# ADJUSTING THE ACCOUNTS

# THE NAVIGATOR

| • Understand Concepts for Review                         |  |
|----------------------------------------------------------|--|
| • Read <i>Feature Story</i>                              |  |
| • Scan <i>Study Objectives</i>                           |  |
| • Read <i>Preview</i>                                    |  |
| • Read text and answer <i>Before You Go On</i><br>p. 107 |  |
| • Work Demonstration Problem                             |  |
| • Review Summary of Study Objectives                     |  |
| • Complete Assignments                                   |  |



# Before studying this chapter, you should know or, if necessary, review:

- a. What a double-entry system is. (Ch. 3, p. 69)
- **b.** How to increase or decrease assets, liabilities, and stockholders' equity using debit and credit procedures. (Ch. 3, pp. 67–72)
- c. How to journalize a transaction. (Ch. 3, pp. 75–76)
- d. How to post a transaction. (Ch. 3, pp. 79-80)
- e. How to prepare a trial balance. (Ch. 3, pp. 88-89)



FEATURE STORY

# Timing Is Everything

In Chapter 1 you learned a neat little formula: Net income = Revenues – Expenses. And in Chapter 3 you learned some nice, orderly rules for recording corporate revenue and expense transactions. Guess what? Things are not really that nice and neat. In fact, it is often difficult to determine in what time period some revenues and expenses should be reported. And, in measuring net income, timing is everything.

There are rules that give guidance on these issues. But occasionally, these rules are overlooked, misinterpreted, or even intentionally ignored. Think what the results would be if the following cases were true.

• Lake Swan Resort pays its general property insurance on a six-month basis. The total of \$18,000 for a six-month period, or \$3,000 per month, is paid on May 30 for June to November. The entire amount of \$18,000 is recorded as an expense for the month of May because it is paid on May 30. Thus the company has a loss of \$7,533 for that month.

# • Juneau Country Club

gives its members an option to pay the entire year's membership with a 5 percent discount. Dues that are received in December 2008 for the year 2009 are all entered at December 2008 as dues income.

- **Cuisine-on-the-Go** receives in October a 50 percent deposit for a Christmas party in the amount of \$7,525. When the accountant records the transaction, it is entered as catering income for the month of October.
- Hospitality Purveyors has its annual convention in Houston. One event is an off-site event to NASA Johnson Space Center for a tour. Coach buses are con-

tracted for this outing with Luxury Coach, Inc. A check for \$3,685 is written to Luxury in May for its services to be provided in September. Luxury records the \$3,685 as income for the month of May.

In each case, accrual accounting concepts were violated. That is, revenues or expenses were not recorded in the proper period, which has a

substantial impact on reported income. Their timing is off!



## After studying this chapter, you should be able to

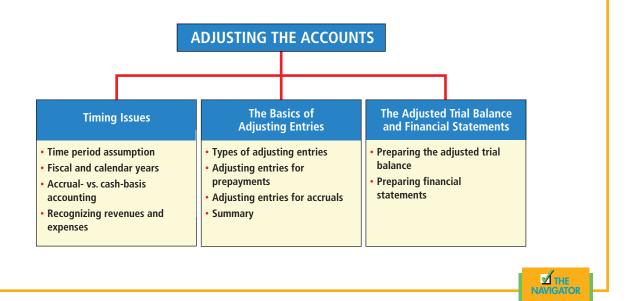
- 1. Explain the time period assumption.
- 2. Explain the accrual basis of accounting.
- 3. Explain why adjusting entries are needed.
- 4. Identify the major types of adjusting entries.
- 5. Prepare adjusting entries for prepayments.
- 6. Prepare adjusting entries for accruals.
- 7. Describe the nature and the purpose of an adjusted trial balance.
- 8. Prepare adjusting entries for the alternative treatment of prepayments.



# PREVIEW OF CHAPTER 4

In Chapter 3 we examined the recording process through the preparation of the trial balance. Before we will be ready to prepare financial statements from the trial balance, additional steps need to be taken. The timing mismatch between revenues and expenses of the four companies mentioned in our Feature Story illustrates the types of situations that make these additional steps necessary. For example, long-lived assets purchased or constructed in prior accounting years are being used to produce goods and to provide services in the current year. What portion of these assets' costs, if any, should be recognized as an expense of the current period? Before financial statements can be prepared, this and other questions relating to the recognition of revenues and expenses must be answered. With the answers in hand, we can then adjust the relevant account balances.

The content and organization of Chapter 4 are as follows:



# TIMING ISSUES



Explain the time period assumption.

No adjustments would be necessary if we could wait to prepare financial statements until a company ended its operations. At that point we could easily determine its final balance sheet and the amount of lifetime income it earned. The following anecdote illustrates one way to compute lifetime income.

A grocery store owner from the old country kept his accounts payable on a spindle, accounts receivable on a note pad, and cash in a cigar box. His daughter, having just passed the CPA exam, chided her father: "I don't understand how you can run your business this way. How do you know what your profits are?"

"Well," the father replied, "when I got off the boat forty years ago, I had nothing but the pants I was wearing. Today, your brother is a doctor, your sister is a college professor, and you are a CPA. Your mother and I have a nice car, a well-furnished house, and a lake home. We have a good business, and everything is paid for. So, you add all that together, subtract the pants, and there's your profit."

# SELECTING AN ACCOUNTING TIME PERIOD

Although the old grocer may be correct in his evaluation, it is impractical to wait so long for the results of operations. All entities, from the corner grocery, to a global company like **Kellogg**, to your college or university, find it desirable and necessary to report the results of their activities more frequently. For example, management usually wants monthly financial statements, and the Internal Revenue Service requires all businesses to file annual tax returns. Therefore, **accountants divide the economic life of a business into artificial time periods**. This convenient assumption is referred to as the **time period assumption**.

Many business transactions affect more than one of these arbitrary time periods. For example, Farmer Brown's milking machine bought in 1998 and the airplanes purchased by **Delta Air Lines** five years ago are still in use today. Therefore, we must determine the relevance of each business transaction to specific accounting periods. Doing so may involve subjective judgments and estimates.

# FISCAL AND CALENDAR YEARS

Both small and large companies prepare financial statements periodically in order to assess their financial condition and results of operations. Accounting time periods are generally *a month*, *a quarter*, or *a year*. Monthly and quarterly time periods are called **interim periods**. Most large companies are required to prepare both quarterly and annual financial statements.

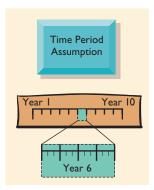
An accounting time period that is one year in length is referred to as a **fiscal year**. A fiscal year usually begins with the first day of a month and ends twelve months later on the last day of a month. The accounting period used by most businesses coincides with the **calendar year** (January 1 to December 31). Companies whose fiscal year differs from the calendar year include **Delta Air Lines**, June 30; **Walt Disney Productions**, September 30; and **CKE Restaurants**, **Inc.**, January 31. Sometimes a company's year-end will vary from year to year. For example, the **Marriott International**, **Inc.**, fiscal year ends on the Friday closest to December 31.

# ACCRUAL- VERSUS CASH-BASIS ACCOUNTING

What you will learn in this chapter is **accrual-basis accounting.** Under the accrual basis, transactions that change a company's financial statements are recorded **in the periods in which the events occur**. For example, using the accrual basis to determine net income means recognizing revenues when earned (rather than when the cash is received). It also means recognizing expenses when incurred (rather than when paid). Information presented on an accrual basis reveals relationships likely to be important in predicting future results. Under accrual accounting, revenues are recognized when services are performed; so trends in revenues are thus more meaningful for decision making.

An alternative to the accrual basis is the cash basis. Under **cash-basis accounting**, revenue is recorded when cash is received, and an expense is recorded when cash is paid. The cash basis often leads to misleading financial statements. It fails to record revenue that has been earned but for which the cash has not been received. Also, expenses are not matched with earned revenues. **Cash-basis accounting is not in accordance with generally accepted accounting principles (GAAP).** 

Most companies use accrual-basis accounting. Individuals and some small companies use cash-basis accounting. The cash basis is justified for small businesses because they often have few receivables and payables. Accountants are sometimes



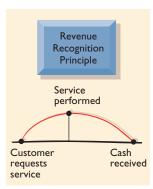
**ALTERNATIVE TERMINOLOGY** The time period assumption is also called the *periodicity assumption*.



Explain the accrual basis of accounting.



standards are often used in other major industrialized countries, accrual-basis accounting is also followed by all these countries.





Expenses

asked to convert cash-basis records to the accrual basis. As you might expect, extensive adjusting entries are required for this task.

# **RECOGNIZING REVENUES AND EXPENSES**

Determining the amount of revenues and expenses to be reported in a given accounting period can be difficult. To help in this task, accountants have developed two principles as part of generally accepted accounting principles (GAAP): the revenue recognition principle and the matching principle.

The revenue recognition principle dictates that revenue be recognized in the accounting period in which it is earned. In a service enterprise, revenue is considered to be earned at the time the service is performed. To illustrate, assume that a dry-cleaning business cleans banquet and bed linens on June 30, but hotels do not claim and pay for their cleaning until the first week of July. Under the revenue recognition principle, revenue is earned in June when the service is performed rather than in July when the cash is received. At June 30, the dry cleaner would report a receivable on its balance sheet and revenue in its income statement for the service performed.

Accountants follow the approach of "let expenses follow revenues." That is, expense recognition is tied to revenue recognition. In the preceding example, this principle means that the salary expense incurred in performing the cleaning service on June 30 should be reported in the income statement for the same period in which the service revenue is recognized. The critical issue in expense recognition is when the expense makes its contribution to revenue. This may or may not be the same period in which the expense is paid. If the salary incurred on June 30 is not paid until July, the dry cleaner would report salaries payable on its June 30 balance sheet. The practice of expense recognition is referred to as the **matching principle** because it dictates that efforts (expenses) be matched with accomplishments (revenues).

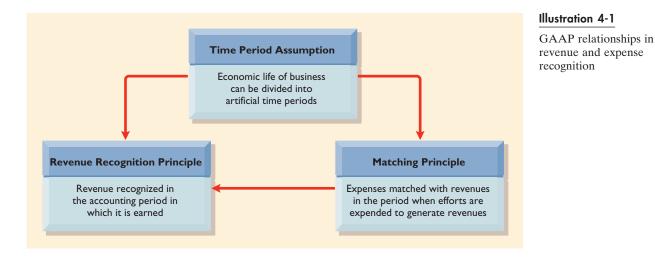
# ACCOUNTING IN ACTION Business Insight

Suppose you are a filmmaker like George Lucas and spend \$11 million to produce a film such as *Star Wars*. Over what period should the cost be expensed? It should be expensed over the economic life of the film. But what is its economic life? The filmmaker must estimate how much revenue will be earned from box office sales, video sales, television, and games and toys—a period that could be less than a year or more than twenty years, as is the case for Twentieth Century Fox's *Star Wars*. Originally released in 1977 and rereleased in 1997, domestic revenues total nearly \$500 million for *Star Wars* and continue to grow. This situation demonstrates the difficulty of properly matching expenses to revenues.

What accounting principle does this example illustrate? How will financial results be affected if the expenses are recognized over a period that is *less than* that used for revenues? What if the expenses are recognized over a period that is *longer than* that used for revenues?

SOURCE: Star Trek Newsletter, 22.

Once the economic life of a business has been divided into artificial time periods, the revenue recognition and matching principles can be applied. This one assumption and two principles thus provide guidelines as to when revenues and expenses should be reported. These relationships are shown in Illustration 4-1.



# BEFORE YOU GO ON...

## REVIEW IT

- 1. What is the relevance of the time period assumption to accounting?
- 2. What are the revenue recognition and the matching principles?

# The basics of adjusting entries

In order for revenues to be recorded in the period in which they are earned and for expenses to be recognized in the period in which they are incurred, adjusting entries are made at the end of the accounting period. In short, **adjusting entries** are needed to ensure that the revenue recognition and the matching principles are followed.

