higher percent of receivables than McDonald's while both companies have 79.0% vs. 76.7% of assets in property, plant, and equipment. Exhibit 5 also reveals that Wendy's finances more of its operations through stockholders' equity, 49.6%, than does McDonald's, 42.1%.

As Exhibit 5 shows, common-sized financial statements facilitate company comparisons and analyses. Such statements are often a starting point for further investigation and analyses of major differences between companies in similar industries. For example, based upon the preceding comparison further inquiries might be made into why Wendy's operating expenses are a higher percent of sales and why Wendy's maintains a higher percent of its total assets in cash and receivables than does McDonald's.

#### **APPENDIX**

#### Reconciliation: Net Cash Flows From Operations and Net Income<sup>4</sup>

In Chapter 2, we illustrated financial statements for Family Health Care for September and October, 2003. During September and October, Family Health Care used the cash basis of accounting. Under the cash basis of accounting, the net cash flows from operating activities shown on the statement of cash flows equals the net income shown in the income statements. For example, Exhibits 4 and 6 in Chapter 2 report net cash flows from operating activities and net income of \$2,600 and \$3,220 for September and October. Under the cash basis, net cash flows from operating activities will always equal net income. This is not true, however, under the accrual basis of accounting.

During November and December, Family Health Care used the accrual basis of accounting. The November financial statements are illustrated in Exhibit 3 of this chapter. The December financial statements for Family Health Care are illustrated in the Illustrative Problem at the end of this chapter. The net cash flows from operating activities and net income for November and December are shown below.

	Net Cash Flows from Operating Activities	Net Income
November	\$(1,690)	\$ 6,390
December	8,760	10,825

Under the accrual basis, net cash flows from operating activities will normally not be the same as net income. The difference can be reconciled by considering the effects of accruals and deferrals on the income statement. Exhibit 6 illustrates the November reconciliation of Family Health Care's net income with operating cash flows from operations.

In Exhibit 6, we begin with net income. We then add or deduct the effects of accruals or deferrals that influenced net income under the accrual basis but did not result in the receipt or payment of cash. We thus arrive at net cash flows from operating activities.

The effect of an accrual or deferral on the income statement and net income is reflected in its net increase or decrease during the period. For example, during November depreciation expense of \$160 was recorded (a deferred expense) and thus deducted in arriving at net income. Yet, no cash was paid. Thus, to arrive at cash flows from operations, depreciation expense is added back to net income. Likewise, accounts payable increased during November by \$140 and a related expense was recorded. But again, no cash was paid.

<sup>4</sup> In a later chapter, this reconciliation will be referred to as the indirect method of reporting cash flows from operations.

#### Exhibit 6

November's Reconciliation of Net Income and Cash Flows from Operations

Net income		\$ 6,390
Add:		
Depreciation expense	\$ 160	
Increase in accounts payable	140	
Increase in wages payable	220	
Increase in unearned revenue	1,440	1,960
Deduct:		
Increase in accounts receivable	\$(2,650)	
Increase in prepaid insurance	(7,300)	
Increase in supplies	(90)	(10,040)
Net cash flows from operating activities		\$ (1,690)

Similarly, wages payable increased during November by \$220 and the related wages expense was deducted in arriving at net income. However, the \$220 was not paid until the next month. Thus, for November, the increases of \$140 in accounts payable and \$220 in wages payable are added back to net income.

The increase in unearned revenue of \$1,440 represents unearned revenue for four months for land rented to ILS Company. ISL Company initially paid Family Heath Care \$1,800 in advance. Of the \$1,800, one-fifth (\$360) was recorded as revenue for November. However, under the cash basis, the entire \$1,800 would have been recorded as revenue. Thus, \$1,440 (the increase in the unearned revenue) is added back to net income to arrive at cash flows from operations.

During November, accounts receivable increased by \$2,650 and thus was recorded as part of revenue in arriving at net income. However, no cash was received. Thus, this increase in accounts receivable is deducted in arriving at cash flows from operations.

The increase in prepaid insurance represents an \$8,400 payment of cash for insurance premiums. During November, only \$1,100 of the premiums is deducted in arriving at net income. Thus, the remaining \$7,300 (the increase in prepaid insurance) is deducted in arriving at cash flows from operations. Similarly, the increase in supplies of \$90 is deducted.

You may have noticed a pattern in how we reconciled net income to net cash flows from operations. First, depreciation expense was added. Next, increases in current assets related to operations were deducted, while increases in current liabilities related to operations were added. The increase in the current liability for notes payable of \$6,800 was not included in the reconciliation. This is because the notes payable is related to the purchase of office equipment, which, in the statement of cash flows, is an investing activity rather than an operating activity.

During November, all the current asset and liability accruals and deferrals related to operations were increases. This was because Family Health Care used the cash basis during October, and thus there were no deferrals or accruals at the beginning of November.

#### Exhibit 7

Reconciling Items

Net income		\$XXX
Add:		
Depreciation expense	\$XXX	
Increases in current liabilities from operations	XXX	
Decreases in current assets from operations	XXX	XXX
Deduct:	<u></u>	
Increases in current assets from operations	\$XXX	
Decreases in current liabilities from operations	XXX	XXX
Net cash flows from operations		\$XXX

In future periods, there would be both increases and decreases in these items. These increases and decreases would be added or subtracted to arrive at cash flows from operations, as shown in Exhibit 7.

For example, a decrease in accounts receivable implies that cash was collected and thus would be added. In contrast, a decrease in accounts payable implies that cash was paid and thus would be deducted.

#### Summary of Learning Goals

Describe the accrual basis of accounting. Under the accrual basis of accounting, revenue is recognized when it is earned. When revenues are earned and recorded, all expenses incurred in generating the revenues are recorded so that revenues and expenses are properly matched in determining the net income or loss for the period. Liabilities are recorded at the time a business incurs the obligation to pay for the services or goods purchased.

# Use the accrual basis of accounting to analyze, record, and summarize transactions.

Every transaction affects one or more elements of the accounting equation, and the two sides of the equation must always be equal. Stockholders' equity is increased by issuing capital stock and revenues (retained earnings) and is decreased by expenses (retained earnings) and dividends (retained earnings).

# Bescribe and illustrate the end-of-the-period adjustment process.

The accrual basis of accounting requires the accounting records to be updated prior to preparing financial statements. This updating process, called the adjustment process, is necessary to match revenues and expenses. The adjustment process involves two types of adjustments—deferrals and accruals. Adjustments for deferrals may involve deferred expenses or deferred revenues. Adjustments for accruals may involve accrued expenses or accrued revenues.

# Prepare accrual-basis financial statements, including a classified balance sheet.

A classified balance sheet includes sections for current assets; property, plant and equipment (fixed assets); and intangible assets. Liabilities are classified as current lia-

bilities or long-term liabilities. The income statement normally reports sections for revenues, operating expenses, other income and expense, and net income.

# Describe how the accrual basis of accounting enhances the interpretation of financial statements.

The net cash flows from operating activities and net income will differ under the accrual basis of accounting. Under the accrual basis, net income is a better indicator of the long-term profitability of a business. For this reason, the accrual basis of accounting is required by generally accepted accounting principles, except for very small businesses. The accrual basis reports the effects of operations on cash flows through the reporting of net cash flows from operating activities on the statement of cash flows.

# Describe the accounting cycle for the accrual basis of accounting.

The accounting cycle is the process that begins with the analysis of transactions and ends with preparing the accounting records for the next accounting period. The basic steps in the accounting cycle are (1) identifying, analyzing, and recording the effects of transactions on the accounting equation, (2) identifying, analyzing, and recording adjustment data, (3) preparing financial statements, and (4) preparing the accounting records for the next accounting period.

#### Describe and illustrate how commonsized financial statements can be used to analyze and evaluate a company's performance.

Common-sized financial statements are often useful in comparing one company to another. In common-sized financial statements, all items are expressed in percentages. Such statements are useful in comparing the current period with prior periods, individual businesses, or one business with industry percentages.

#### Glossary

- **Account** A record for summarizing increases and decreases in a financial statement element.
- **Accounting cycle** The process that begins with the analysis of transactions and ends with preparing the accounting records for the next accounting period.
- **Accounts payable** A liability for an amount incurred from purchases of products or services in the normal operations of a business.
- **Accounts receivable** An asset for amounts due from customers in the normal operations of a business.
- **Accruals** A revenue or expense that has not been recorded.
- **Accrued expense** An expense that has been incurred at the end of an accounting period but has not been recorded in the accounts; sometimes called an accrued liability.
- **Accrued revenue** A revenue that has been earned at the end of an accounting period but has not been recorded in the accounts; sometimes called an accrued asset.
- **Accumulated depreciation** An offsetting or contra asset account used to record depreciation on a fixed asset.
- **Adjustment process** A process required by the accrual basis of accounting in which the accounts are updated prior to preparing financial statements.
- **Classified balance sheet** A balance sheet prepared with various sections, subsections, and captions that aid in its interpretation and analysis.
- **Closing process** The process of transferring the balances of the revenue, expense, and dividends accounts to retained earnings in preparation for the next accounting period.
- **Common-sized financial statement** A financial statement in which all items are expressed in percentages.
- **Current assets** Cash and other assets that are expected to be converted to cash or sold or used up within one year or less, through the normal operations of the business.

- **Current liabilities** Liabilities that will be due within a short time (usually one year or less) and that are to be paid out of current assets.
- **Deferrals** The delayed recording of an expense or revenue.
- **Deferred expense** Items that are initially recorded as assets but are expected to become expenses over time or through the normal operations of the business; sometimes called prepaid expenses.
- **Deferred revenues** Items that are initially recorded as liabilities but are expected to become revenues over time or through the normal operations of the business; sometimes called unearned revenues.
- **Depreciation** The reduction in the ability of a fixed asset to provide service.
- **Fixed assets** Physical assets of a long-term nature; sometimes called plant assets.
- **Intangible assets** Assets that are rights of a long-term nature.
- **Liabilities** Amounts owed to creditors.
- **Long-term liabilities** Liabilities that will not be due for a long time (usually more than one year).
- **Notes receivable** Written claims against debtors who promise to pay the amount of the note plus interest at an agreed-upon rate.
- **Prepaid expenses** Items that are initially recorded as assets but are expected to become expenses over time or through the normal operations of the business; often called deferred expenses.
- **Stockholders' equity** The stockholders' rights to the assets of a business.
- **Unearned revenues** Items that are initially recorded as liabilities but are expected to become revenues over time or through the normal operation of the business; often called deferred revenues.

#### Illustrative Accounting Application Problem

Assume that the December transactions for Family Health Care are as follows:

- a. Received cash of \$1,900 from patients for services provided on account during November.
- b. Provided services of \$10,800 on account.
- c. Received \$6,500 for services provided for patients who paid cash.
- d. Purchased supplies on account, \$400.
- e. Received \$6,900 from insurance companies that paid on patients' accounts for services that had been previously billed.
- f. Paid \$310 on account for supplies that had been purchased.
- g. Expenses paid during December were as follows: wages, \$4,200, including \$220 accrued at the end of November; rent, \$800; utilities, \$610; interest, \$100; miscellaneous, \$520.
- h. Paid dividends of \$1,200 to stockholders (Dr. Landry).

#### Instructions:

1. Record the December transactions, using the summary of transactions form shown below. The beginning balances of December 1 have already been entered into the form. After each transaction, you should enter a balance for each item. The transactions are recorded similarly to those for November, except that separate accounts are used for dividends, revenues, and expenses. In addition, you should note that in transaction (g), the \$4,200 of wages paid includes wages of \$220 that were accrued at the end of November. Thus, only \$3,980 (\$4,200 – \$220) should be recorded as wages expense for December. The remaining \$220 reduces the wages payable. You should also note that the balance of retained earnings on December 1, \$8,510, is the balance on November 30.

Assets	=	Liabilities	+ Stockholders' Equity
Accts.       Prepaid       Office       Acc.         Cash +       Rec. +       Ins. +       Supp. +       Equip       Dep. +       La         Bal. 7,730       2,650       7,300       90       8,500       160       12,	Notes and = Pay. .000 16,800		Unearned Capital + Revenue + Stock 1,440 11,000
Retained Fees Rental Wages + Earnings — Dividends + Earned + Rev. — Exp. —	Ins. Rent Exp. – Exp.		upp. Int. Misc. Exp. — Exp. — Exp.
Ral 8 510			

2. The adjustment data for December are as follows:

Deferred expenses:

- 1. Prepaid insurance expired, \$1,100.
- 2. Supplies used, \$275.
- 3. Depreciation on office equipment, \$160.

Deferred revenues:

4. Unearned revenue earned, \$360.

Accruals:

- 5. Wages owed employees but not paid, \$340.
- 6. Services provided but not billed to insurance companies, \$1,050.

Enter the adjustments in the Summary of Transactions. Identify each adjustment by "a" and the number of the related adjustment item. For example, the adjustment for prepaid insurance should be identified as (a1).

- 3. Prepare the December financial statements, including the income statement, retained earnings statement, balance sheet, and statement of cash flows.
- 4. Close the temporary accounts on the Summary of Transactions.
- 5. (Appendix) Reconcile the December net income with the net cash flows from operations. (Note: In computing increases and decreases in amounts, use adjusted balances.)

#### Solution

[Solutions to (1) and (2) are found on pages 122–123. Solution to (3) is on pages 124–125.]

4. Family Health Care Closing Process for December

Retained	Fees	Rental	Wages	Ins.	Rent	Util.	Dep.	Supp.	Int.	Misc.
Earnings — Divid	ends + Earned	+ Rev.	<ul><li>Ехр.</li></ul>	<ul><li>Exp.</li></ul>	<ul><li>Exp.</li></ul>	<ul><li>Exp.</li></ul>	<ul><li>Exp.</li></ul>	<ul><li>Exp.</li></ul>	— Ехр.	<ul><li>Exp.</li></ul>
8,510 1,	200 18,350	360	4,320	1,100	800	610	160	275	100	520
18,710	-18,350	-360								
-7,885			-4,320	-1,100	-800	-610	-160	-275	-100	-520
19,335 1,	200 0	0	0	0	0	0	0	0	0	0
-1,200 $-1,3$	200									
18,135	0 0	0	0	0	0	0	0	0	0	0

#### 1. Family Health Care Summary of Transactions for December

				Assets				=	Liab	+	Stockholders' + Equity		
Bal. a.	Cash + 7,730 1,900	Accts. Rec. + 2,650 -1,900	Prepaid - Ins. 7,300	+ Supp. 90	Office + Equip. 8,500	Acc. — Dep 160	+ Land 12,000	Notes = Pay 16,800	Accts. + Pay. + 140	Wages Pay. + 220	Unearned Revenue + 1,440	Capital Stock 11,000	
Bal. b.	9,630	750 10,800	7,300	90	8,500	160	12,000	16,800	140	220	1,440	11,000	
Bal. c.	9,630 6,500	11,550	7,300	90	8,500	160	12,000	16,800	140	220	1,440	11,000	
Bal. d.	16,130	11,550	7,300	90 400	8,500	160	12,000	16,800	140 400	220	1,440	11,000	
Bal. e.	16,130 6,900	11,550 6,900	7,300	490	8,500	160	12,000	16,800	540	220	1,440	11,000	
Bal. f.	23,030 -310	4,650	7,300	490	8,500	160	12,000	16,800	540 -310	220	1,440	11,000	
	22,720 -6,230	4,650	7,300	490	8,500	160	12,000	16,800	230	220 -220	1,440	11,000	
	16,490 1,200	4,650	7,300	490	8,500	160	12,000	16,800	230	0	1,440	11,000	
Bal.	15,290	4,650	7,300	490	8,500	160	12,000	16,800	230	0	1,440	11,000	

#### 2. Family Health Care Adjustments for December

				Assets				=	Liab		Stockho + Equi		
	Ol-	Accts.	Prepaid		Office	Acc.	1	Notes	Accts.	Wages	Unearned	Capital	
Bal. a1	Cash ∃ 15,290	+ Rec. + 4,650	Ins. 7,300 -1,100	+ Supp. 490		— Dep. + 160	- Land 12,000	= Pay. 16,800	+ Pay. + 230	Pay. + 0	Revenue 1,440	+ Stock 11,000	
Bal. a2	15,290	4,650	6,200	490 -275	-	160	12,000	16,800	230	0	1,440	11,000	
Bal. a3	15,290	4,650	6,200	215	8,500	160 160	12,000	16,800	230	0	1,440	11,000	
Bal. a4	15,290	4,650	6,200	215	8,500	320	12,000	16,800	230	0	1,440 -360	11,000	
Bal. a5	15,290	4,650	6,200	215	8,500	320	12,000	16,800	230	0 340	1,080	11,000	
Bal. a6	15,290	4,650 1,050	6,200	215	8,500	320	12,000	16,800	230	340	1,080	11,000	
Bal.	15,290	5,700	6,200	215	8,500	320	12,000	16,800	230	340	1,080	11,000	

	_	- Dividends -	Fees + Earned -	Rental ⊢ Rev. —						Misc. Exp.	
Bal. a.	8,510										Collected cash
Bal.	8,510										
b.			10,800								Fees earned
Bal.	8,510		10,800								
c.			6,500								Fees earned
Bal.	8,510		17,300								
d.	-		-								Purch. of suppl.
Bal.	8,510		17,300								
e.											Collected cash
Bal.	8,510		17,300								
f.											Paid on account
Bal.	8,510		17,300								
g.					3,980	800	610		100	520	Paid expenses
Bal.	8,510		17,300		3,980	800	610		100	520	
 h.	· 	1,200	· 								Paid dividends
Bal.	8,510	1,200	17,300		3,980	800	610		100	520	

_	Retained	— Dividends	Fees	Rental ⊢ Rev -	Wages	Ins. — Exp	Rent	Util. – Evn	Dep. – Exp	Supp.	Int. – Exp	Misc. – Exp.	
Bal.	8,510	1,200	17,300	i iicv.	3,980	LAP.	800	610	Lxp.	LAP.	100	520	
a1	0,010	1,200	17,000		0,000	1,100					100	020	Ins. exp.
Bal.	8,510	1,200	17,300		3,980	1,100	800	610	0	0	100	520	C
a2										275			Supp. exp.
Bal.	8,510	1,200	17,300		3,980	1,100	800	610	0	275	100	520	
a3									160				Dep. exp.
Bal.	8,510	1,200	17,300		3,980	1,100	800	610	160	275	100	520	
a4				360									Rental rev.
Bal.	8,510	1,200	17,300	360	3,980	1,100	800	610	160	275	100	520	
a5					340								Wages exp.
Bal.	8,510	1,200	17,300	360	4,320	1,100	800	610	160	275	100	520	
a6			1,050										Fees earned
Bal.	8,510	1,200	18,350	360	4,320	1,100	800	610	160	275	100	520	

3.