Adjusting entries make it possible to report on the balance sheet the appropriate assets, liabilities, and stockholders' equity at the statement date and to report on the income statement the proper net income (or loss) for the period. However, the trial balance—the first pulling together of the transaction data—may not contain up-to-date and complete data. This is true for the following reasons:

- 1. Some events are not journalized daily because it is inexpedient to do so. Examples are the consumption of supplies and the earning of wages by employees.
- 2. Some costs are not journalized during the accounting period because they expire with the passage of time rather than through recurring daily transactions. Examples are equipment deterioration, rent, and insurance.
- **3.** Some items may be unrecorded. An example is a utility service bill that will not be received until the next accounting period.

Adjusting entries are required every time financial statements are prepared. The starting point is an analysis of each account in the trial balance to determine whether it is complete and up-to-date. The analysis requires a thorough understanding of the company's operations and the interrelationship of accounts. Preparing adjusting entries is often an involved process. The company may need to make inventory counts of supplies and repair parts. It may need to prepare supporting



Explain why adjusting entries are needed.



schedules of insurance policies, rental agreements, and other contractual commitments. Adjustments are often prepared after the balance sheet date. However, the adjusting entries are dated as of the balance sheet date.

# STUDY OBJECTIVE 4

Identify the major types of adjusting entries.

#### Illustration 4-2

Categories of adjusting entries

# **TYPES OF ADJUSTING ENTRIES**

Adjusting entries can be classified as either prepayments or accruals. Each of these classes has two subcategories, as shown in Illustration 4-2.

#### Prepayments

- 1. **Prepaid expenses.** Expenses paid in cash and recorded as assets before they are used or consumed.
- **2. Unearned revenues.** Cash received and recorded as liabilities before revenue is earned.

## Accruals

- 1. Accrued revenues. Revenues earned but not yet received in cash or recorded.
- 2. Accrued expenses. Expenses incurred but not yet paid in cash or recorded.

Specific examples and explanations of each type of adjustment are given on the following pages. Each example is based on the October 31 trial balance of Premier Staffing Agency, Inc., from Chapter 3, reproduced in Illustration 4-3.

|                   | NG AGENCY, IN<br>Balance<br>31, 2008 | с.       |  |
|-------------------|--------------------------------------|----------|--|
|                   | Debit                                | Credit   |  |
| Cash              | \$15,200                             |          |  |
| Supplies          | 2,500                                |          |  |
| Prepaid Insurance | 600                                  |          |  |
| Office Equipment  | 5,000                                |          |  |
| Notes Payable     |                                      | \$ 5,000 |  |
| Accounts Payable  |                                      | 2,500    |  |
| Unearned Revenue  |                                      | 1,200    |  |
| Common Stock      |                                      | 10,000   |  |
| Retained Earnings |                                      | -0-      |  |
| Dividends         | 500                                  |          |  |
| Service Revenue   |                                      | 10,000   |  |
| Salaries Expense  | 4,000                                |          |  |
| Rent Expense      | 900                                  |          |  |
| r                 | \$28,700                             | \$28,700 |  |

We assume that Premier Staffing uses an accounting period of one month. Thus monthly adjusting entries will be made. The entries will be dated October 31.

# ADJUSTING ENTRIES FOR PREPAYMENTS



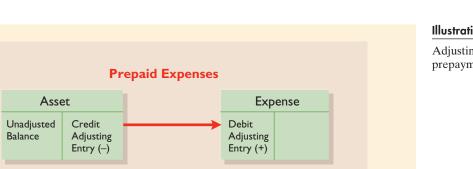
Prepare adjusting entries for prepayments.

As indicated earlier, prepayments are either prepaid expenses or unearned revenues. Adjusting entries for prepayments are required to record the portion of the prepayment that represents the **expense incurred** or the **revenue earned** in the current accounting period.

# Illustration 4-3

Trial balance

If an adjustment is needed for prepayments, the asset and the liability are overstated and the related expense and revenue are understated before the adjustment. For example, in the trial balance, the balance in the asset Supplies shows only supplies purchased. This balance is overstated; a related expense account, Supplies Expense, is understated because the cost of supplies used has not been recognized. Thus the adjusting entry for prepayments will decrease a balance sheet account (Supplies) and increase an income statement account (Supplies Expense). The effects of adjusting entries for prepayments are depicted graphically in Illustration 4-4.



# HELPFUL HINT

Remember that credits decrease assets and increase revenues. Debits increase expenses and decrease liabilities.

Illustration 4-4

Adjusting entries for prepayments

# Prepaid Expenses

As stated on the preceding page, expenses paid in cash and recorded as assets before they are used or consumed are called **prepaid expenses**. When a cost is prepaid, an asset account is debited to show the service or benefit that will be received in the future. Prepayments often occur in regard to insurance, supplies, advertising, and rent. In addition, prepayments are made when buildings and equipment are purchased.

Prepaid expenses expire either with the passage of time (e.g., rent and insurance) or through use and consumption (e.g., supplies). The expiration of these costs does not require daily journal entries, which would be unnecessary and impractical. Instead, it is customary to postpone recognizing cost expirations until financial statements are prepared. At each statement date, adjusting entries are made for two purposes: (1) to record the expenses that apply to the current accounting period and (2) to show the unexpired costs in the asset accounts.

Prior to adjustment, assets are overstated and expenses are understated. Thus the prepaid expense adjusting entry results in a debit (increase) to an expense account and a credit (decrease) to an asset account.

SUPPLIES. Businesses use various types of supplies. For example, a CPA firm will have office supplies such as stationery, envelopes, and accounting paper. Supplies are generally debited to an asset account when they are acquired. In the course of operations, supplies are depleted; but recognition of supplies used is deferred until the adjustment process. At that point, a physical inventory (count) of supplies is taken. The difference between the balance in the Supplies (asset) account and the cost of supplies on hand represents the supplies used (expense) for the period.

Premier Staffing Agency, Inc., purchased supplies costing \$2,500 on October 5. A debit (increase) was made to the asset Supplies. This account shows a balance of \$2,500 in the October 31 trial balance. An inventory count at the close of business on October 31 reveals that \$1,000 of supplies are still on hand. Thus the cost

**Supplies** Oct. 5 Supplies purchased; record asset Premier Staffing

Oct. 31 Supplies used; record supplies expense

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**Equation analyses** summarize the effects of the transaction on the accounting equation.

Equation AnalysisA = L + SE-1,500 - 1,500 Exp

#### Illustration 4-5

Supplies accounts after adjustment

of supplies used is 1,500 (2,500 - 1,000), and the following adjusting entry is made:

| Oct. 31 | Supplies Expense          | 1,500 |       |
|---------|---------------------------|-------|-------|
|         | Supplies                  |       | 1,500 |
|         | (To record supplies used) |       |       |

After the adjusting entry is posted, the two supplies accounts look like Illustration 4-5.

|            | Sup   | plies             |       | S                 | upplies 1 | Expense |  |
|------------|-------|-------------------|-------|-------------------|-----------|---------|--|
| 10/5       | 2,500 | 10/31 <b>Adj.</b> | 1,500 | 10/31 <b>Adj.</b> | 1,500     |         |  |
| 10/31 Bal. | 1,000 |                   |       |                   |           |         |  |

The asset account Supplies now shows a balance of \$1,000, which is the cost of supplies on hand at the statement date. In addition, Supplies Expense shows a balance of \$1,500, which equals the cost of supplies used in October. If the adjusting entry is not made, October expenses will be understated and net income overstated by \$1,500. Also, both assets and stockholders' equity will be overstated by \$1,500 on the October 31 balance sheet.

# ACCOUNTING IN ACTION Business Insight

In the past, the costs of media advertising for burgers, bleaches, athletic shoes, and such products were sometimes recorded as assets and expensed in subsequent periods as sales took place. The reasoning behind this treatment was that long ad campaigns provided benefits over multiple accounting periods. Today, this treatment is no longer allowed. Instead, advertising costs must be expensed when the advertising takes place. The issue is important because the outlays for advertising can be substantial. Recent big spenders: **Coca-Cola** spent \$2 billion; **PepsiCo, Inc.**, \$1.7 billion; **Campbell Soup Company**, \$1.7 billion: and **JC Penney Company**, \$947 million.

Why do you think current accounting rules require that the cost of long ad campaigns be expensed rather than recorded as an asset?

# Insurance



record asset

|      | Insuranc | e Policy | /    |
|------|----------|----------|------|
| Oct  | Nov      | Dec      | lan  |
| \$50 | \$50     | \$50     | \$50 |
| Feb  | March    | April    | May  |
| \$50 | \$50     | \$50     | \$5Ó |
| June | July     | Aug      | Sept |
| \$50 | \$50     | \$50     | \$50 |
|      | I YFAR   | \$600    |      |

Oct. 31 Insurance expired; record insurance expense **INSURANCE.** Most companies have fire and theft insurance on merchandise and equipment, personal liability insurance for accidents suffered by customers, and automobile insurance on company cars and trucks. The cost of insurance protection is determined by the payment of insurance premiums. The minimum term of coverage is usually one year, but three- to five-year terms are available and offer lower annual premiums. Insurance premiums normally are charged to the asset account Prepaid Insurance when paid. At the financial statement date it is necessary to debit (increase) Insurance Expense and credit (decrease) Prepaid Insurance for the cost that has expired during the period.

On October 4, Premier Staffing Agency, Inc., paid \$600 for a one-year fire insurance policy. The effective date of coverage was October 1. The premium was charged to Prepaid Insurance when it was paid, and this account shows a balance of \$600 in the October 31 trial balance. Analysis reveals that \$50 ( $$600 \div 12$ ) of insurance expires each month. Thus the following adjusting entry is made:

| Oct. 31 | Insurance Expense             | 50 |    |
|---------|-------------------------------|----|----|
|         | Prepaid Insurance             |    | 50 |
|         | (To record insurance expired) |    |    |

After the adjusting entry is posted, the accounts look like Illustration 4-6.

| Р          | repaid | Insurance  |    | Ins               | urance Ex | spense | Illustration 4-6                |
|------------|--------|------------|----|-------------------|-----------|--------|---------------------------------|
| 10/4       | 600    | 10/31 Adj. | 50 | 10/31 <b>Adj.</b> | 50        |        | Insurance account<br>adjustment |
| 10/31 Bal. | 550    |            |    |                   |           |        |                                 |

The asset Prepaid Insurance shows a balance of \$550. This amount represents the unexpired cost for the remaining eleven months of coverage. The \$50 balance in Insurance Expense is equal to the insurance cost that has expired in October. If this adjustment is not made, October expenses will be understated by \$50 and net income overstated by \$50. Also, both assets and stockholders' equity will be overstated by \$50 on the October 31 balance sheet.

**DEPRECIATION.** A business enterprise typically owns productive facilities such as buildings, equipment, and vehicles. Because these assets provide service for a number of years, each is recorded as an asset, rather than an expense, in the year it is acquired. As explained in Chapter 1, such assets are recorded at cost, as required by the cost principle. The term of service is referred to as the useful life.

According to the matching principle, a portion of the cost of a long-lived asset should be reported as an expense during each period of the asset's useful life. **Depreciation** is the allocation of the cost of an asset to expense over its useful life in a rational and systematic manner.

**Need for Depreciation Adjustment.** From an accounting standpoint, acquiring productive facilities is viewed essentially as a long-term prepayment for services. The need for periodic adjusting entries for depreciation is therefore the same as that for other prepaid expenses: to recognize the cost that has expired (expense) during the period and to report the unexpired cost (asset) at the end of the period.