Family Health Care, P.C. Income Statement For the Month Ended December 31, 2003		
Fees earned		\$18,350
Operating expenses:		
Wages expense	\$4,320	
Insurance expense	1,100	
Rent expense	800	
Utilities expense	610	
Supplies expense	275	
Depreciation expense	160	
Interest expense	100	
Miscellaneous expenses	520	
Total operating expenses		7,885
Operating income		\$10,465
Other income:		4.57.55
Rental revenue		360
Net income		\$10.825
		<u>Ψ.10,020</u>

Family Health Care, P.C.  Balance Sheet  December 31, 2003							
Assets							
Current assets: Cash Accounts receivable Prepaid insurance Supplies Total current assets	\$15,290 5,700 6,200 215	\$27,405					
Fixed assets:  Office equipment \$8,500  Less accumulated depreciation 320  Land Total fixed assets  Total assets	\$ 8,180 	20,180 \$47,585					
Liabilities							
Current liabilities: Accounts payable Wages payable Notes payable Unearned revenue Total current liabilities	\$ 230 340 6,800 1,080	\$ 8,450					
Long-term liabilities:  Notes payable		10,000 \$18,450					
Stockholders' Equity							
Capital stock	\$11,000 	29,135 \$47,585					

Family Health Care, P.C. Retained Earnings Statement For the Month Ended December 31, 2003	
Retained earnings, December 1, 2003	\$ 8,510 5
Less dividends	9,625 \$18,135

Family Health Care, P.C. Statement of Cash Flows For the Month Ended December 31, 2003		
Cash flows from operating activities:     Cash received from patients     Deduct cash payments for expenses:     Supplies     Wages     Rent     Utilities     Interest     Miscellaneous expense     Net cash flow from operating activities Cash flows from financing activities:     Deduct cash dividends Net increase in cash December 1, 2003 cash balance December 31, 2003 cash balance	\$ (310) (4,200) (800) (610) (100) (520)	\$15,300 \$\frac{(6,540)}{\\$ 8,760} \$\frac{(1,200)}{\\$ 7,560} \$\frac{7,730}{\\$ 15,290}

5. December's Reconciliation of Net Income with Net Cash Flows from Operations

Net income		\$10,825
Add:		
Depreciation expense	\$ 160	
Increase in accounts payable	90	
Increase in wages payable	120	
Decrease in prepaid insurance	1,100	1,470
Deduct:		
Increase in accounts receivable	\$(3,050)	
Increase in supplies	(125)	
Decrease in unearned revenue	(360)	(3,535)
Net cash flows from operating activities		\$ 8,760

### Self-Study Questions

# 1. Assume that a lawyer bills her clients \$15,000 on June 30, 2004, for services rendered during June. The lawyer collects \$8,500 of the billings during July and the remainder in August. Under the accrual basis of accounting, when would the lawyer record the revenue for the fees?

#### Answers at end of chapter

- A. June, \$15,000; July, \$0; and August, \$0
- B. June, \$0; July, \$6,500; and August, \$8,500
- C. June, \$8,500; July, \$6,500; and August, \$0
- D. June, \$0; July, \$8,500; and August, \$6,500

- 2. On January 24, 2004, Niche Consulting collected \$5,700 it had billed its clients for services rendered on December 31, 2003. How would you record the January 24 transaction, using the accrual basis?
  - A. Increase Cash, \$5,700; decrease Fees Earned, \$5,700.
  - B. Increase Accounts Receivable, \$5,700; increase Fees Earned, \$5,700.
  - C. Increase Cash, \$5,700; decrease Accounts Receivable, \$5,700.
  - D. Increase Cash, \$5,700; increase Fees Earned, \$5,700.
- 3. Which of the following items represents a deferral?
  - A. Prepaid insurance
  - B. Wages payable
  - C. Fees earned
  - D. Accumulated depreciation
- 4. If the supplies account indicated a balance of \$2,250 before adjustment on May 31 and supplies on hand at May 31 totaled \$950, the adjustment would be:

- A. Increase Supplies, \$950; Decrease Supplies Expense, \$950.
- B. Increase Supplies, \$1,300; Decrease Supplies Expense, \$1,300.
- C. Increase Supplies Expense, \$950; Decrease Supplies, \$950.
- D. Increase Supplies Expense, \$1,300; Decrease Supplies, \$1,300.
- 5. The balance in the unearned rent account for Jones Co. as of December 31 is \$1,200. If Jones Co. failed to record the adjusting entry for \$600 of rent earned during December, the effect on the balance sheet and income statement for December would be:
  - A. assets understated by \$600; net income overstated by \$600.
  - B. liabilities understated by \$600; net income understated by \$600.
  - C. liabilities overstated by \$600; net income understated by \$600.
  - D. liabilities overstated by \$600; net income overstated by \$600.

#### Discussion Questions

- 1. Would General Electric and Xerox use the cash basis or the accrual basis of accounting? Explain.
- 2. How are revenues and expenses reported on the income statement under (a) the cash basis of accounting and (b) the accrual basis of accounting?
- 3. Fees for services provided are billed to a customer during 2003. The customer remits the amount owed in 2004. During which year would the revenues be reported on the income statement under (a) the cash basis? (b) the accrual basis?
- 4. Employees performed services in 2003, but the wages were not paid until 2004. During which year would the wages expense be reported on the income statement under (a) the cash basis? (b) the accrual basis?
- 5. Which of the following accounts would appear only in an accrual basis accounting system and which could appear in either a cash basis or accrual basis accounting system? (a) Capital Stock, (b) Fees Earned, (c) Accounts Payable, (d) Land, (e) Utilities Expense, and (f) Accounts Receivable.
- 6. Is the land balance before the accounts have been adjusted the amount that should normally be reported on the balance sheet? Explain.
- 7. Is the supplies balance before the accounts have been adjusted the amount that should normally be reported on the balance sheet? Explain.
- 8. Why are adjustments needed at the end of an accounting period?
- 9. What is the difference between the adjusting process and the closing process?
- 10. Identify the four different categories of adjustments frequently required at the end of an accounting period.

- 11. If the effect of an adjustment is to increase the balance of a liability account, which of the following statements describes the effect of the adjustment on the other account?
  - a. Increases the balance of a revenue account.
  - b. Increases the balance of an expense account.
  - c. Increases the balance of an asset account.
- 12. If the effect of an adjustment is to increase the balance of an asset account, which of the following statements describes the effect of the adjustment on the other account?
  - a. Increases the balance of a revenue account.
  - b. Increases the balance of a liability account.
  - c. Increases the balance of an expense account.
- 13. Does every adjustment have an effect on determining the amount of net income for a period? Explain.
- 14. (a) Explain the purpose of the two accounts: Depreciation Expense and Accumulated Depreciation. (b) Is it customary for the balances of the two accounts to be equal? (c) In what financial statements, if any, will each account appear?
- 15. Describe the nature of the assets that compose the following sections of a balance sheet: (a) current assets, (b) property, plant, and equipment.
- 16. (a) Why is the closing process required at the end of an accounting period? (b) To what account are revenue and expenses closed? (c) To what account is dividends closed?
- 17. (a) What are common-sized financial statements? (b) Why are common-sized financial statements useful in interpreting and analyzing financial statements?



materials that are available.

#### Exercises

#### Exercise 3–1

Accrual basis of accounting

Goal 2

Neal Hastings established Ember Services, P.C., a professional corporation, on January 1 of the current year. Ember Services offers financial planning advice to its clients. The effect of each transaction and the balances after each transaction for January are as follows. Each increase or decrease in stockholders' equity, except transaction (h), affects net income.

			Assets			=	Liabilities	+	Stockho	lders'	Equity
a.	Cash +15,000	+	Accounts Receivable	+	Supplies	=	Accounts Payable	+	Capital Stock + 15,000	+	Retained Earnings
b.					+1,100		+1,100				
Bal. c.	15,000 -775				1,100		1,100 775		15,000		
Bal. d.	14,225 +9,000				1,100		325		15,000		+9,000
Bal. e.	23,225 -4,500				1,100		325		15,000		9,000 -4,500
Bal. f.	18,725				1,100 -850		325		15,000		4,500 -850
Bal. g.	18,725		+2,800		250		325		15,000		3,650 +2,800
Bal. h.	18,725 -2,000		2,800		250		325		15,000		6,450 -2,000
Bal.	16,725		2,800		250		325		15,000		4,450

- a. Describe each transaction.
- b. What is the amount of the net income for January?