At the time an asset is acquired, its useful life cannot be known with certainty. The asset may be useful for a longer or shorter time than expected, depending on such factors as actual use, deterioration owing to the elements, or obsolescence. Thus you should recognize that depreciation is an estimate rather than a factual measurement of the cost that has expired. A common procedure in computing depreciation expense is to divide the cost of the asset by its useful life. For example, if cost is \$10,000 and useful life is expected to be 10 years, annual depreciation is \$1,000.<sup>1</sup>

For Premier Staffing, depreciation on the office equipment is estimated to be \$480 a year, or \$40 per month. Accordingly, depreciation for October is recognized by the following adjusting entry:

| Oct. 31 | Depreciation Expense                      | 40 |    | Γ |
|---------|-------------------------------------------|----|----|---|
|         | Accumulated Depreciation—Office Equipment |    | 40 |   |
|         | (To record monthly depreciation)          |    |    | L |

After the adjusting entry is posted, the accounts look like Illustration 4-7. The balance in the accumulated depreciation account will increase \$40 each month. After journalizing and posting the adjusting entry on November 30, the balance will be \$80; on December 31, \$120; and so on.

nts after

| А   | = | L | + | SE      |
|-----|---|---|---|---------|
| -50 |   |   |   | -50 Exp |

**Cash Flows** no effects

#### Depreciation



Office equipment purchased; record asset

| I | C    | Office Ec | lnibmer | it     |
|---|------|-----------|---------|--------|
| ſ | Oct  | Nov       | Dec     | Jan    |
|   | \$40 | \$40      | \$40    | \$40   |
|   | Feb  | March     | April   | May    |
|   | \$40 | \$40      | \$40    | \$40   |
|   | June | July      | Aug     | Sept   |
| I | \$40 | \$40      | \$40    | \$40   |
|   | Depr | eciation  | = \$480 | )/year |

Oct. 31 Depreciation recognized;

record depreciation expense

| A   | = | L | + | SE  |
|-----|---|---|---|-----|
| -40 |   |   |   | -40 |

<sup>&</sup>lt;sup>1</sup>Additional consideration is given to computing depreciation expense in Chapter 13.

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#### Illustration 4-7

Accounts after adjustment for depreciation

| <b>Office Equipment</b>                       |                      |
|-----------------------------------------------|----------------------|
| 10/1 5,000                                    |                      |
|                                               |                      |
| Accumulated Depreciation—                     |                      |
| Accumulated Depreciation—<br>Office Equipment | Depreciation Expense |

#### **HELPFUL HINT**

All contra accounts have increases, decreases, and normal balances opposite to the account to which they relate.

#### **Illustration 4-8**

Balance sheet presentation of accumulated depreciation

#### **ALTERNATIVE TERMINOLOGY**

Book value is sometimes referred to as *carrying value* or *unexpired cost*.





Cash is received in advance; liability is recorded



Oct. 31 Service i

Service is provided; revenue is recorded **Statement Presentation.** Accumulated Depreciation—Office Equipment is a contra asset account. A **contra asset account** is one that is offset against an asset account on the balance sheet. This accumulated depreciation account appears just after Office Equipment on the balance sheet. Its normal balance is a credit. An alternative would be to credit (decrease) Office Equipment directly for the depreciation each month. But use of the contra account provides disclosure of **both the original cost** of the equipment **and the total cost that has expired to** date. In the balance sheet, Accumulated Depreciation—Office Equipment is deducted from the related asset account as shown in Illustration 4-8.

| Office equipment                                | \$5,000 |         |  |
|-------------------------------------------------|---------|---------|--|
| Less: Accumulated depreciation-office equipment | 40      | \$4,960 |  |

The difference between the cost of any depreciable asset and its related accumulated depreciation is referred to as the **book value** of that asset. In Illustration 4-8, the book value of the equipment on the balance sheet date is \$4,960. You should realize that the book value is generally different from the market value (the price at which the asset could be sold in the marketplace). The reason the two are different is that depreciation is a means of cost allocation, not a matter of valuation.

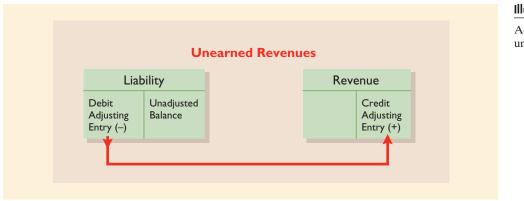
Depreciation expense also identifies that portion of the asset's cost that has expired in October. As in the case of other prepaid adjustments, the omission of this adjusting entry would cause total assets, total stockholders' equity, and net income to be overstated and depreciation expense to be understated.

If the company owns additional equipment, such as delivery or store equipment, or if it has buildings, a separate depreciation expense is recorded on each of those items. Related accumulated depreciation accounts also are established, such as Accumulated Depreciation—Delivery Equipment, Accumulated Depreciation—Store Equipment, and Accumulated Depreciation—Buildings.

# **Unearned Revenues**

As stated on page 108, cash received and recorded as liabilities before revenue is earned is called **unearned revenues**. Such items as rent, magazine subscriptions, and customer deposits for future service may result in unearned revenues. Airlines such as **United**, **American**, and **Delta** treat receipts from the sale of tickets as unearned revenue until the flight service is provided. Similarly, college tuition received prior to the start of a semester is considered unearned revenue by the college. Unearned revenues are the opposite of prepaid expenses. Indeed, unearned revenue on the books of one company is likely to be a prepayment on the books of the company that has made the advance payment. For example, if identical accounting periods are assumed, a landlord will have unearned rent revenue when a tenant has prepaid rent.

When the payment is received for services to be provided in a future accounting period, an unearned revenue account (a liability) should be credited (increased) to recognize the obligation that exists. Later, unearned revenues are earned by providing service to a customer. It may not be practical to make daily journal entries as the revenue is earned. In such cases, recognition of earned revenue is delayed until the end of the period. Then an adjusting entry is made to record the revenue that has been earned and to show the liability that remains. In the typical case, liabilities are overstated and revenues are understated prior to adjustment. Thus **the adjusting entry for unearned revenues results in a debit (decrease) to a liability account and a credit (increase) to a revenue account.** Illustration 4-9 shows adjusting entries for unearned revenue.



Premier Staffing Agency, Inc., received \$1,200 on October 2 from R. Knox for staffing services expected for a New Year's Eve party to be completed by December 31. The payment was credited to Unearned Revenue; this account shows a balance of \$1,200 in the October 31 trial balance. Analysis reveals that \$400 of those fees was earned in October. The following adjusting entry is made:

| Illustration | 1 4-9   |
|--------------|---------|
| Adjusting    | entries |

. ..

Adjusting entries for unearned revenue.

**ALTERNATIVE TERMINOLOGY** Unearned revenue is

> SE +400

sometimes referred to as *deferred revenue*.

| Oct. 31 | Unearned Revenue                          | 400 |     | Δ | _ | T    |
|---------|-------------------------------------------|-----|-----|---|---|------|
|         | Service Revenue                           |     | 400 | A | _ | _400 |
|         | (To record revenue for services provided) |     |     |   |   | -400 |

After the adjusting entry is posted, the accounts look like Illustration 4-10.

| Unearned Revenue  |     |            |       | Service Revenue   |
|-------------------|-----|------------|-------|-------------------|
| 10/31 <b>Adj.</b> | 400 | 10/2       | 1,200 | 10/31 Bal. 10,000 |
|                   |     | 10/31 Bal. | 800   | 31 Adj. 400       |

Illustration 4-10

Revenue accounts after prepayments adjustment

The liability Unearned Revenue now shows a balance of \$800. This amount represents the remaining prepaid staffing services to be performed in the future. At the same time, Service Revenue shows total revenue of \$10,400 earned in October. If this adjustment is not made, revenues and net income would be understated by \$400 in the income statement. Also, liabilities would be overstated and stockholders' equity would be understated by \$400 on the October 31 balance sheet.



# **CCOUNTING MATTERS!** Ethics Insight

Companies would rather report steadily increasing profits than fluctuating profits. To "smooth" earnings, companies sometimes shift the reporting of revenues or expenses between periods. A *Wall Street Journal* article reported that **Microsoft Corp.** agreed to settle Securities and Exchange Commission charges that it mis-

stated its earnings in some years by illegally maintaining different "reserve" accounts for such expenses as marketing and obsolete inventory. The settlement did not require Microsoft to pay a fine. Microsoft accepted the commission's order without admitting or denying wrongdoing and agreed not to commit accounting violations. "The SEC said Microsoft maintained undisclosed reserve accounts totaling between \$200 million and \$900 million between 1994 and 1998 and didn't maintain proper internal controls to document them or substantiate their size." The SEC said that the improper use of these reserve accounts resulted in "material inaccuracies" in the financial reports filed with the SEC.

What accounting principles do you think Microsoft violated? What did the SEC mean by "material inaccuracies"? Why would a company prefer to report steadily increasing profits rather than fluctuating profits?

*SOURCE:* Rebecca Buckman, "Microsoft, SEC Settle Probe into Earnings Misstatements," *Wall Street Journal Online*, June 4, 2002.

# BEFORE YOU GO ON...

#### REVIEW IT

- 1. What are the four types of adjusting entries?
- 2. What is the effect on assets, stockholders' equity, expenses, and net income if a prepaid expense adjusting entry is not made?
- **3.** What is the effect on liabilities, stockholders' equity, revenues, and net income if an unearned revenue adjusting entry is not made?
- 4. Using **PepsiCo's** Consolidated Statement of income, what was the amount of depreciation expense for 2005 and 2006? (See Note 4 to the financial statements.)

#### 🕨 DO IT

The ledger of Hammond, Inc., on March 31, 2008, includes the following selected accounts befor adjusting entries.

|                                           | Debit  | Credit |  |
|-------------------------------------------|--------|--------|--|
| Prepaid Insurance                         | 3,600  |        |  |
| Office Supplies                           | 2,800  |        |  |
| Office Equipment                          | 25,000 |        |  |
| Accumulated Depreciation—Office Equipment |        | 5,000  |  |
| Unearned Revenue                          |        | 9,200  |  |

An analysis of the accounts shows the following:

- 1. Insurance expires at the rate of \$100 per month.
- 2. Supplies on hand total \$800.
- 3. The office equipment depreciates \$200 a month.
- 4. One-half of the unearned revenue was earned in March.

Prepare the adjusting entries for the month of March.

#### **ACTION PLAN**

- Make adjusting entries at the end of the period for revenues earned and expenses incurred in the period.
- Don't forget to make adjusting entries for prepayments. Failure to adjust for prepayments leads to overstatement of the asset or liability and related understatement of the expense or revenue.



## SOLUTION

| <ol> <li>Insurance Expense<br/>Prepaid Insurance<br/>(To record insurance expired)</li> </ol>                               | 100   | 100   |
|-----------------------------------------------------------------------------------------------------------------------------|-------|-------|
| <ol> <li>Office Supplies Expense<br/>Office Supplies<br/>(To record supplies used)</li> </ol>                               | 2,000 | 2,000 |
| <ol> <li>Depreciation Expense<br/>Accumulated Depreciation—Office Equipment<br/>(To record monthly depreciation)</li> </ol> | 200   | 200   |
| <ul><li>4. Unearned Revenue</li><li>Service Revenue</li><li>(To record revenue for services provided)</li></ul>             | 4,600 | 4,600 |
|                                                                                                                             |       |       |

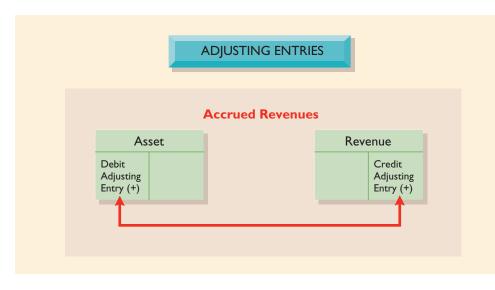
# **ADJUSTING ENTRIES FOR ACCRUALS**

The second category of adjusting entries is **accruals**. Adjusting entries for accruals are required to record revenues earned and expenses incurred in the current accounting period that have not been recognized through daily entries.

An accrual adjustment is needed when various accounts are understated: the revenue account and the related asset account, and/or the expense account and the related liability account. Thus the adjusting entry for accruals will **increase both a balance sheet and an income statement account**. Adjusting entries for accruals are graphically depicted in Illustration 4-11.

# STUDY OBJECTIVE 6

Prepare adjusting entries for accruals.



#### **Accrued Revenues**

Oct. 31

<u>Illustration 4-11</u> Adjusting entries for

accruals



Revenue and receivable are recorded for unbilled services



Cash is received; receivable is reduced

# Accrued Revenues

As explained on page 108, revenues earned but not yet received in cash or recorded at the statement date are **accrued revenues**. Accrued revenues may accumulate (accrue) with the passing of time, as in the case of interest revenue and rent revenue. Or they may result from services that have been performed but neither billed nor collected, as in the case of commissions and fees. The former are unrecorded because the earning of interest and rent does not involve daily transactions. The latter may be unrecorded because only a portion of the total service has been provided. An adjusting entry is required for two purposes: (1) to show the receivable that exists at the balance sheet date and (2) to record the revenue that has been earned during the period. Prior to adjustment, both assets and revenues are understated. Thus an adjusting entry for accrued revenues results in a debit (increase) to an asset account and a credit (increase) to a revenue account.

In October, Premier Staffing Agency, Inc., earned \$200 for services that were not billed to clients before October 31. Because these services have not been billed, they have not been recorded. The following adjusting entry is made:

| A    | = | L | + | SE   |
|------|---|---|---|------|
| -200 |   |   |   | +200 |

| Oct. 31 | Accounts Receivable                       | 200 |     |
|---------|-------------------------------------------|-----|-----|
|         | Service Revenue                           |     | 200 |
|         | (To record revenue for services provided) |     |     |

After the adjusting entry is posted, the accounts look like Illustration 4-12.

#### Illustration 4-12

Receivable and revenue accounts after accrual adjustment

| ALTERNATIVE | TERMINOLO | GY       |
|-------------|-----------|----------|
| ALLENINALLE |           | <u> </u> |

Accrued revenues are also called *accrued receivables*.

| Accounts Receivable   | Service Revenue                              |
|-----------------------|----------------------------------------------|
| 10/31 <b>Adj. 200</b> | 10/31 10,000<br>31 400<br>31 <b>Adj. 200</b> |
|                       | 10/31 <b>Bal.</b> 10,600                     |

The asset Accounts Receivable shows that \$200 is owed by clients at the balance sheet date. The balance of 10,600 in Service Revenue represents the total revenue earned during the month (10,000 + 400 + 200). If the adjusting entry is not made, the following will all be understated: assets and stockholders' equity on the balance sheet and revenues and net income on the income statement.

In the next accounting period, the clients will be billed. The entry to record the billing should recognize that a portion has already been recorded in the previous month's adjusting entry. To illustrate, assume that bills totaling \$3,000 are mailed to clients on November 10. Of this amount, \$200 represents revenue earned in October and recorded as Service Revenue in the October 31 adjusting entry. The remaining \$2,800 represents revenue earned in November. Thus the following entry is made:

| A =    | = L | +  | SE    |
|--------|-----|----|-------|
| -2,800 |     | +2 | 2,800 |

| Nov. 10   Accounts Receivable             | 2,800 |       |
|-------------------------------------------|-------|-------|
| Service Revenue                           |       | 2,800 |
| (To record revenue for services provided) |       |       |

This entry records service revenue between November 1 and November 10. The subsequent collection of revenue from clients (including the \$200 earned in October) will be recorded with a debit (increase) to Cash and a credit (decrease) to Accounts Receivable.

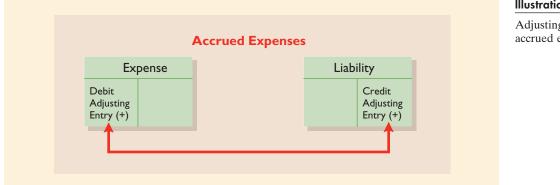
# Accrued Expenses

# ALTERNATIVE TERMINOLOGY

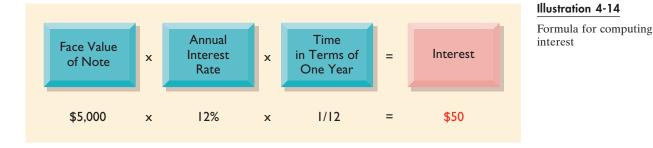
Accrued expenses are also called *accrued liabilities*.

As indicated on page 108, expenses incurred but not yet paid or recorded at the statement date are called **accrued expenses**. Interest, rent, taxes, and salaries can be accrued expenses. Accrued expenses result from the same causes as accrued revenues. In fact, an accrued expense on the books of one company is an accrued revenue to another company. For example, the \$200 accrual of fees by Premier is an accrued expense to the client that received the service.

Adjustments for accrued expenses are needed for two purposes: (1) to record the obligations that exist at the balance sheet date and (2) to recognize the expenses that apply to the current accounting period. Prior to adjustment, both liabilities and expenses are understated. Therefore, as shown in Illustration 4-13, the adjusting entry for accrued expenses results in a debit (increase) to an expense account and a credit (increase) to a liability account.



**ACCRUED INTEREST.** Premier Staffing Agency, Inc., signed a \$5,000, three-month note payable on October 1. The note requires interest at an annual rate of 12 percent. The amount of the interest accumulation is determined by three factors: (1) the face value of the note; (2) the interest rate, which is always expressed as an annual rate; and (3) the length of time the note is outstanding. In this instance, the total interest due on the \$5,000 note at its due date three months hence is \$150 (\$5,000 × 12% × 3/12); the interest for one month is \$50. The formula for computing interest<sup>2</sup> and its application to Premier Staffing Agency, Inc., for the month of October are shown in Illustration 4-14. Note that the time period is expressed as a fraction of a year.



The accrued expense adjusting entry at October 31 is

| Oct. 31 | Interest Expense                      | 50 | )  |
|---------|---------------------------------------|----|----|
|         | Interest Payable                      |    | 50 |
|         | (To record interest on notes payable) |    |    |

A = L + SE + 50 -50

After this adjusting entry is posted, the accounts look like Illustration 4-15.

| Interest Expense | Interest Payable | Illustration 4-15                  |
|------------------|------------------|------------------------------------|
| 10/31 Adj. 50    | 10/31 Adj. 50    | Interest accounts after adjustment |

<sup>2</sup>The computation of interest will be considered in more depth in later chapters.



Adjusting entries for accrued expenses.



Interest is a cost of borrowing money that accumulates with the passage of time.

In Illustration 4-15, Interest Expense shows the interest charges for the month. The amount of interest owed at the statement date is shown in Interest Payable. It will not be paid until the note comes due at the end of three months. The Interest Payable account is used instead of crediting (increasing) Notes Payable. The reason for using the two accounts is to disclose the two types of obligations (interest and principal) in the accounts and statements. If this adjusting entry is not made, liabilities and interest expense will be understated, and net income and stockholders' equity will be overstated.

ACCRUED SALARIES. Some types of expenses are paid for after the services have been performed. Examples are employee salaries and commissions. At Premier Staffing, Inc., salaries were last paid on October 26; the next payday is November 9. As shown in the calendar in Illustration 4-16, three working days remain in October (October 29-31).



At October 31, the salaries for the last three days of the month represent an accrued expense and a related liability. The employees receive total salaries of \$2,000 for a five-day workweek, or \$400 per day. Thus accrued salaries at October 31 are 1,200 ( $400 \times 3$ ). The adjusting entry is

| Oct. 31 | Salaries Expense             | 1,200 |       |
|---------|------------------------------|-------|-------|
|         | Salaries Payable             |       | 1,200 |
|         | (To record accrued salaries) |       |       |

After this adjusting entry is posted, the accounts look like Illustration 4-17.

| Salaries                                            | Expense | Salaries | Payable           |       |
|-----------------------------------------------------|---------|----------|-------------------|-------|
| 10/26         4,000           31 Adj.         1,200 |         |          | 10/31 <b>Adj.</b> | 1,200 |
| 10/31 Bal. 5,200                                    |         | -        |                   |       |

After this adjustment, the balance in Salaries Expense of \$5,200 (13 days  $\times$ \$400) is the actual salary expense for October. (The employees started work on October 15.) The balance in Salaries Payable of \$1,200 is the amount of the liability for salaries owed as of October 31. If the \$1,200 adjustment for salaries is not recorded, Premier's expenses will be understated \$1,200, and its liabilities will be understated \$1,200.

At Premier Staffing, salaries are payable every two weeks. The next payday is November 9, when total salaries of \$4,000 will again be paid. The payment will consist of \$1,200 of salaries payable at October 31 plus \$2,800 of salaries expense

#### Illustration 4-17

Salary accounts after adjustment

Illustration 4-16

pay periods

| Α | = | L      | + | SE     |
|---|---|--------|---|--------|
|   |   | +1,200 |   | -1,200 |

for November (seven working days as shown in the November calendar  $\times$  \$400). Therefore, the following entry is made on November 9:

| Nov. 9 | Salaries Payable               | 1,200 |       | A =    | L +    | SE     |
|--------|--------------------------------|-------|-------|--------|--------|--------|
|        | Salaries Expense<br>Cash       | 2,800 | 4.000 | -4,000 | -1,200 | -2,800 |
|        | (To record November 9 payroll) |       | 1,000 |        |        |        |

This entry does two things: (1) It eliminates the liability for Salaries Payable that was recorded in the October 31 adjusting entry. (2) It records the proper amount of Salaries Expense for the period between November 1 and November 9.

# Technology in action

In many computer systems, the adjusting process is handled like any other transaction, with the accountant inputting the adjustment at the time required. The main difference between adjusting entries and regular transactions is that with adjusting entries, one part of the computer system may perform the required calculation for such items as depreciation or interest and then "feed" these figures to the journalizing process. Such systems are also able to display information before and after changes were made.



If a computer performs adjusting entries, what role does the accountant play? Why might management be interested in "information before and after changes"?

# BEFORE YOU GO ON...

## REVIEW IT

- **1.** If an accrued revenue adjusting entry is not made, what is the effect on assets, stockholders' equity, revenues, and net income?
- 2. If an accrued expense adjusting entry is not made, what is the effect on liabilities, stock-holders' equity, and interest expense?

# ┝ DO IT

Hector and Jeremy are the new owners of Micro Resort Rental Services, Inc. At the end of August 2008, their first month of ownership, Hector and Jeremy are trying to prepare monthly financial statements. They have the following information for the month:

- 1. At August 31, Micro owed employees \$800 in salaries that will be paid on September 1.
- **2.** On August 1, Micro borrowed \$30,000 from a local bank on a fifteen-year mortgage. The annual interest rate is 10%.
- 3. Service revenue unrecorded in August totaled \$1,100.

Prepare the adjusting entries needed at August 31, 2008.

## ACTION PLAN

- Make adjusting entries at the end of the period for revenues earned and expenses incurred in the period.
- Don't forget to make adjusting entries for accruals. Adjusting entries for accruals will increase both a balance sheet and an income statement account.

#### SOLUTION

| <ol> <li>Salaries Expense<br/>Salaries Payable<br/>(To record accrued salaries)</li> </ol>                    | 800 | 800 |
|---------------------------------------------------------------------------------------------------------------|-----|-----|
| 2. Interest Expense<br>Interest Payable<br>(To record interest)<br>$($30,000 \times 10\% \times 1/12 = $250)$ | 250 | 250 |

- 3. Accounts Receivable
  - Service Revenue

(To record revenue for services provided)

1,100



# SUMMARY OF BASIC RELATIONSHIPS

### Illustration 4-18

Summary of adjusting entries

| The four basic types of adjusting entries are summarized in Illustration 4-18. Take |
|-------------------------------------------------------------------------------------|
| some time to study and analyze the adjusting entries shown in the summary. Be       |
| sure to note that each adjusting entry affects one balance sheet account and one    |
| income statement account.                                                           |

| Type of<br>Adjustment | Reason for<br>Adjustment                                                     | Accounts<br>before Adjustment                   | Adjusting<br>Entry              |
|-----------------------|------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------|
| 1. Prepaid expenses   | Prepaid expenses originally recorded in asset accounts have been used.       | Assets overstated<br>Expenses understated       | Dr. Expenses<br>Cr. Assets      |
| 2. Unearned revenues  | Unearned revenues initially recorded in liability accounts have been earned. | Liabilities overstated<br>Revenues understated  | Dr. Liabilities<br>Cr. Revenues |
| 3. Accrued revenues   | Revenues have been earned but not yet received in cash or recorded.          | Assets understated<br>Revenues understated      | Dr. Assets<br>Cr. Revenues      |
| 4. Accrued expenses   | Expenses have been incurred but not yet paid in cash or recorded.            | Expenses understated<br>Liabilities understated | Dr. Expenses<br>Cr. Liabilities |

The journalizing and posting of adjusting entries for Premier Staffing Agency, Inc., on October 31 are shown in Illustrations 4-19 and 4-20. All adjustments are identified in the ledger by the reference J2 because they have been journalized on page 2 of the general journal. A center caption entitled "Adjusting Entries" may be inserted between the last transaction entry and the first adjusting entry to identify these entries. When reviewing the general ledger in Illustration 4-20, note that the adjustments are highlighted in color.