#### F Exercise 3–2

Classify accruals and deferrals

Goal 3



Classify the following items as (a) deferred expense (prepaid expense), (b) deferred revenue (unearned revenue), (c) accrued expense (accrued liability), or (d) accrued revenue (accrued asset).

- 1. Fees earned but not yet received.
- 2. Taxes owed but payable in the following period.
- 3. Salary owed but not yet paid.
- 4. Supplies on hand.
- 5. Fees received but not yet earned.
- 6. Utilities owed but not yet paid.
- 7. A two-year premium paid on a fire insurance policy.
- 8. Subscriptions received in advance by a magazine publisher.

#### F Exercise 3-3

Classify adjustments

Goal 3

The following accounts were taken from the unadjusted trial balance of O'Neil Co., a congressional lobbying firm. Indicate whether or not each account would normally require an adjusting entry. If the account normally requires an adjusting entry, use the following notation to indicate the type of adjustment:

AE-Accrued Expense

AR-Accrued Revenue

DR-Deferred Revenue

DE-Deferred Expense

To illustrate, the answers for the first two accounts are shown below.

Account	Answer
Dividends Accounts Receivable Accumulated Depreciation Cash Interest Payable	Does not normally require adjustment. Normally requires adjustment (AR).
Interest Receivable	(continued)

Account

Answer

Land Office Equipment Prepaid Insurance Supplies Expense Unearned Fees Wages Expense

#### F Exercise 3-4

Adjustment for supplies

Goal 3

a. \$1,234



Answer each of the following independent questions concerning supplies and the adjustment for supplies. (a) The balance in the supplies account, before adjustment at the end of the year, is \$1,475. What is the amount of the adjustment if the amount of supplies on hand at the end of the year is \$241? (b) The supplies account has a balance of \$418, and the supplies expense account has a balance of \$1,943 at December 31, 2004. If 2004 was the first year of operations, what was the amount of supplies purchased during the year?

#### F Exercise 3-5

Adjustments for prepaid insurance

Goal 3

The prepaid insurance account had a balance of \$3,600 at the beginning of the year. The account was increased for \$1,200 for premiums on policies purchased during the year. What is the adjustment required at the end of the year for each of the following independent situations: (a) the amount of unexpired insurance applicable to future periods is \$3,450? (b) the amount of insurance expired during the year is \$1,875? For (a) and (b), indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease.

#### F Exercise 3-6

Adjustment for unearned fees

Goal 3



The balance in the unearned fees account, before adjustment at the end of the year, is \$6,750. What is the adjustment if the amount of unearned fees at the end of the year is \$2,800? Indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease.

#### F Exercise 3-7

Adjustment for unearned revenue

Goal 3

For the years ending June 30, 2001 and 2000, Microsoft Corporation reported unearned revenue of \$4,816 million and \$5,614 million, respectively. For the year ending June 30, 2001, Microsoft also reported total revenues of \$19,747 million. (a) What adjustment for unearned revenue did Microsoft make at June 30, 2001? Indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease. (b) What percentage of total revenues was the adjustment for unearned revenue?

#### F Exercise 3-8

Effect of omitting adjustment

Goal 3



At the end of March, the first month of the business year, the usual adjustment transferring rent earned to a revenue account from the unearned rent account was omitted. Indicate which items will be incorrectly stated, because of the error, on (a) the income statement for March and (b) the balance sheet as of March 31. Also indicate whether the items in error will be overstated or understated.

#### F Exercise 3-9

Adjustment for accrued salaries

Goal 3

Taylor Fork Realty Co. pays weekly salaries of \$13,750 on Friday for a five-day week ending on that day. What is the adjustment at the end of the accounting period, assuming that the period ends (a) on Tuesday, (b) on Wednesday? Indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease.

#### F Exercise 3–10

Determine wages paid

Goal 3



The balances of the two wages accounts at December 31, after adjustments at the end of the first year of operations, are Wages Payable, \$1,960, and Wages Expense, \$87,430. Determine the amount of wages paid during the year.

#### F Exercise 3–11

Effect of omitting adjustment

Goal 3

#### F Exercise 3-12

Effect of omitting adjustment

Goal 3



#### F Exercise 3–13

Effects of errors on financial statements

Goal 3

#### F Exercise 3–14

Effects of errors on financial statements

Goal 3



## F Exercise 3-15

Effects of errors on financial statements

Goal 3

b. \$445,670

Accrued salaries of \$3,100 owed to employees for December 30 and 31 are not considered in preparing the financial statements for the year ended December 31, 2003. Indicate which items will be erroneously stated, because of the error, on (a) the income statement for December 2003 and (b) the balance sheet as of December 31, 2003. Also indicate whether the items in error will be overstated or understated.

Assume that the error in Exercise 3-11 was not corrected and that the \$3,100 of accrued salaries was included in the first salary payment in January 2004. Indicate which items will be erroneously stated, because of failure to correct the initial error, on (a) the income statement for January 2004 and (b) the balance sheet as of January 31, 2004.

For a recent period, Circuit City Stores reported accrued expenses of \$183,336 thousand. For the same period, Circuit City reported earnings before income taxes of \$352,893 thousand. If accrued expenses had not been recorded, what would have been the earnings (loss) before income taxes?

The balance sheet for Ford Motor Company as of December 31, 2001, includes \$23,990 million of accrued expenses as liabilities. Before taxes, Ford Motor Company reported a net loss of \$7,584 million. If the accruals had not been recorded at December 31, 2001, how much would net income or net loss before taxes have been for the year ended December 31, 2001?

The accountant for Maxim Medical Co., a medical services consulting firm, mistakenly omitted adjustments for (a) unearned revenue (\$10,390) and (b) accrued wages (\$2,440). (a) Indicate the effect of each error, considered individually, on the income statement for the current year ended December 31. Also indicate the effect of each error on the December 31 balance sheet. Set up a table similar to the following, and record your answers by inserting the dollar amount in the appropriate spaces. Insert a zero if the error does not affect the item.

	Error (a)		Erro	or (b)
	Over- stated	Under- stated	Over- stated	Under– stated
Revenue for the year would be	\$	\$	\$	\$
2. Expenses for the year would be	\$	\$	\$	\$
3. Net income for the year would be	\$	\$	\$	\$
4. Assets at December 31 would be	\$	\$	\$	\$
5. Liabilities at December 31 would be	\$	\$	\$	\$
6. Stockholders' equity at December 31 would be	\$	\$	\$	\$

(b) If the net income for the current year had been \$437,720, what would be the correct net income if the proper adjustments had been made?

#### F Exercise 3-16

Adjustment for accrued fees

Goal 3



#### F Exercise 3-17

Adjustments for unearned and accrued fees

Goal 3

#### F Exercise 3-18

Effect of deferred revenue

Goal 3

a. \$597 million



#### F Exercise 3-19

Effect on financial statements of omitting adjustment

Goal 3

#### F Exercise 3-20

Adjustment for depreciation

Goal 3



#### F Exercise 3-21

Adjustments

Goal 3

At the end of the current year, \$7,260 of fees have been earned but have not been billed to clients.

- a. What is the adjustment to record the accrued fees? Indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease.
- b. If the cash basis rather than the accrual basis had been used, would an adjustment have been necessary? Explain.

The balance in the unearned fees account, before adjustment at the end of the year, is \$48,000. Of these fees, \$16,000 have been earned. In addition, \$7,500 of fees have been earned but have not been billed. What are the adjustments to (a) to adjust the unearned fees account and (b) to record the accrued fees? Indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease.

AOL Time Warner Inc. reported unearned revenue of \$1,660 million and \$1,063 million as of December 31, 2001 and 2000, respectively. For the year ending December 31, 2001, AOL Time Warner reported total revenues of \$38,234 million. (a) What was the amount of the adjustment for unearned revenue for 2001? (b) What would have been total revenues under the cash basis?

The adjustment for accrued fees was omitted at December 31, the end of the current year. Indicate which items will be in error, because of the omission, on (a) the income statement for the current year and (b) the balance sheet as of December 31. Also indicate whether the items in error will be overstated or understated.

The estimated amount of depreciation on equipment for the current year is \$3,000. (a) How is the adjustment recorded? Indicate each account affected, whether the account is increased or decreased, and the amount of the increase or decrease. (b) If the adjustment in (a) was omitted, which items would be erroneously stated on (1) the income statement for the year and (2) the balance sheet as of December 31?

The Purification Company is a consulting firm specializing in pollution control. The following adjustments were made for The Purification Company:

Adjustments

	Aujustinents
Account	Increase (Decrease)
Accounts Receivable	\$ 5,100
Supplies	(1,225)
Prepaid Insurance	(1,000)
Accumulated Depreciation—Equipment	1,800
Wages Payable	900
Unearned Rent	(2,500)
Fees Earned	5,100
Wages Expense	900
Supplies Expense	1,225
Rent Revenue	2,500
Insurance Expense	1,000
Depreciation Expense	1,800

Identify each of the six pairs of adjustments. For each adjustment, indicate the account, whether the account is increased or decreased, and the amount of the adjustment. No account is affected by more than one adjustment. Use the following format. The first adjustment is shown as an example.

Adjustment	Account	Increase or Decrease	Amount	
1.	Accounts Receivable	Increase	\$5,100	
	Fees Earned	Increase	5,100	

Cisco Systems Inc. reported Property, Plant, and Equipment of \$5,029 million and Ac-

#### F Exercise 3-22

Book value of fixed assets

#### Goal 4



## What was the book value of the fixed assets at July 28, 2001?

cumulated Depreciation of \$2,438 million at July 28, 2001.

b. Would the book values of Cisco Systems' fixed assets normally approximate their fair market values?

#### F Exercise 3-23

Classify assets

Goal 4

Identify each of the following as (a) a current asset or (b) property, plant, and equipment: 4.

of which provide for monthly payments of \$12,500. Explain how the liability should be

1. Accounts receivable

classified on the balance sheet.

2. Building

Equipment 5. Prepaid insurance

6. **Supplies** 

3. Cash

At the balance sheet date, a business owes a mortgage note payable of \$375,000, the terms

#### F Exercise 3-24

Balance sheet classification

#### Goal 4



#### F Exercise 3-25

Classified balance sheet

Goal 4

Total assets, \$96,550



Shoshone Co. offers personal weight reduction consulting services to individuals. After all the accounts have been closed on June 30, 2004, the end of the current fiscal year, the balances of selected accounts from the ledger of Shoshone Co. are as follows:

Accounts Payable	\$ 8,750	Prepaid Insurance	\$ 3,100
Accounts Receivable	18,725	Prepaid Rent	2,400
Accum. DeprEquipment	21,100	Retained Earnings	59,850
Capital Stock	25,000	Salaries Payable	1,750
Cash	2,150	Supplies	675
Equipment	90,600	Unearned Fees	1,200

Prepare a classified balance sheet.

#### F Exercise 3-26

Classified balance sheet

Goal 4

Total assets, \$1,222,503



La-Z-Boy Inc. is one of the world's largest manufacturers of furniture that is best known for its reclining chairs. The following data (in thousands) were adapted from the 2001 annual report of La-Z-Boy Inc.:

Accounts payable	\$ 92,830
Accounts receivables	380,867
Accumulated depreciation	252,027
Capital stock	267,530
Cash	23,565
	(continued)



Income taxes payable*	\$ 11,490
Intangible assets	247,422
Inventories	257,887
Long-term debt*	5,304
Long-term debt**	196,923
Other assets*	46,457
Other assets**	35,964
Other liabilities*	51,361
Other long-term liabilities**	80,519
Notes payable*	10,380
Payroll payable*	78,550
Property, plant, and equipment	482,368
Retained earnings	427,616

For the preceding items, (\*) indicates that the item is current in nature, while (\*\*) indicates that the item is long-term in nature.

Prepare a classified balance sheet as of April 28, 2001.

## F Exercise 3–27

Balance Sheet

Goal 4

List the errors you find in the following balance sheet. Prepare a corrected balance sheet.

ZigZag Services Co. Balance Sheet For the Year Ended March 31, 2004		
Assets		
Current assets: Cash Accounts payable Supplies Prepaid insurance Land Total current assets Property, plant, and equipment: Building Equipment Total property, plant, and equipment	\$ 3,170 4,390 750 1,600 100,000 \$ 55,500 28,250	\$109,910 
Total assets		<u>\$211,660</u>
Liabilities		
Current liabilities:     Accounts receivable     Accumulated depreciation—building     Accumulated depreciation—equipment     Net loss     Total liabilities	\$ 8,390 23,000 16,000 	<u>\$ 57,390</u>
Stockholders' Equity		
Wages payable Capital stock Retained earnings Total stockholders' equity Total liabilities and stockholders' equity		\$ 975 40,000 113,295 \$154,270 \$211,660

#### F Exercise 3-28

Identify accounts to be closed

Goal 6



From the following list, identify the accounts that should be closed at the end of the accounting period:

- a. Accounts Payable
- b. Accumulated Depreciation—Buildings
- c. Capital Stock
- d. Depreciation Expense-Buildings
- e. Dividends
- f. Equipment

- g. Fees Earned
- h. Land
- i. Salaries Expense
- j. Salaries Payable
- k. Supplies
- l. Supplies Expense

### FExercise 3-29

Closing process

Goal 6



During the closing process for Matrix Corporation, retained earnings was affected by three separate transactions: an increase of \$729,350, a decrease of \$512,900, and a decrease of \$40,000. For the year ending July 31, 2004, dividends of \$40,000 were paid. As of August 1, 2003, the balance of retained earnings was \$405,700. (a) What was the net income or loss for the year ending July 31, 2004? (b) Prepare a retained earnings statement for the year.

#### F Exercise 3–30

Closing process

Goal 6



Image Services Co. offers its services to individuals desiring to improve their personal images. After the accounts have been adjusted at January 31, the end of the fiscal year, the following balances were taken from the ledger of Image Services Co.:

Retained Earnings	\$325,750	Rent Expense	\$74,000
Dividends	45,000	Supplies Expense	15,500
Fees Earned	380,700	Miscellaneous Expense	4,500
Wages Expense	205,300		

Perform the closing process for (a) revenues, (b) expenses, and (c) dividends. Indicate each account closed, whether the account is increased or decreased, and the amount of the increase or decrease. Close all expenses with one transfer to retained earnings.

## Accounting Application Problems

#### Problem 3-1A

Accrual-basis accounting

Goal 2



Papaw Health Care Inc. is owned and operated by Dr. Richard Byrne, the sole stockholder. During October 2004, Papaw Health Care entered into the following transactions:

- Oct. 1 Received \$4,500 from Embark Company as rent for the use of a vacant office in Papaw Health Care's building. Embark paid the rent six months in advance.
  - 1 Paid \$2,400 for an insurance premium on a one-year, general business policy.
  - 4 Purchased supplies of \$1,200 on account.
  - 5 Collected \$5,100 for services provided to customers on account.
  - 11 Paid creditors \$900 on account.
  - 18 Invested an additional \$25,000 in the business in exchange for capital stock.
  - 20 Billed patients \$13,600 for services provided on account.
  - 25 Received \$3,800 for services provided to customers who paid cash.
  - Paid expenses as follows: wages, \$7,000; utilities, \$2,000; rent on medical equipment, \$1,500; interest, \$125; miscellaneous, \$300.
  - 29 Paid dividends of \$3,000 to stockholders (Dr. Byrne).

#### Instructions

Analyze and record the October transactions for Papaw Health Care Inc. Using the following format, record each transaction by date and as a plus or minus in the appropriate accounts. The October 1, 2004 balances are shown in the form.

		Assets	=	Liabilities	Stockholders' + Equity
Bal. Oct. 1	Accts. Pre. Cash + Rec. + Ins. + 5,800 7,500 200	- Supp. + Building —	Acc. Accts Dep. + Land = Pay. 1,000 25,000 2,150	+ Rent + Pay. +	Notes Capital Pay. + Stock 20,000 25,000
Bal. Oct. 1	Ret. + Earn. — Dividends ∃ 37.660 0	- Earned + Rev Ex	•	F F F	Ins. Int. Misc. Exp. — Exp. — Exp. 0 0 0

#### Problem 3-2A

Adjustment process

#### Goal 3



Adjustment data for Papaw Health Care Inc. for October are as follows:

- Insurance expired, \$200.
- 2. Supplies on hand on October 31, \$325.
- 3. Depreciation on building, \$1,000.
- 4. Unearned rent revenue earned, \$750.
- 5. Wages owed employees but not paid, \$800.
- 6. Services provided but not billed to patients, \$2,100.

#### Instructions

Based upon the transactions recorded in October for Problem 3–1A, record the adjustments for October.

#### Problem 3-3A

Financial statements and the closing process

Goals 4, 6

1. Net income, \$6,140



Data for Papaw Health Care for October are provided in Problem 3-1A and Problem 3-2A

#### Instructions

- 1. Prepare an income statement, retained earnings statement, and a classified balance sheet for October. The notes payable is due in 2010.
- 2. Close the revenue, expense, and dividend accounts.

#### Problem 3-4A

Statement of cash flows

#### Goal 4

Net cash flow from operating activities, (\$825)



Data for Papaw Health Care for October are provided in Problems 3–1A, 3–2A, and 3–3A.

#### **Instructions**

- 1. Prepare a statement of cash flows for October. *Hint*: The statement of cash flows is prepared by analyzing and summarizing the cash transactions shown in the summary of transactions for Problem 3–1A.
- 2. Reconcile the net cash flows from operating activities with the net income for October. *Hint*: See the appendix to this chapter and use adjusted balances in computing increases and decreases in accounts.

#### Problem 3-5A

Adjustments and errors

#### Goal 3

Corrected net income, \$198,225



At the end of April, the first month of operations, the following selected data were taken from the financial statements of Phil Olson, P.C., a professional services corporation owned and operated by Phil Olson, an attorney at law:

Net income for April	\$187,500
Total assets at April 30	498,300
Total liabilities at April 30	67,800
Total stockholders' equity at April 30	430,500

In preparing the statements, adjustments for the following data were overlooked:

- a. Unbilled fees earned at April 30, \$21,500.
- b. Depreciation of equipment for April, \$6,000.

- c. Accrued wages at April 30, \$2,900.
- d. Supplies used during April, \$1,875.