## Illustration 4-19

General journal showing adjusting entries

# HELPFUL HINT

 (1) Adjusting entries should not involve debits or credits to cash.
 (2) Evaluate whether the adjustment makes sense. For example, an adjustment to recognize supplies used should increase supplies expense.
 (3) Double-check all computations.

|         | GENERAL JOURNAL                                                                                       |            |       | J2     |
|---------|-------------------------------------------------------------------------------------------------------|------------|-------|--------|
| Date    | Account Titles and Explanation                                                                        | Ref.       | Debit | Credit |
| 2008    | Adjusting Entries                                                                                     |            |       |        |
| Oct. 31 | Supplies Expense<br>Supplies<br>(To record supplies used)                                             | 611<br>129 | 1,500 | 1,500  |
| 31      | Insurance Expense<br>Prepaid Insurance<br>(To record insurance expired)                               | 722<br>130 | 50    | 50     |
| 31      | Depreciation Expense<br>Accumulated Depreciation—Office Equipment<br>(To record monthly depreciation) | 711<br>158 | 40    | 40     |
| 31      | Unearned Revenue<br>Service Revenue<br>(To record revenue for services provided)                      | 209<br>400 | 400   | 400    |
| 31      | Accounts Receivable<br>Service Revenue<br>(To record revenue for services provided)                   | 112<br>400 | 200   | 200    |
| 31      | Interest Expense<br>Interest Payable<br>(To record interest on notes payable)                         | 905<br>230 | 50    | 50     |
| 31      | Salaries Expense<br>Salaries Payable<br>(To record accrued salaries)                                  | 726<br>212 | 1,200 | 1,200  |

# Illustration 4-20

General ledger after adjustment

|                |                 |           |           |            | GENERAL         | L       |
|----------------|-----------------|-----------|-----------|------------|-----------------|---------|
|                |                 | Cas       | h         |            | No. 101         |         |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         |         |
| 2008           |                 |           |           |            |                 | 20      |
| Oct. 1         |                 | J1        | 10,000    |            | 10,000          | 0       |
| 2              |                 | J1        | 1,200     |            | 11,200          |         |
| 3<br>4         |                 | J1<br>J1  |           | 900<br>600 | 10,300<br>9,700 |         |
| 20             |                 | J1<br>J1  |           | 500        | 9,200           | 20      |
| 26             |                 | J1        |           | 4,000      | 5,200           | 0       |
| 31             |                 | J1        | 10,000    |            | 15,200          |         |
|                | Acco            | ounts R   | eceivable | 1          | No. 112         | _       |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | 20      |
| 2008           |                 |           |           |            |                 | 20      |
| Oct.31         | Adj. entry      | <b>J2</b> | 200       |            | 200             |         |
|                |                 | Suppl     | ies       |            | No. 129         |         |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | 20      |
| 2008           |                 |           |           |            |                 | 0       |
| Oct. 5         |                 | J1        | 2,500     |            | 2,500           |         |
| 31             | Adj. entry      | <b>J2</b> |           | 1,500      | 1,000           |         |
|                | Pre             | paid In   | surance   |            | No. 130         |         |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | 20<br>0 |
| 2008           |                 |           |           |            |                 | U       |
| Oct. 4         |                 | J1        | 600       |            | 600             |         |
| 31             | Adj. entry      | <b>J2</b> |           | 50         | 550             |         |
|                | Off             | ice Equ   | iipment   |            | No. 157         | _       |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | 20      |
| 2008           |                 |           |           |            |                 | 0       |
| Oct. 1         |                 | J1        | 5,000     |            | 5,000           |         |
| Accumu         | lated Depreciat | ion—O     | ffice Equ | iipment    | No. 158         | _       |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | 20      |
| 2008           |                 |           |           |            |                 | 0       |
| Oct.31         | Adj. entry      | J2        |           | 40         | 40              |         |
|                | N               | lotes Pa  | yable     |            | No. 200         | _       |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | 20      |
| 2008           |                 |           |           |            |                 | 0       |
| 2008<br>Oct. 1 |                 | J1        |           | 5,000      | 5,000           |         |
|                | Ac              |           | Payable   | - )        | No. 201         | _       |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         |         |
|                | Supranution     |           | 2.0010    | Crouit     | Durantee        | 20<br>0 |
| 2008<br>Oct. 5 |                 | J1        |           | 2,500      | 2,500           | 0       |
| 001. 5         | '<br>Una        |           | Revenue   | 2,500      | No. 209         |         |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | _       |
|                |                 | ICI.      | Deon      | Credit     | Dalance         | 20      |
| 2008<br>Oct 2  |                 | 11        |           | 1 200      |                 | 0       |
| Oct. 2<br>31   | Adj. entry      | J1<br>J2  | 400       | 1,200      | 800             | 0       |
| 51             | • •             | laries P  |           |            | No. 212         | -       |
| Date           | Explanation     | Ref.      | Debit     | Credit     | Balance         | _       |
|                | Explanation     | IXCI.     | Debit     | Credit     | Datallee        | 20<br>0 |
| 2008           | A di onten      | 12        |           | 1 200      | 1 300           | U       |
| Oct.31         | Adj. entry      | J2        |           | 1,200      | 1,200           |         |

| LEDGE           | R                        |           |                       |            |                       |  |
|-----------------|--------------------------|-----------|-----------------------|------------|-----------------------|--|
|                 | In                       | terest P  | ayable                |            | No. 230               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            |                          |           |                       |            |                       |  |
| Oct. 31         | Adj. entry               | J2        |                       | 50         | 50                    |  |
| Data            | 1                        | ommon     | Stock<br>Debit        | Credit     | No. 311               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008<br>Oct. 1  |                          | J1        |                       | 10,000     | 10,000                |  |
|                 | Ret                      |           | Carnings              | ,          | No. 320               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            |                          |           |                       |            |                       |  |
|                 |                          |           |                       |            |                       |  |
|                 |                          | Divide    |                       | ~ "        | No. 332               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008<br>Oct. 20 |                          | J1        | 500                   |            | 500                   |  |
| 001.20          | Se                       | rvice R   |                       | I          | No. 400               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            |                          |           |                       |            |                       |  |
| Oct. 31         | J1                       |           | 10,000                | 10,000     | 10,400                |  |
| 31<br>31        | Adj. entry<br>Adj. entry | J2<br>J2  |                       | 400<br>200 | 10,400<br>10,600      |  |
| 51              | Ŭ Ŭ                      | pplies E  | xpense                | 200        | No. 611               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            |                          |           |                       |            |                       |  |
| Oct.31          | Adj. entry               | <b>J2</b> | 1,500                 |            | 1,500                 |  |
|                 | 1                        |           | Expense               | 1          | No. 711               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008<br>Oct.31  | Adj. entry               | J2        | 40                    |            | 40                    |  |
| 00.51           |                          |           | Expense               | I          | No. 722               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            | 1                        |           |                       |            |                       |  |
| Oct.31          | Adj. entry               | J2        | 50                    |            | 50                    |  |
|                 | 1                        | laries E  | xpense                |            | No. 726               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            |                          | 11        | 1.000                 |            | 4.000                 |  |
| Oct. 26<br>31   | Adj. entry               | J1<br>J2  | 4,000<br><b>1,200</b> |            | 4,000<br><b>5,200</b> |  |
|                 | · · ·                    | Rent Ex   |                       |            | No. 729               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008            |                          |           |                       |            |                       |  |
| Oct. 3          |                          | J1        | 900                   |            | 900                   |  |
|                 |                          | terest E  | _                     | G          | No. 905               |  |
| Date            | Explanation              | Ref.      | Debit                 | Credit     | Balance               |  |
| 2008<br>Oct.31  | Adj. entry               | J2        | 50                    |            | 50                    |  |

# THE ADJUSTED TRIAL BALANCE AND FINANCIAL STATEMENTS

# STUDY OBJECTIVE 7

Describe the nature and purpose of an adjusted trial balance. After all adjusting entries have been journalized and posted, another trial balance is prepared from the ledger accounts. This is called an **adjusted trial balance**. Its purpose is to **prove the equality** of the total debit balances and the total credit balances in the ledger after all adjustments have been made. The accounts in the adjusted trial balance contain all data that are needed for the preparation of financial statements.

# PREPARING THE ADJUSTED TRIAL BALANCE

The adjusted trial balance for Premier Staffing Agency, Inc., is shown in Illustration 4-21. It has been prepared from the ledger accounts in Illustration 4-20. The amounts affected by the adjusting entries are highlighted in color. Compare these amounts to those in the unadjusted trial balance in Illustration 4-3 on page 108.

# **PREPARING FINANCIAL STATEMENTS**

**Financial statements can be prepared directly from the adjusted trial balance.** Illustrations 4-22 and 4-23 show the interrelationships of data in the adjusted trial balance and the financial statements.

| PREMIER STAFFING AGENCY, INC.<br>Adjusted Trial Balance<br>October 31, 2008 |          |              |  |  |  |  |
|-----------------------------------------------------------------------------|----------|--------------|--|--|--|--|
|                                                                             | Dr.      | Cr.          |  |  |  |  |
| Cash                                                                        | \$15,200 |              |  |  |  |  |
| Accounts Receivable                                                         | 200      |              |  |  |  |  |
| Supplies                                                                    | 1,000    |              |  |  |  |  |
| Prepaid Insurance                                                           | 550      |              |  |  |  |  |
| Office Equipment                                                            | 5,000    |              |  |  |  |  |
| Accumulated Depreciation—Office Equipment                                   |          | <b>\$ 40</b> |  |  |  |  |
| Notes Payable                                                               |          | 5,000        |  |  |  |  |
| Accounts Payable                                                            |          | 2,500        |  |  |  |  |
| Unearned Revenue                                                            |          | 800          |  |  |  |  |
| Salaries Payable                                                            |          | 1,200        |  |  |  |  |
| Interest Payable                                                            |          | 50           |  |  |  |  |
| Common Stock                                                                |          | 10,000       |  |  |  |  |
| Retained Earnings                                                           |          | -0-          |  |  |  |  |
| Dividends                                                                   | 500      |              |  |  |  |  |
| Service Revenue                                                             |          | 10,600       |  |  |  |  |
| Salaries Expense                                                            | 5,200    |              |  |  |  |  |
| Supplies Expense                                                            | 1,500    |              |  |  |  |  |
| Rent Expense                                                                | 900      |              |  |  |  |  |
| Insurance Expense                                                           | 50       |              |  |  |  |  |
| Interest Expense                                                            | 50       |              |  |  |  |  |
| Depreciation Expense                                                        | 40       |              |  |  |  |  |
|                                                                             | \$30,190 | \$30,190     |  |  |  |  |

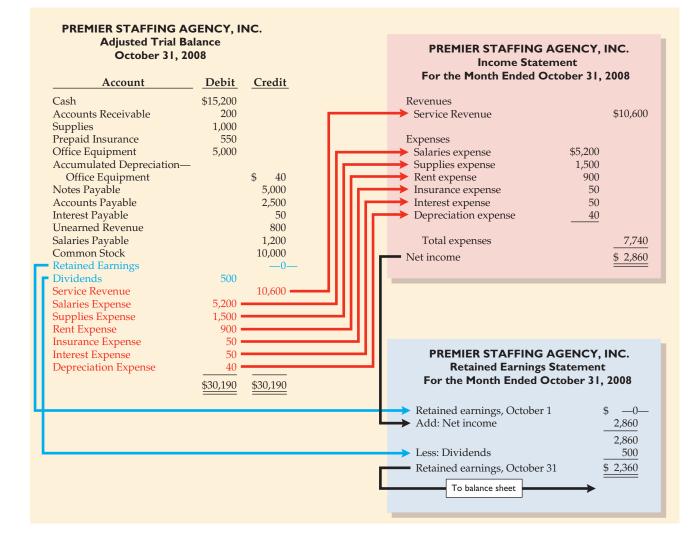
# Illustration 4-21

Adjusted trial balance

As shown in Illustration 4-22, the income statement is first prepared from the revenue and expense accounts. The retained earnings statement is derived from the retained earnings and dividends accounts and the net income (or net loss) shown in the income statement. As shown in Illustration 4-23, the balance sheet is then prepared from the asset and liability accounts, the common stock account, and the ending retained earnings balance as reported in the retained earnings statement.