#### Instructions

Determine the correct amount of net income for April and the total assets, liabilities, and stockholders' equity at April 30. In addition to indicating the corrected amounts, indicate the effect of each omitted adjustment by setting up and completing a columnar table similar to the following. Adjustment (a) is presented as an example.

	Net Income	Total Assets	Total Liabilities	Total Stockholders' Equity
Reported amounts Corrections:	\$187,500	\$498,300	\$67,800	\$430,500
Adjustment (a)	+21,500	+21,500	0	+21,500
Adjustment (b) Adjustment (c)				
Adjustment (d) Corrected amounts				

#### Problem 3-6A

Adjustment process and financial statements

Goals 3, 4

2. Net income, \$21,040



Adjustment data for Marasca Laundry Inc. for January 2004 are as follows:

- a. Wages accrued but not paid at January 31, \$2,100.
- b. Depreciation of equipment during the year, \$6,600.
- c. Laundry supplies on hand at January 31, \$900.
- d. Insurance premiums expired, \$2,800.

#### Instructions

1. Using the following format, record each adjustment as a plus or minus in the appropriate accounts. The January 31 balances are given.

			Assets			=	Lial	oilities	+	Stockh Equ	
Jan. 31 Balances	Cash + 11,100	Laundry Supplies + 5,560	Prepaid Insurance 4,490	+ Equi	ndry oment — ,100	Acc. Dep. = 40,200	Accounts Payable 4,100	Wage + Payabl		Capital Stock 7,500	
+ Jan. 31 Balances	Retained Earnings — 29,250	Dividends + 2,000	Laundry Revenue — 150,000	Wages Expense – 61,400	Rent - Expense - 36,000	Utilities – Expense – 13,700	Dep. - Expense – 0	Laundry Supplies Expense – O	Insur Expe		Misc. Expense 1,700

2. Prepare an income statement and a retained earnings statement for the year ended January 31, 2004, and a classified balance sheet as of January 31, 2004.

#### Problem 3-7A

Adjustment process and the closing process

Goals 3, 4, 6

Last Chance Corporation offers legal consulting advice to prison inmates. Adjustment data for Last Chance Corporation for June 2004 are as follows:

- a. Accrued fees revenue at June 30, \$5,000.
- b. Insurance expired during the year, \$1,900.
- c. Supplies on hand at June 30, \$450.

#### 2. Net income, \$45,900



- d. Depreciation of building for the year, \$1,620.
- e. Depreciation of equipment for the year, \$3,500.
- f. Accrued salaries and wages at June 30, \$1,750.
- g. Unearned rent at June 30, \$1,000.

#### Instructions

1. Using the following format, record each adjustment as a plus or minus in the appropriate accounts. The June 30 balances are shown in the form.

- 2. Prepare an income statement and a retained earnings statement for the year ended June 30, 2004, and a classified balance sheet as of June 30, 2004.
- 3. Close the revenue, expense, and dividend accounts.

## Alternate Accounting Application Problems

## Alternate Problem 3–1B

Accrual-basis accounting
Goal 2





Osmosis Health Care Inc. is owned and operated by Dr. Chris Ballard, the sole stockholder. During August, Osmosis Health Care entered into the following transactions:

- Aug. 2 Received \$9,000 from BFX Company as rent for the use of a vacant office in Osmosis Health Care's building. BFX prepays the rent six months in advance.
  - 2 Paid \$3,600 for an insurance premium on a one-year, general business policy.
  - 3 Purchased supplies of \$1,450 on account.
  - 6 Collected \$5,500 for services provided to customers on account.
  - 9 Paid creditors \$2,400 on account.
  - 18 Invested an additional \$10,000 in the business in exchange for capital stock.
  - 23 Billed patients \$11,500 for services provided on account.
  - 25 Received \$4,800 for services provided to customers who paid cash.
  - Paid expenses as follows: wages, \$10,250; utilities, \$3,800; rent on medical equipment, \$2,500; interest, \$125; miscellaneous, \$340.
  - 31 Paid dividends of \$2,000 to stockholders (Dr. Ballard).

#### Instructions

Analyze and record the August transactions for Osmosis Health Care Inc. Using the following format, record each transaction by date and as a plus or minus in the appropriate accounts. The August 1, 2004 balances are shown in the form.

				Asset	ts			=	Liab	ilities		+ +	tockholders' Equity
		Accts.	Pre.			Acc.		Accts.	Un.	Wages	Notes	C	Capital
	Cash +	Rec.	+ Ins	+ Supp	⊢ Building	- Dep.	+ Land	= Pay.	+ Rent +	Pay.	+ Pay.	+ 5	Stock
Bal. Aug. 1	5,800	8,300	300	180	50,000	4,000	25,000	4,280	0	0	20,000	4	-0,000
	Ret.			Fees	Rent	Wages	Utilities	Rent	Supplies	Dep.	Ins.	Int.	Misc.
	+ Earn.	- Div	idends -	+ Earned	+ Rev	Exp	Exp.	— Ехр. —	Exp.	— Exp. –	- Exp I	Ехр.	<ul><li>Exp.</li></ul>
Bal. Aug. 1	21,300	0	0	0	0	0	0	0	0	0	0	0	0

## Alternate Problem 3–2B

Adjustment process

#### Goal 3





## Alternate Problem 3–3B

Financial statements and the closing process

Goals 4, 6

1. Net income, \$2,915





## Alternate Problem 3–4B

Statement of Cash Flows

#### Goal 4

1. Net cash flow from operating activities, (\$3,715)





# Alternate Problem 3–5B

Adjustments and errors

Goal 3

Adjustment data for Osmosis Health Care Inc. for August are as follows:

- 1. Insurance expired, \$300.
- 2. Supplies on hand on August 31, \$285.
- 3. Depreciation on building, \$1,000.
- 4. Unearned rent revenue earned, \$1,500.
- 5. Wages owed employees but not paid, \$725.
- 6. Services provided but not billed to patients, \$5,500.

#### Instructions

Based upon the transactions recorded in August for Problem 3–1B, record the adjustments for August.

Data for Osmosis Health Care Inc. for August are provided in Problem 3–1B and Problem 3–2B.

#### Instructions

- 1. Prepare an income statement, retained earnings statement, and a classified balance sheet for August. The notes payable is due in 2015.
- 2. Close the revenue, expense, and dividend accounts.

Data for Osmosis Health Care for August are provided in Problems 3–1B, 3–2B, and 3–3B.

#### Instructions

- 1. Prepare a statement of cash flows for August. *Hint:* The statement of cash flows is prepared by analyzing and summarizing the cash transactions shown in the summary of transactions for Problem 3–1B.
- 2. Reconcile the net cash flows from operating activities with the net income for August. *Hint:* See the appendix to this chapter and use adjusted balances in computing increases and decreases in accounts.

At the end of March, the first month of operations, the following selected data were taken from the financial statements of Rita Abbott, P.C., a professional services corporation owned and operated by Rita Abbott, an attorney at law:

Net income for March \$372,300 Total liabilities at March 31 158,500 Total assets at March 31 862,000 Total stockholders' equity at March 31 703,500

#### Corrected net income, \$371,425





In preparing the statements, adjustments for the following data were overlooked:

- Unbilled fees earned at March 31, \$10,100.
- Depreciation of equipment for March, \$7,500. b.
- Accrued wages at March 31, \$2,100. c.
- d. Supplies used during March, \$1,375.

#### Instructions

Determine the correct amount of net income for March and the total assets, liabilities, and stockholders' equity at March 31. In addition to indicating the corrected amounts, indicate the effect of each omitted adjustment by setting up and completing a columnar table similar to the following. Adjustment (a) is presented as an example.

	Net Income	Total Assets	Total Liabilities	Total Stockholders' Equity
Reported amounts Corrections:	\$372,300	\$862,000	\$158,500	\$703,500
Adjustment (a)	+10,100	+10,100	0	+10,100
Adjustment (b) Adjustment (c)				
Adjustment (d) Corrected amounts				

### **Alternate Problem** 3-6B

Adjustment process and financial statements

Goals 3, 4

2. Net income, \$116,810



Adjustment data for Catnip Laundry Inc. for October 2004 are as follows:

- Wages accrued but not paid at October 31, \$2,500.
- Depreciation of equipment during the year, \$6,600. b.
- Laundry supplies on hand at October 31, \$900. c.
- d. Insurance premiums expired during the year, \$4,500.

#### Instructions

Using the following format, record each adjustment as a plus or minus in the appropriate accounts. The October 31 balances are given.

			Assets			=	Lial	oilities		ckholders' equity
Oct. 31 Balances	Cash + 18,100	Laundry Supplies + 7,640	Prepaid Insurance 6,000	+ Equi	indry pment — 5,100	Acc. Dep. = 140,200	Accounts Payable 9,100	Wage + Payab 0	'	:k
Oct. 31 Balances	Retained Earnings — 109,290	Dividends +	Laundry Revenue — 240,900	Wages Expense - 51,400	Rent - Expense 36,000	Utilities — Expense — 13,650	Dep. Expense – O	Laundry Supplies Expense – O	Insurance - Expense 0	Misc. – Expense 2,700



2. Prepare an income statement and a retained earnings statement for the year ended October 31, 2004, and a classified balance sheet as of October 31, 2004.