#### Illustration 4-22

Preparation of the income statement and retained earnings statement from the adjusted trial balance



# BEFORE YOU GO ON...

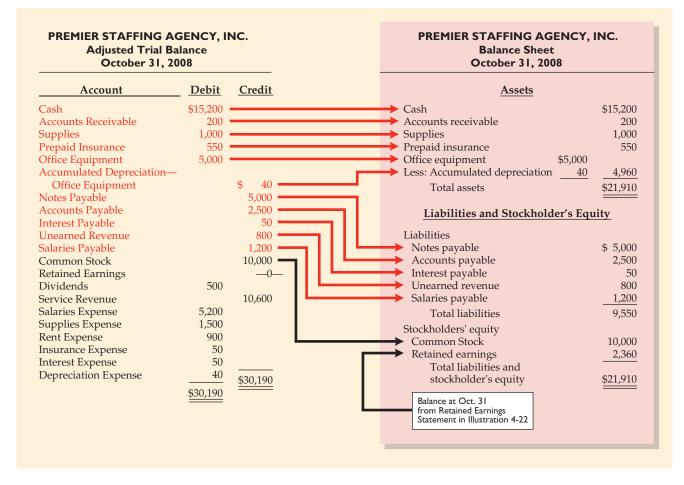
- REVIEW IT
- 1. What is the purpose of an adjusted trial balance?
- 2. How is an adjusted trial balance prepared?



### 124 CHAPTER 4 Adjusting the Accounts

#### Illustration 4-23

Preparation of the balance sheet from the adjusted trial balance



# Alternative treatment of prepaid expenses and unearned revenues

# STUDY OBJECTIVE 8

Prepare adjusting entries for the alternative treatment of prepayments. In our discussion of adjusting entries for prepaid expenses and unearned revenues, we illustrated transactions for which the initial entries were made to balance sheet accounts. In the case of prepaid expenses, the prepayment was debited to an asset account. In the case of unearned revenue, the cash received was credited to a liability account. Some businesses use an alternative treatment: (1) At the time an expense is prepaid, it is debited to an expense account. (2) At the time of a receipt for future services, it is credited to a revenue account. The circumstances that justify such entries and the different adjusting entries that may be required are described next. The alternative treatment of prepaid expenses and unearned revenues has the same effect on the financial statements as the procedures described in the chapter.

# **PREPAID EXPENSES**

Prepaid expenses become expired costs either through the passage of time (e.g., insurance) or through consumption (e.g., supplies). If, at the time of purchase, the company expects to consume the supplies before the next financial statement date, it may be more convenient initially to debit (increase) an expense account rather than an asset account.

Assume that Premier Staffing Agency, Inc., expects that all the supplies purchased on October 5 will be used before the end of the month. A debit of \$2,500 to Supplies Expense (rather than to the asset account Supplies) on October 5 will eliminate the need for an adjusting entry on October 31, if all the supplies are used. At October 31, the Supplies Expense account will show a balance of \$2,500, which is the cost of supplies used between October 5 and October 31.

But what if the company does not use all the supplies, and an inventory of \$1,000 of supplies remains on October 31? Obviously, an adjusting entry is needed. Prior to adjustment, the expense account Supplies Expense is overstated \$1,000, and the asset account Supplies is understated \$1,000. Thus the following adjusting entry is made:

| Oct. 31 | Supplies                       | 1,000 |       |
|---------|--------------------------------|-------|-------|
|         | Supplies Expense               |       | 1,000 |
|         | (To record supplies inventory) |       |       |

After posting the adjusting entry, the accounts look like Illustration 4-24.

| Supplies         | S          | Supplies Expense |                   |       |  |
|------------------|------------|------------------|-------------------|-------|--|
| 10/31 Adj. 1,000 | 10/5       | 2,500            | 10/31 <b>Adj.</b> | 1,000 |  |
|                  | 10/31 Bal. | 1,500            |                   |       |  |

After adjustment, the asset account Supplies shows a balance of \$1,000, which is equal to the cost of supplies on hand at October 31. In addition, Supplies Expense shows a balance of \$1,500, which is equal to the cost of supplies used between October 5 and October 31. If the adjusting entry is not made, expenses will be overstated and net income will be understated by \$1,000 in the October income statement. Also, both assets and stockholders' equity will be understated by \$1,000 on the October 31 balance sheet.

A comparison of the entries and accounts for advertising supplies is shown in Illustration 4-25.

| Prepayment Initially<br>Debited to Asset Account |                                             |                | Prepayment Initially<br>Debited to Expense Account<br>(alternative) |                                             |                |  |
|--------------------------------------------------|---------------------------------------------|----------------|---------------------------------------------------------------------|---------------------------------------------|----------------|--|
| Oct. 5                                           | Supplies<br>Accounts Payable                | 2,500<br>2,500 | Oct. 5                                                              | Supplies<br>Expense<br>Accounts Payable     | 2,500<br>2,500 |  |
| Oct. 31                                          | Supplies<br>Expense<br>Advertising Supplies | 1,500<br>1,500 | Oct. 31                                                             | Supplies<br>Advertising Supplies<br>Expense | 1,000<br>1,000 |  |

After posting the entries, the accounts look like Illustration 4-26.

| Supplies          |       |                   | (alternative)<br>Supplies |                   |          |                   |       |
|-------------------|-------|-------------------|---------------------------|-------------------|----------|-------------------|-------|
| 10/5              | 2,500 | 10/31 <b>Adj.</b> | 1,500                     | 10/31 <b>Adj.</b> | 1,000    |                   |       |
| 10/31 <b>Bal.</b> | 1,000 |                   |                           |                   |          |                   |       |
| Supplies Expense  |       |                   |                           | S                 | Supplies | Expense           |       |
| 10/31 <b>Adj.</b> | 1,500 |                   |                           | 10/5              | 2,500    | 10/31 <b>Adj.</b> | 1,000 |
|                   |       |                   |                           | 10/31 <b>Bal.</b> | 1,500    |                   |       |

| A =    | L | + SE   |  |
|--------|---|--------|--|
| +1,000 |   | +1,000 |  |

Illustration 4-24

Prepaid expenses accounts after adjustment

## Illustration 4-25

Adjustment approaches—a comparison

## Illustration 4-26

Comparison of accounts

Note that the account balances under each alternative are the same at October 31: Supplies \$1,000 and Supplies Expense \$1,500.

# **UNEARNED REVENUES**

Unearned revenues become earned either through the passage of time (e.g., unearned rent) or through providing the service (e.g., unearned fees). Similar to the case for prepaid expenses, a revenue account may be credited (increased) when cash is received for future services.

To illustrate, assume that Premier Staffing received \$1,200 for future services on October 2. The services were expected to be performed before October 31.<sup>3</sup> In such a case, Service Revenue is credited. If revenue is in fact earned before October 31, no adjustment is needed.

However, if at the statement date \$800 of the services has not been performed, an adjusting entry is required. The revenue account Service Revenue is overstated \$800, and the liability account Unearned Revenue is understated \$800. Thus the following adjusting entry is made:

| Oct. 31 | Service Revenue              | 800 |     |
|---------|------------------------------|-----|-----|
|         | Unearned Revenue             |     | 800 |
|         | (To record unearned revenue) |     |     |

After posting the adjusting entry, the accounts look like Illustration 4-27.

#### Illustration 4-27

Unearned revenue accounts after adjustment

|       | Unearned Revenue |                   |     | Service Revenue   |     |            |       |
|-------|------------------|-------------------|-----|-------------------|-----|------------|-------|
| ounts |                  | 10/31 <b>Adj.</b> | 800 | 10/31 <b>Adj.</b> | 800 | 10/2       | 1,200 |
|       |                  |                   |     |                   |     | 10/31 Bal. | 400   |

The liability account Unearned Revenue shows a balance of \$800. This is equal to the services that will be provided in the future. In addition, the balance in Service Revenue equals the services provided in October. If the adjusting entry is not made, both revenues and net income will be overstated by \$800 in the October income statement. Also, liabilities will be understated by \$800, and stockholders' equity will be overstated by \$800 on the October 31 balance sheet.

A comparison of the entries and accounts for service revenue earned and unearned is shown in Illustration 4-28.

| Unearned Revenue<br>Initially Credited<br>to Liability Account |       | Unearned Revenue<br>Initially Credited to<br>Revenue Account<br>(alternative) |       |  |
|----------------------------------------------------------------|-------|-------------------------------------------------------------------------------|-------|--|
| Oct. 2 Cash                                                    | 1,200 | Oct. 2 Cash                                                                   | 1,200 |  |
| Unearned Revenue                                               | 1,200 | Service Revenue                                                               | 1,200 |  |
| Oct. 31 Unearned Revenue                                       | 400   | Oct. 31 Service Revenue                                                       | 800   |  |
| Service Revenue                                                | 400   | Unearned Revenue                                                              | 800   |  |

After posting the entries, the accounts look like Illustration 4-29. Note that the balances in the accounts are the same under the two alternatives: Unearned Revenue \$800 and Service Revenue \$400.

## Illustration 4-28

Adjustment approaches—a comparison



The required adjusted balances here are Service Revenue \$400 and Unearned Revenue \$800.

| А | = | L    | + | SE   |
|---|---|------|---|------|
|   |   | +800 |   | -800 |

<sup>&</sup>lt;sup>3</sup>This example focuses only on the alternative treatment of unearned revenues. In the interest of simplicity, the entries to Service Revenue pertaining to the immediate earning of revenue (\$10,000) and the adjusting entry for accrued revenue (\$200) have been ignored.

| U                 | nearned | Revenue           |       | Un                |         | native)<br>  Revenue |       |
|-------------------|---------|-------------------|-------|-------------------|---------|----------------------|-------|
| 10/31 <b>Adj.</b> | 400     | 10/2              | 1,200 |                   |         | 10/31 <b>Adj.</b>    | 800   |
|                   |         | 10/31 <b>Bal.</b> | 800   |                   |         |                      |       |
| Service Revenue   |         |                   | S     | ervice            | Revenue |                      |       |
|                   |         | 10/31 <b>Adj.</b> | 400   | 10/31 <b>Adj.</b> | 800     | 10/2                 | 1,200 |
|                   |         |                   |       |                   |         | 10/31 <b>Bal.</b>    | 400   |

#### Illustration 4-29

Comparison of accounts

# SUMMARY OF ADDITIONAL ADJUSTMENT RELATIONSHIPS

The use of alternative adjusting entries requires additions to the summary of basic relationships presented earlier in Illustration 4-18. The additions are shown in color in Illustration 4-30.

Alternative adjusting entries **do not apply** to accrued revenues and accrued expenses because **no entries occur before these types of adjusting entries are made**. Therefore, the entries in Illustration 4-18 for these two types of adjustments remain unchanged.

## Illustration 4-30

Summary of basic relationship for prepayments

| Type of<br>Adjustment | Reason for<br>Adjustment                                                                                     | Account Balances<br>before Adjustment          | Adjusting<br>Entry              |
|-----------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------|
| 1. Prepaid expenses   | (a) Prepaid expenses initially recorded<br>in asset accounts have been used.                                 | Assets overstated<br>Expenses understated      | Dr. Expenses<br>Cr. Assets      |
|                       | (b) Prepaid expenses initially recorded<br>in expense accounts have not been<br>used.                        | Assets understated<br>Expenses overstated      | Dr. Assets<br>Cr. Expenses      |
| 2. Unearned revenues  | <ul> <li>(a) Unearned revenues initially recorded<br/>in liability accounts have been<br/>earned.</li> </ul> | Liabilities overstated<br>Revenues understated | Dr. Liabilities<br>Cr. Revenues |
|                       | (b) Unearned revenues initially recorded<br>in revenue accounts have not been<br>earned.                     | Liabilities understated<br>Revenues overstated | Dr. Revenues<br>Cr. Liabilities |

# LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about Lake Swan Resort, Juneau Country Club, Cuisine-on-the-Go, and Hospitality Purveyors at the beginning of this chapter, and answer the following questions:

- 1. What are the purposes of adjusting entries?
- 2. What do these four companies have in common relative to accrual accounting?
- 3. What other types of adjusting entries do you believe these companies might make?