Pale Corporation offers legal consulting advice to prison inmates. Adjustment data for Pale

### **Alternate Problem** 3-7B

Adjustment process and the closing process

Goals 3, 4, 6

Corporation for April 2004 are as follows: Accrued fees revenue at April 30, \$6,000. a.

- b. Insurance expired during the year, \$9,000.
- c. Supplies on hand at April 30, \$450.
- d. Depreciation of building for the year, \$1,620.
- Depreciation of equipment for the year, \$3,500. e.

2. Net income, \$40,130





- f. Accrued salaries and wages at April 30, \$1,200.
- g. Unearned rent at April 30, \$2,500.

#### Instructions

1. Using the following format, record each adjustment as a plus or minus in the appropriate accounts. The April 30 balances are shown in the form.

Apr. 30 Balances 8		Accounts Receivable + 10,500	Prepaid Insurance + 13,800	Supplies + 1,950	Land + 50,000	Building — 132,500	Acc. Dep.  Building + Equipment 51,700 90,100
– Apr. 30 Balances	Acc. De - Equip. 35,300	= Payable	5	Unearned + Rent 8,000		Retained + Earnings 119,100	Fees  - Dividends + Revenue 10,000 198,400
+   Apr. 30 Balances	Rent Revenue – 0	- Expense — E	xpense – Exp	lities Repairs ense — Expense ,000 11,500	e — Equip.— E	surance Ex expense — Buil	ep. xp. Supplies Misc. lding — Expense — Expense 0 0 4.050

- 2. Prepare an income statement and a retained earnings statement for the year ended April 30, 2004, and a classified balance sheet as of April 30, 2004.
- 3. Close the revenue, expense, and dividend accounts.

## Building Leadership Skills-Financial Analysis and Reporting

#### Case 3-1

Analysis of income statements

Walgreen Company and CVS Corporation operate national chains of drugstores that sell prescription drugs, over-the-counter drugs, and other general merchandise such as greeting cards, beauty and cosmetics, household items, food,and beverages. Walgreen operates approximately 3,600 stores, while CVS Corporation operates approximately 4,200 stores. The following operating data (in thousands) were adapted from the 2001 SEC 10-K filings of Walgreen and CVS.

	CVS	Walgreen
Net sales	\$22,241,400	\$24,623,000
Cost of sales	16,550,400	18,048,900
Gross profit	\$ 5,691,000	\$ 6,574,100
Selling, general, and administrative expenses	4,920,400	5,175,800
Operating income	\$ 770,600	\$ 1,398,300
Other income and expense	(61,000)	24,400
Income before taxes	\$ 709,600	\$ 1,422,700
Income taxes	296,400	537,100
Net income	\$ 413,200	\$ 885,600

- 1. Prepare common-sized income statements for CVS and Walgreen.
- 2. Compute the average sales per store for CVS and Walgreen. Round to thousands.
- 3. Analyze and comment on your results in (1) and (2).
- 4. Broker recommendations are reported on Yahoo.com's financial Web site (http://finance.yahoo.com/). The recommendations are ranked as follows:

Strong Buy	1
Buy	2
Hold	3
Sell	4
Strong Sell	5

Based upon your answer to (3), would you expect that the average broker recommendation for CVS to be higher (less favorable) or lower (more favorable) than for Walgreen? Compare your assessment with the average broker recommendation on Yahoo.com's financial Web site (http://finance.yahoo.com/). To find the broker recommendation, enter the stock symbols for CVS (CVS) and Walgreen (WAG) and click on "research." Appendix C at the end of the text provides more details about using Yahoo Finance for research.

#### Case 3-2

Cash-basis income statement

The following operating data (in thousands) were adapted from the 2001 SEC 10-K filings of Walgreen and CVS:

	C/	/S	Walgreen		
	2001	2000	2001	2000	
Accounts receivable	\$ 966,200	\$ 824,500	\$ 798,300	\$ 614,500	
Accounts payable	1,535,800	1,351,500	1,546,800	1,364,000	
Accrued expenses payable	1,267,900	1,001,400	937,500	847,700	

- 1. Using the preceding data, adjust the operating income for CVS and Walgreen shown in Case 3–1 to an adjusted cash basis. *Hint:* To convert to a cash basis, you need to compute the change in each accrual accounting item shown above and then either add or subtract the change to the operating income.
- 2. Compute the net difference between the operating income under the accrual and cash bases.
- 3. Express the net difference in (2) as a percent of operating income under the accrual basis.
- 4. Which company's operating income, CVS's or Walgreen's, is closer to the cash basis?
- 5. Do you think most analysts focus on operating income or net income in assessing the long-term profitability of a company? Explain.

#### Case 3-3

Cash basis vs. accrual basis financial statements

The local minor league baseball team, *The Hampton Hounds*, began their season in late April, with 5 home dates (and no road games) in April. The team's owner is seeking a short-term loan from the local bank to help fund some improvements. As a result, a statement of cash receipts and disbursements was prepared for the bank for April.



The owner estimates that the average cash receipts from tickets and concessions is \$20,000 per home date. The average operating cash disbursements is \$4,000 per home date. Players are paid the 15th of every month during the regular season (until Oct. 15th) at an average rate of \$18,000 per month per player. All 25 players receive their first paycheck on May 15th. Rent is paid on the stadium on the first of every month during the playing season at a rate of \$60,000 per month, with the first payment due on May 1st and the last payment due on September 1st. In addition to individual game sales, the Hounds sold 1,000 season tickets during the month of April at \$720 per ticket. There are 160 total games in the season, half of which are home dates.

- 1. Prepare a statement of cash receipts and disbursements for April.
- 2. Prepare an accrual basis income statement for April. (*Hint:* Translate expenses into a per game basis and match against the revenue.)
- 3. Which statement best represents the results of operations for April?
- 4. Comment on management's intention to use the statement of cash receipts and disbursements to support the request for the bank loan rather than using an accrual-based income statement.

#### Case 3-4

Effect of events on financial statements

On September 11, 2001, two **United Air Lines** aircraft were hijacked and destroyed in terrorist attacks on the World Trade Center in New York City and in a crash near Johnstown, Pennsylvania. In addition to the loss of all passengers and crew on board the aircraft, these attacks resulted in numerous deaths and injuries to persons on the ground and massive property damage. In the immediate aftermath of the attacks, the FAA ordered all aircraft operating in the United States grounded immediately. This grounding effectively lasted for three days, and United was able to operate only a portion of its scheduled flights for several days thereafter. Passenger traffic and yields on United's flights declined significantly when flights were permitted to resume, and United refunded significant numbers of tickets for the period from September 11 to September 25.

The following data for United were adapted (in millions) from the Securities and Exchange Commission 10-K filing for the years ending December 31, 2000 and 1999:

	Year Ending December 31,		
	2000	1999	
Operating income	\$ 673	\$1,342	
Net income	52	1,204	
Net cash flows from operating activities	2,358	2,415	

1. Based upon the preceding data, develop an expectation of what you believe the operating income, net income, and net cash flows from operating activities would be for United Air Lines for the year ending December 31, 2001. Use the following format for your answers:

	Year Ending December 31, 2001
Operating income	\$
Net income	\$
Net cash flows from operating activities	\$

2. Would you report the loss related to the terrorist attacks separately in the income statement? If so, how?

Case 3-5

Analysis of income and cash flows

The following data (millions) for 2001, 2000, and 1999 were taken from 10-K filings with the Securities and Exchange Commission:

	2001	2000	1999
Company A Revenues Operating income Net income	\$20,092	\$19,889	\$19,284
	5,352	3,691	3,982
	3,969	2,177	2,431
Net cash flows from operating activities	4,110	3,585	3,883
Net cash flows from investing activities	(1,188)	(1,165)	(3,421)
Net cash flows from financing activities	(2,830)	(2,072)	(471)
Total assets	22,417	20,834	21,623
Company B Revenues Operating income (loss) Net income (loss)	\$13,879	\$16,741	\$14,883
	(1,602)	1,637	1,318
	(1,216)	828	1,208
Net cash flows from operating activities	236	2,898	2,647
Net cash flows from investing activities	(2,696)	(3,396)	(3,962)
Net cash flows from financing activities	3,306	239	2,270
Total assets	23,605	21,931	19,942
Company C Revenues Operating income (loss) Net income (loss)	\$ 3,122	\$ 2,762	\$ 1,640
	(412)	(864)	(606)
	(567)	(1,411)	(720)
Net cash flows from operating activities	(120)	(130)	(91)
Net cash flows from investing activities	(253)	164	(952)
Net cash flows from financing activities	107	693	1,104
Total assets	1,638	2,135	2,466
Company D Revenues Operating income (loss) Net income (loss)	\$49,000	\$45,352	\$43,082
	2,183	1,739	1,534
	877	613	247
Net cash flows from operating activities	2,281	1,548	1,838
Net cash flows from investing activities	(1,523)	(1,810)	(1,465)
Net cash flows from financing activities	(878)	280	(257)
Total assets	18,190	17,932	16,641