# SOLUTION

- 1. Adjusting entries are necessary to make the financial statements complete and accurate. Adjusting entries are made to record revenues in the period in which they are earned and to recognize expenses in the period in which they are incurred. Therefore, adjustments ensure that the revenue recognition and matching principles are followed.
- 2. Each of the companies misstated net income by either overstating revenues (sales) or understating expenses. They failed to properly time the reporting of revenues or expenses.

- 3. (a) Accrued expenses: rent, salaries, utilities, interest, taxes.
  - (b) Accrued revenues: interest earned, rent, commissions, fees.
    - (c) Prepaid expenses: insurance, rent, supplies, advertising.
    - (d) Unearned revenues: rent, subscriptions, customer deposits, and prepayments.

🗹 ТНЕ

# Demonstration problem

Terry Thomas opens the Green Thumb Lawn Care Company to provide lawn-care services to hotels, restaurants, and theme parks on April 1. On April 30, the trial balance shows the following balances for selected accounts:

| Prepaid Insurance | \$ 3,600 |
|-------------------|----------|
| Equipment         | 28,000   |
| Notes Payable     | 20,000   |
| Unearned Revenue  | 4,200    |
| Service Revenue   | 1,800    |
|                   |          |

Analysis reveals the following additional data.

- 1. Prepaid insurance is the cost of a two-year insurance policy, effective April 1.
- 2. Depreciation on the equipment is \$500 per month.
- 3. The note payable is dated April 1. It is a six-month, 12 percent note.
- **4.** Seven customers paid for the company's six month lawn service package of \$600 beginning in April. These customers were serviced in April.

5. Lawn services provided other customers but not billed at April 30 totaled \$1,500.

#### Instructions

Prepare the adjusting entries for the month of April. Show computations.

## SOLUTION TO DEMONSTRATION PROBLEM

|                     | GENERAL JOURNAL |                                                                                                                                 |      | <b>J</b> 1 |        |
|---------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------|------|------------|--------|
| N                   | Date            | Account Titles and Explanation                                                                                                  | Ref. | Debit      | Credit |
| ments are           | Apr. 30         | Adjusting Entries<br>Insurance Expense                                                                                          |      | 150        |        |
| ons                 |                 | Prepaid Insurance<br>(To record insurance expired:                                                                              |      |            | 150    |
| tles                | 30              | $3,600 \div 24 = 150 \text{ per month}$<br>Depreciation Expense                                                                 |      | 500        |        |
| s are<br>redits are |                 | Accumulated Depreciation—Equipment<br>(To record monthly depreciation)                                                          |      |            | 500    |
| s equal<br>entry.   | 30              | Interest Expense<br>Interest Payable<br>(To record interest on notes payable:<br>$$20,000 \times 12\% \times 1/12 = $200$ )     |      | 200        | 200    |
|                     | 30              | Unearned Revenue<br>Service Revenue<br>(To record service revenue: \$600 ÷ 6 = \$100;<br>\$100 per month × 7 customers = \$700) |      | 700        | 700    |
|                     | 30              | Accounts Receivable<br>Service Revenue<br>(To record revenue for services provided)                                             |      | 1,500      | 1,500  |

#### ACTION PLAN

- Note that adjustments are being made for one month.
- Make computations carefully.
- Select account titles carefully.
- Make sure debits are made first and credits are indented.
- Check that debits equal credits for each entry.



# SUMMARY OF STUDY OBJECTIVES

**1.** *Explain the time period assumption.* The time period assumption assumes that the economic life of a business can be divided into artificial time periods.

**2.** *Explain the accrual basis of accounting.* Accrual-basis accounting means that events that change a company's financial statements are recorded in the periods in which the events occur, rather than in the periods in which the company receives or pays cash.

**3.** *Explain why adjusting entries are needed.* Adjusting entries are made at the end of an accounting period. They ensure that revenues are recorded in the period in which they are earned and that expenses are recognized in the period in which they are incurred.

**4.** *Identify the major types of adjusting entries.* The major types of adjusting entries are prepaid expenses, unearned revenues, accrued revenues, and accrued expenses.

**5.** *Prepare adjusting entries for prepayments.* Prepayments are either prepaid expenses or unearned revenues. Adjusting entries for prepayments are required at the statement date to record the portion of the prepayment that represents the expense incurred or the revenue earned in the current accounting period.

**6.** *Prepare adjusting entries for accruals.* Accruals are either accrued revenues or accrued expenses. Adjusting entries for accruals are required to record revenues earned and expenses incurred in the current accounting period that have not been recognized through daily entries.

**7.** Describe the nature and the purpose of an adjusted trial balance. An adjusted trial balance shows the balances of all accounts, including those that have been adjusted, at the end of an accounting period. Its purpose is to show the effects of all financial events that have occurred during the accounting period.

8. Prepare adjusting entries for the alternative treatment of prepayments. Prepayments may be initially debited to an expense account. Unearned revenues may be credited to a revenue account. At the end of the period, these accounts may be overstated. The adjusting entries for prepaid expenses are a debit to an asset account and a credit to an expense account. Adjusting entries for unearned revenues are a debit to a revenue account and a credit to a liability account.



# GLOSSARY

- Accrual-basis accounting Accounting basis in which transactions that change a company's financial statements are recorded in the periods in which the events occur (p. 105).
- Accrued expenses Expenses incurred but not yet paid in cash or recorded (p. 116).
- Accrued revenues Revenues earned but not yet received in cash or recorded (p. 115).
- **Adjusted trial balance** A list of accounts and their balances after all adjustments have been made (p. 122).
- **Adjusting entries** Entries made at the end of an accounting period to ensure that the revenue recognition and matching principles are followed (p. 107).
- **Book value** The difference between the cost of a depreciable asset and its related accumulated depreciation (p. 112).
- **Calendar year** An accounting period that extends from January 1 to December 31 (p. 105).
- **Cash-basis accounting** Accounting basis in which revenue is recorded when cash is received and an expense is recorded when cash is paid (p. 105).
- **Contra asset account** An account that is offset against an asset account on the balance sheet (p. 112).

- **Depreciation** The allocation of the cost of an asset to expense over its useful life in a rational and systematic manner (p. 111).
- **Fiscal year** An accounting period that is one year in length (p. 105).
- **Interim periods** Monthly or quarterly accounting time periods (p. 105).
- **Matching principle** The principle that efforts (expenses) be matched with accomplishments (revenues) (p. 106).
- **Prepaid expenses** Expenses paid in cash and recorded as assets before they are used or consumed (p. 109).
- **Revenue recognition principle** The principle that revenue be recognized in the accounting period in which it is earned (p. 106).
- **Time period assumption** An assumption that the economic life of a business can be divided into artificial time periods (p. 105).
- **Unearned revenues** Cash received and recorded as liabilities before revenue is earned (p. 112).
- **Useful life** The length of service of a productive facility (p. 111).

# Exercises

**4-1** The ledger of Taqueria San Juan includes the following accounts. Explain why each account may require adjustment.

Indicate why adjusting entries are needed. (SO 3)

- (a) Prepaid Insurance
- (b) Depreciation Expense
- (c) Unearned Revenue
- (d) Interest Payable

# 130 CHAPTER 4 Adjusting the Accounts

| Identify the major types of adjusting entries.<br>(SO 4)                                                              | <b>4-2</b> Empire Bakers accumulates the following adjustment data on December 31. Indicate (a) the type of adjustment (prepaid expense, accrued revenues, and so on) and (b) the accounts before adjustment (overstated or understated).                                                                                                                                                                           |                                                                                                                                                                                                                              |  |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                       | 1. Prepaid supplies of \$800 are used.                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                              |  |
|                                                                                                                       | 2. \$600 worth of kitchen equipment h                                                                                                                                                                                                                                                                                                                                                                               | as not been depreciated.                                                                                                                                                                                                     |  |
|                                                                                                                       | 3. Interest of \$450 has accumulated on                                                                                                                                                                                                                                                                                                                                                                             | a note payable.                                                                                                                                                                                                              |  |
|                                                                                                                       | 4. \$100 of the \$600 insurance premium                                                                                                                                                                                                                                                                                                                                                                             | n paid has been used.                                                                                                                                                                                                        |  |
| Prepare adjusting entry for<br>supplies.<br>(SO 5)                                                                    | <b>4-3</b> Professional Design Company specializes in uniform design for foodservices. Its trial balance on December 31 shows Supplies \$9,000 and Supplies Expense \$0. On December 31, there are \$2,000 of supplies on hand. Prepare the adjusting entry at December 31; and, using T accounts, enter the balances in the accounts, post the adjusting entry, and indicate the adjusted balance in each account. |                                                                                                                                                                                                                              |  |
| Prepare adjusting entries for accruals.                                                                               | <b>4-4</b> The bookkeeper for Royal Cruises entries at December 31.                                                                                                                                                                                                                                                                                                                                                 | s asks you to prepare the following accrued adjusting                                                                                                                                                                        |  |
| (SO 6)                                                                                                                | <b>1.</b> Interest on notes payable of \$500 is                                                                                                                                                                                                                                                                                                                                                                     | accrued.                                                                                                                                                                                                                     |  |
|                                                                                                                       | 2. Services provided but unbilled total                                                                                                                                                                                                                                                                                                                                                                             | \$2,520.                                                                                                                                                                                                                     |  |
|                                                                                                                       | <b>3.</b> Salaries earned by employees of \$1,                                                                                                                                                                                                                                                                                                                                                                      | 800 have not been recorded.                                                                                                                                                                                                  |  |
|                                                                                                                       | Use the following account titles: Servic<br>Interest Payable, Salaries Expense, and S                                                                                                                                                                                                                                                                                                                               | ce Revenue, Accounts Receivable, Interest Expense, Salaries Payable.                                                                                                                                                         |  |
| Analyze accounts in an<br>adjusted trial balance.<br>(SO 7)                                                           | accounts. Identify the accounts that r adjustment, indicate (a) the type of adjustment.                                                                                                                                                                                                                                                                                                                             | tering Company includes the following balance sheet<br>equire adjustment. For each account that requires<br>justing entry (prepaid expenses, unearned revenues,<br>ises) and <b>(b)</b> the related account in the adjusting |  |
|                                                                                                                       | Accounts Receivable                                                                                                                                                                                                                                                                                                                                                                                                 | Interest Payable                                                                                                                                                                                                             |  |
|                                                                                                                       | Prepaid Insurance                                                                                                                                                                                                                                                                                                                                                                                                   | Unearned Service Revenue                                                                                                                                                                                                     |  |
|                                                                                                                       | Accumulated Depreciation-                                                                                                                                                                                                                                                                                                                                                                                           | -Equipment                                                                                                                                                                                                                   |  |
| Identify types of adjustments and account relationships.                                                              | <b>4-6</b> Pho Saigon Noodles and Cateri<br>December 31.                                                                                                                                                                                                                                                                                                                                                            | ing accumulates the following adjustment data at                                                                                                                                                                             |  |
| (SO 4, 5, 6)                                                                                                          | 1. Services provided but unbilled total \$750.                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                              |  |
|                                                                                                                       | 2. Food supplies of \$300 have been used.                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                              |  |
|                                                                                                                       | 3. Utility expenses of \$300 are unpaid.                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                              |  |
|                                                                                                                       | 4. Unearned revenue of \$450 has been earned.                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                              |  |
|                                                                                                                       | 5. Salaries of \$1,000 are unpaid.                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                              |  |
|                                                                                                                       | 6. Prepaid insurance totaling \$445 has expired.                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                              |  |
|                                                                                                                       | Instructions                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                              |  |
|                                                                                                                       | For each of the above items, indicate the                                                                                                                                                                                                                                                                                                                                                                           | he following.                                                                                                                                                                                                                |  |
|                                                                                                                       | (a) The type of adjustment (prepaid expense, unearned revenue, accrued revenue, or accrued expense).                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                              |  |
|                                                                                                                       | (b) The accounts before adjustment (o                                                                                                                                                                                                                                                                                                                                                                               | overstatement or understatement).                                                                                                                                                                                            |  |
| Prepare adjusting entries, post,<br>and prepare adjusted trial bal-<br>ance and financial statements.<br>[SO 5, 6, 7] | <b>4-7</b> Spring River Resort Inc. opened for Its trial balance before adjustment on A                                                                                                                                                                                                                                                                                                                             | or business on June 1 with eight air-conditioned units.<br>ugust 31 is as follows.                                                                                                                                           |  |