1. Match each of the following companies with the data for Company A, B, C, or D:

Amazon.com Coca-Cola Inc. Delta Air Lines Kroger

2. Explain the logic underlying your matches.

#### Case 3-6

Analysis of income statements

Home Depot and Lowe's operate national chains of home improvement stores that sell a wide assortment of building materials and home improvement, lawn, and garden products, such as lumber, paint, wall coverings, lawn mowers, plumbing, and electrical supplies. Home Depot operates approximately 1,300 stores, while Lowe's operates approximately 740 stores. The following operating data (in thousands) were adapted from the 2002 SEC 10-K fillings of Home Depot and Lowe's:

	Home Depot	Lowe's
Net sales	\$53,553,000	\$22,111,108
Cost of sales	37,406,000	15,743,267
Gross profit	\$16,147,000	\$ 6,367,841
Operating expenses	11,215,000	4,570,053
Operating income	\$ 4,932,000	\$ 1,797,788
Other income and expense	25,000	(173,537
Income before taxes	\$ 4,957,000	\$ 1,624,251
Income taxes	1,913,000	600,989
Net income	\$ 3,044,000	\$ 1,023,262

- 1. Prepare common-sized income statements for Home Depot and Lowe's.
- 2. Compute the average sales per store for Home Depot and Lowe's. Round to thousands.
- 3. Analyze and comment on your results in (1) and (2).
- 4. Broker recommendations are reported on Yahoo.com's financial Web site (http://finance.yahoo.com/). The recommendations are ranked as follows:

Strong Buy	1
Buy	2
Hold	3
Sell	4
Strong Sell	5

Based upon your answer to (3), would you expect that the average broker recommendation for Home Depot to be higher (less favorable) or lower (more favorable) than for Lowe's? Compare your assessment with the average broker recommendation on Yahoo.com's financial Web site (http://finance.yahoo.com/). To find the broker recommendation, enter the stock symbols for Home Depot (HD) and Lowe's (LOW) and click on "research." Appendix C at the end of the text provides more details about using Yahoo Finance for research.

## Building Leadership Skills-Responsible Leadership

#### Activity 3–1

Accrued expense

On December 30, 2003, you buy a Ford Expedition. It comes with a three-year, 36,000-mile warranty. On January 21, 2004, you return the Expedition to the dealership for some basic repairs covered under the warranty. The cost of the repairs to the dealership is \$315. In what year, 2003 or 2004, should **Ford Motor Co.** recognize the cost of the warranty repairs as an expense?

#### Activity 3-2

Account for revenue

State College requires students to pay tuition each term before classes begin. Students who have not paid their tuition are not allowed to enroll or to attend classes.

What accounts do you think would be used by State College to record the receipt of the students' tuition payments? Describe the nature of each account.

#### Activity 3–3

Accrued revenue

The following is an excerpt from a conversation between Karen Wyer and Jim Harris just before they boarded a flight to Puerto Rico on **United Airlines**. They are going to Puerto Rico to attend their company's annual sales conference.

Karen: Jim, aren't you taking an accounting course at City College?

*Jim:* Yes, I decided it's about time I learned something about accounting. You know, our annual bonuses are based upon the sales figures that come from the accounting department.

Karen: I guess I never really thought about it.

Jim: You should think about it! Last year, I placed a \$250,000 order on December 23. But when I got my bonus, the \$250,000 sale wasn't included. They said it hadn't been shipped until January 4, so it would have to count in next year's bonus.

Karen: A real bummer!

Jim: Right! I was counting on that bonus including the \$250,000 sale.

Karen: Did you complain?

Jim: Yes, but it didn't do any good. Jacob, the head accountant, said something about matching revenues and expenses. Also, something about not recording revenues until the sale is final. I figure I'd take the accounting course and find out whether he's just jerking me around.

*Karen:* I never really thought about it. When do you think United Airlines will record its revenues from this flight?

Jim: Mmm ... I guess it could record the revenue when it sells the ticket ... or ... when the boarding passes are taken at the door ... or ... when we get off the plane ... or when our company pays for the tickets ... or ... I don't know. I'll ask my accounting instructor.

Discuss when United Airlines should recognize the revenue from ticket sales to properly match revenues and expenses.

## Activity 3-4

Adjustments for financial statements

Several years ago, your father opened Derby Television Repair Inc. He made a small initial investment and added money from his personal bank account as needed. He withdrew money for living expenses at irregular intervals. As the business grew, he hired an assistant. He is now considering adding more employees, purchasing additional service trucks, and purchasing the building he now rents. To secure funds for the expansion, your father submitted a loan application to the bank and included the most recent financial statements (as follows) prepared from accounts maintained by a part-time bookkeeper.

Derby Television Repair Inc. Income Statement For the Year Ended December 31, 2004		
Service revenue		\$66,900
Less: Rent paid	\$18,000	
Wages paid	16,500	
Supplies paid	7,000	
Utilities paid	3,100	
Insurance paid	3,000	
Miscellaneous payments	2,150	49,750
Net income		\$17,150

Derby Television Repair Inc. Balance Sheet December 31, 2004	
Assets	
Cash	\$ 3,750
Amounts due from customers	2,100
Truck	25,000
Total assets	<u>\$30,850</u>
Equities	
Stockholders' equity	<u>\$30,850</u>

After reviewing the financial statements, the loan officer at the bank asked your father if he used the accrual basis of accounting for revenues and expenses. Your father responded that he did, and that is why he included an account for "Amounts Due from Customers." The loan officer then asked whether or not the accounts were adjusted prior to the preparation of the statements. Your father answered that they had not been adjusted.

- a. Why do you think the loan officer suspected that the accounts had not been adjusted prior to the preparation of the statements?
- b. Indicate possible accounts that might need to be adjusted before an accurate set of financial statements could be prepared.

### Activity 3-5

Compare balance sheets

Compare the balance sheets of two different companies, and present to the class a summary of the similarities and differences of the two companies. You may obtain the balance sheets you need from one of the following sources:

- 1. Your school or local library.
- 2. The investor relations department of each company.
- 3. The company's Web site on the Internet.
- 4. EDGAR (Electronic Data Gathering, Analysis, and Retrieval), the electronic archives of financial statements filed with the Securities and Exchange Commission. The EDGAR address is www.sec.gov/edgarhp.htm. To obtain annual report information, click on "Search for Company Filings," then click on "Search for Companies and Filings." Type in a company name on the "EDGAR Company Search" form. EDGAR will list the reports available for the selected company. A

company's annual report (along with other information) is provided in its annual 10-K report to the SEC. Click on the 10-K (or 10-K405) report for the year you wish to download. If you wish, you can save the whole 10-K report to a file and then open it with your word processor. Appendix C at the end of the text provides more details about using EDGAR for research.

### Activity 3-6

Business strategy



Assume that you and two friends are debating whether to open an automotive and service retail chain that will be called Auto-Mart. Initially, Auto-Mart will open three stores locally, but the business plan anticipates going nationwide within five years.

Currently, you and your future business partners are debating whether to focus Auto-Mart on a "do-it-yourself" or "do-it-for-me" business strategy. A "do-it-yourself" business strategy emphasizes the sale of retail auto parts that customers will use themselves to repair and service their cars. A "do-it-for-me" business strategy emphasizes the offering of maintenance and service for customers.

- 1. In groups of three or four, discuss whether to implement a "do-it-yourself" or "do-it-for-me" business strategy. List the advantages of each strategy and arrive at a conclusion as to which strategy to implement.
- 2. Provide examples of real world businesses that use "do-it-yourself" or "do-it-forme" business strategies.

## Answers to Self-Study Questions

- A Under the accrual basis of accounting, revenues are recorded when the services are rendered. Since the services were rendered during June, all the fees should be recorded on June 30 (Answer A). This is an example of accrued revenue. Under the cash basis of accounting, revenues are recorded when the cash is collected, not necessarily when the fees are earned. Thus, no revenue would be recorded in June, \$8,500 of revenue would be recorded in July, and \$6,500 of revenue would be recorded in August (Answer D). Answers B and C are incorrect and are not used under either the accrual or cash bases.
- 2. **C** The collection of a \$5,700 accounts receivable is recorded as an increase in Cash, \$5,700, and a decrease in Accounts Receivable, \$5,700 (Answer C). The initial recording of the fees earned on account is recorded as an increase in Accounts Receivable and an increase in Fees Earned (Answer B). Services rendered for cash are recorded as an increase in Cash and an increase in Fees Earned (Answer D). Answer A is incorrect and would result in the accounting equation being out

- of balance because total assets would exceed total liabilities and stockholders' equity by \$11,400.
- 3. A A deferral is the delay in recording an expense already paid, such as prepaid insurance (answer A). Wages payable (answer B) is considered an accrued expense or accrued liability. Fees earned (answer C) is a revenue item. Accumulated depreciation (answer D) is a contra account to a fixed asset.
- 4. **D** The balance in the supplies account, before adjustment, represents the amount of supplies available during the period. From this amount (\$2,250) is subtracted the amount of supplies on hand (\$950) to determine the supplies used (\$1,300). The used supplies is recorded as an increase in Supplies Expense, \$1,300, and a decrease in Supplies, \$1,300 (Answer D).
- 5. **C** The failure to record the adjusting entry increasing Rent Revenue, \$600, and decreasing Unearned Rent, \$600, would have the effect of overstating liabilities by \$600 and understating net income by \$600 (answer C).