# SPRING RIVER RESORT INC. Trial Balance August 31, 2008

| Account<br>Number |                   | Debit    | Credit |
|-------------------|-------------------|----------|--------|
| 101               | Cash              | \$19,600 |        |
| 126               | Supplies          | 3,300    |        |
| 130               | Prepaid Insurance | 6,000    |        |

#### Exercises 131

| Land              | 25,000                                                                                                                                                                                 |                                                                                                                                                                                                                                            |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cottages          | 125,000                                                                                                                                                                                |                                                                                                                                                                                                                                            |
| Furniture         | 26,000                                                                                                                                                                                 |                                                                                                                                                                                                                                            |
| Accounts Payable  |                                                                                                                                                                                        | \$ 6,500                                                                                                                                                                                                                                   |
| Unearned Rent     |                                                                                                                                                                                        | 7,400                                                                                                                                                                                                                                      |
| Mortgage Payable  |                                                                                                                                                                                        | 80,000                                                                                                                                                                                                                                     |
| Common Stock      |                                                                                                                                                                                        | 100,000                                                                                                                                                                                                                                    |
| Retained Earnings |                                                                                                                                                                                        | -0-                                                                                                                                                                                                                                        |
| Dividends         | 5,000                                                                                                                                                                                  |                                                                                                                                                                                                                                            |
| Rent Revenue      |                                                                                                                                                                                        | 80,000                                                                                                                                                                                                                                     |
| Repair Expense    | 3,600                                                                                                                                                                                  |                                                                                                                                                                                                                                            |
| Salaries Expense  | 51,000                                                                                                                                                                                 |                                                                                                                                                                                                                                            |
| Utilities Expense | 9,400                                                                                                                                                                                  |                                                                                                                                                                                                                                            |
| -                 | \$273,900                                                                                                                                                                              | \$273,900                                                                                                                                                                                                                                  |
|                   | Cottages<br>Furniture<br>Accounts Payable<br>Unearned Rent<br>Mortgage Payable<br>Common Stock<br>Retained Earnings<br>Dividends<br>Rent Revenue<br>Repair Expense<br>Salaries Expense | Cottages125,000Furniture26,000Accounts Payable26,000Unearned RentMortgage PayableCommon StockCommon StockRetained EarningsDividendsDividends5,000Rent RevenueRepair ExpenseRepair Expense3,600Salaries Expense51,000Utilities Expense9,400 |

In addition to those accounts listed on the trial balance, the chart of accounts for Spring River Resort also contains the following accounts and account numbers: No. 112 Accounts Receivable, No 144 Accumulated Depreciation—Cottages, No. 150 Accumulated Depreciation— Furniture, No. 212 Salaries Payable, No. 230 Interest Payable, No. 620 Depreciation Expense— Cottages, No. 621 Depreciation Expense—Furniture, No. 631 Supplies Expense, No. 718 Interest Expense, and No. 722 Insurance Expense.

Other data:

- **1.** Insurance expires at the rate of \$400 per month.
- 2. A count of August 31 shows \$900 of supplies on hand.
- 3. Annual depreciation is \$3,600 on cottages and \$2,400 on furniture.
- 4. Unearned rent of \$4,100 was earned prior to August 31.
- 5. Salaries of \$400 were unpaid at August 31.
- 6. Rentals of \$800 were due from tenants at August 31. (Use Accounts Receivable.)
- 7. The mortgage interest rate is 9 percent per year. (The mortgage was taken out on August 1.)

#### Instructions

Journalize the adjusting entries on August 31 for the three-month period June 1–August 31.

**4-8** Jan Spears opened her decorating company on January 1, 2008. During the first month of operations, the following transactions occurred:

- **1.** Performed services for country club clients. On January 31, \$2,300 of such services was earned but not yet billed to the clubs.
- 2. Utility expenses incurred but not paid prior to January 31 totaled \$650.
- **3.** Purchased decorating supplies on January 1 for \$50,000, paying \$10,000 in cash and signing a \$40,000, three-year note payable. Interest is \$300 per month.
- 4. Purchased a one-year fire insurance policy on January 1 for \$6,000.
- **5.** Purchased a computer at \$2,100. On January 31, determined that \$200 of the computer had been depreciated.

#### Instructions

Prepare the adjusting entries on January 31. Account titles are: Accumulated Depreciation— Furniture, Depreciation Expense, Service Revenue, Accounts Receivable, Insurance Expense, Interest Expense, Interest Payable, Prepaid Insurance, Supplies, Supplies Expense, Utilities Expense, and Utilities Payable.

**4-9** Michael Davidson started his own hospitality consulting firm, Star Company, on June 1, 2008. Star Company performs feasibility studies to determine if restaurants should be opened at certain locations. The trial balance at June 30 is as follows.

Prepare adjusting entries. (SO 5, 6, 7)

Prepare adjusting entries, post to ledger accounts, and prepare adjusted trial balance. (SO 5, 6, 7)

| Trial Balance     |                          |          |          |  |
|-------------------|--------------------------|----------|----------|--|
|                   | June 30, 2008            |          |          |  |
| Account<br>Number |                          | Debit    | Credit   |  |
| 101               | Cash                     | \$ 7,700 |          |  |
| 110               | Accounts Receivable      | 4,000    |          |  |
| 120               | Prepaid Insurance        | 2,400    |          |  |
| 130               | Supplies                 | 1,500    |          |  |
| 135               | Office Equipment         | 11,000   |          |  |
| 200               | Accounts Payable         |          | \$ 3,500 |  |
| 230               | Unearned Service Revenue |          | 3,000    |  |
| 311               | Common Stock             |          | 19,100   |  |
| 320               | Retained Earnings        |          | -0-      |  |
| 400               | Service Revenue          |          | 6,000    |  |
| 510               | Salaries Expense         | 4,000    |          |  |
| 520               | Rent Expense             | 1,000    |          |  |
|                   |                          | \$31,600 | \$31,600 |  |

**STAR COMPANY** 

In addition to those accounts listed on the trial balance, the chart of accounts for Star Company also contains the following accounts and account numbers: No. 136 Accumulated Depreciation— Office Equipment, No. 210 Utilities Payable, No. 220 Salaries Payable, No. 530 Depreciation Expense, No. 540 Insurance Expense, No. 550 Utilities Expense, and No. 560 Supplies Expense. Other data:

- 1. \$500 of supplies has been used during the month.
- 2. A utility bill for \$200 has not been recorded and will not be paid until next month.
- 3. The insurance policy is for two years.
- 4. \$1,000 of unearned service revenue has been earned at the end of the month.
- 5. Salaries of \$600 are accrued at June 30.
- 6. The office equipment has a five-year life with no salvage value. It is being depreciated at \$200 per month for 60 months.
- 7. Invoices representing \$1,000 of services performed during the month have not been recorded as of June 30.

#### Instructions

Account

- (a) Prepare the adjusting entries for the month of June. Use J3 as the page number for your journal.
- (b) Post the adjusting entries to the ledger accounts. Enter the totals from the trial balance as beginning account balances, and place a check mark in the posting reference column.
- (c) Prepare an adjusted trial balance at June 30, 2008.

**4-10** The Thayer Motel, Inc., opened for business on May 1, 2008. Its trial balance before adjustment on May 31 is as follows.

In addition to those accounts listed on the trial balance, the chart of accounts for Thayer Mo-

and prepare adjusted trial balance and financial statements. (SO 5, 6, 7)

Prepare adjusting entries, post,

# THAYER MOTEL, INC. Trial Balance May 31, 2008

| Number |                   | Debit    | Credit |
|--------|-------------------|----------|--------|
| 101    | Cash              | \$ 2,500 |        |
| 126    | Supplies          | 1,900    |        |
| 130    | Prepaid Insurance | 2,400    |        |
| 140    | Land              | 15,000   |        |

### Exercises 133

| 141 | Lodge               | 70,000    |           |
|-----|---------------------|-----------|-----------|
| 149 | Furniture           | 16,800    |           |
| 201 | Accounts Payable    |           | \$ 5,300  |
| 208 | Unearned Rent       |           | 4,600     |
| 275 | Mortgage Payable    |           | 35,000    |
| 311 | Common Stock        |           | 60,000    |
| 332 | Dividends           | 1,000     |           |
| 429 | Rent Revenue        |           | 9,200     |
| 610 | Advertising Expense | 500       |           |
| 726 | Salaries Expense    | 3,000     |           |
| 732 | Utilities Expense   | 1,000     |           |
|     |                     | \$114,100 | \$114,100 |
|     |                     |           |           |

tel also contains the following accounts and account numbers: No. 142 Accumulated Depreciation—Lodge, No. 150 Accumulated Depreciation—Furniture, No. 212 Salary Payable, No. 230 Interest Payable, No. 320 Retained Earnings, No. 619 Depreciation Expense—Lodge, No. 621 Depreciation Expense—Furniture, No. 631 Supplies Expense, No. 718 Interest Expense, and No. 722 Insurance Expense.

Other data:

- 1. Insurance expires at the rate of \$200 per month.
- 2. A count of supplies shows \$900 of unused supplies on May 31.
- 3. Annual depreciation is \$2,400 on the lodge and \$3,000 on furniture.
- 4. The mortgage interest rate is 12%. (The mortgage was taken out on May 1.)
- 5. Unearned rent of \$2,500 has been earned.
- 6. Salaries of \$800 are accrued and unpaid at May 31.

#### Instructions

- (a) Journalize the adjusting entries on May 31.
- (b) Prepare a ledger using the three-column form of account. Enter the trial balance amounts, and post the adjusting enteries. (Use J1 as the posting reference.)
- (c) Prepare an adjusted trial balance on May 31.
- (d) Prepare an income statement and a retained earnings statement for the month of May and a balance sheet at May 31.

**4-11** The financial statements of **PepsiCo** are presented in Appendix A at the end of this textbook.

#### Instructions

- (a) Using the consolidated financial statements and related information, identify items that may result in adjusting entries for prepayments.
- (b) Using the consolidated financial statements and related information, identify items that may result in adjusting entries for accruals.
- (c) Using the Selected Financial Data and Five-Year Summary, what has been the trend since 2004 for net income?

**4-12** A wealth of accounting-related information is available via the Internet. For example, the Rutgers Accounting Web offers access to a great variety of sources.

#### Address: accounting.rutgers.edu

*Steps:* Click on Accounting Resources. (*Note:* Once on this page, you may have to click on the text only box to access the available information.)

#### Instructions

- (a) List the categories of information available through the Accounting Resources page.
- (b) Select any one of these categories, and briefly describe the types of information available.



### ETHICS CASE

**4-13** Die Hard Company is a pest-control company providing services to hotels and clubs. Its sales declined greatly this year due to the passage of legislation outlawing the sale of several of Die Hard's chemical pesticides. In the coming year, Die Hard will have environmentally safe and competitive chemicals to replace these discontinued products. Sales in the next year are expected to greatly exceed any prior year's. The decline in sales and profits appears to be a one-year aberration. But even so, the company president fears a large dip in the current year's profits. He believes that such a dip could cause a significant drop in the market price of Die Hard's stock and make the company a takeover target.

To avoid this possibility, the company president calls in Becky Freeman, controller, to discuss this period's year-end adjusting entries. He urges her to accrue every possible revenue and to defer as many expenses as possible. He says to Becky, "We need the revenues this year, and next year can easily absorb expenses deferred from this year. We can't let our stock price be hammered down!" Becky didn't get around to recording the adjusting entries until January 17, but she dated the entries December 31 as if they were recorded then. Becky also made every effort to comply with the president's request.

#### Instructions

- (a) Who are the stakeholders in this situation?
- (b) What are the ethical considerations of (1) the president's request and (2) Becky's dating the adjusting entries December 31?
- (c) Can Becky accrue revenues and defer expenses and still be ethical?