## chapter

## ACCRUAL ACCOUNTING CONCEPTS



## study objectives

After studying this chapter, you should be able to:
1 Explain the revenue recognition principle and the expense recognition principle.
2 Differentiate between the cash basis and the accrual basis of accounting.
3 Explain why adjusting entries are needed, and identify the major types of adjusting entries.
4 Prepare adjusting entries for deferrals.
5 Prepare adjusting entries for accruals.
6 Describe the nature and purpose of the adjusted trial balance.
7 Explain the purpose of closing entries.
8 Describe the required steps in the accounting cycle.
9 Understand the causes of differences between net income and cash provided by operating activities.

The accuracy of the financial reporting system depends on answers to a few fundamental questions. At what point has revenue been earned? At what point is the earnings process complete? When have expenses really been incurred?

During the 1990s, the stock prices of dot-com companies boomed. Many dot-com companies earned most of their revenue from selling advertising space on their websites. To boost reported revenue, some dot-coms began swapping website ad space. Company

## WHAT WAS <br> YOUR PROFIT?

 til later years.most common abuses of financial accounting. Xerox admitted reporting billions of dollars of lease revenue in periods earlier than it should have been reported. And WorldCom stunned the financial markets with its admission that it had boosted net income by billions of dollars by delaying the recognition of expenses un-

Unfortunately, revelations such as these have become all too common in the corporate world. It is no wonder that the U.S. Trust Survey of affluent Americans reported that 85 percent of its respondents believed that there should be tighter regulation of financial disclosures, and 66 percent said they did not trust the management of publicly traded companies.

Why did so many companies violate basic financial reporting rules and sound ethics? Many speculate that as stock prices climbed, executives were under increasing pressure to meet higher and higher earnings expectations. If actual results weren't as good as hoped for, some gave in to temptation and "adjusted" their numbers to meet market expectations.

## INSIDE CHAPTER 4

- Cooking the Books? (p. 166)
- Reporting Revenue Accurately (p. 167)
- Turning Gift Cards into Revenue (p. 174)
- Cashing In on Accrual Accounting (p. 178)


## preview of chapter 4

As indicated in the Feature Story, making adjustments is necessary to avoid misstatement of revenues and expenses such as those at Xerox and WorldCom. In this chapter, we introduce you to the accrual accounting concepts that make such adjustments possible.

The organization and content of the chapter are as follows.

study objective
Explain the revenue recognition principle and the expense recognition principle.

Helpful Hint An accounting time period that is one year long is called a fiscal year.


## Timing Issues

Most businesses need immediate feedback about how well they are doing. For example, management usually wants monthly reports on financial results, most large corporations are required to present quarterly and annual financial statements to stockholders, and the Internal Revenue Service requires all businesses to file annual tax returns. Accounting divides the economic life of a business into artificial time periods. As indicated in Chapter 2, this is the periodicity assumption. Accounting time periods are generally a month, a quarter, or a year.

Many business transactions affect more than one of these arbitrary time periods. For example, a new building purchased by Citigroup or a new airplane purchased by Delta Air Lines will be used for many years. It doesn't make sense to expense the full cost of the building or the airplane at the time of purchase because each will be used for many subsequent periods. Instead, we determine the impact of each transaction on specific accounting periods.

Determining the amount of revenues and expenses to report in a given accounting period can be difficult. Proper reporting requires an understanding of the nature of the company's business. Two principles are used as guidelines: the revenue recognition principle and the expense recognition principle.

## THE REVENUE RECOGNITION PRINCIPLE

The revenue recognition principle requires that companies recognize revenue in the accounting period in which it is earned. In a service company, revenue is considered to be earned at the time the service is performed. To illustrate, assume Conrad Dry Cleaners cleans clothing on June 30, but customers do not claim and pay for their clothes until the first week of July. Under the revenue recognition principle, Conrad earns revenue in June when it performs the service, not in July when it receives the cash. At June 30, Conrad would report a receivable on its balance sheet and revenue in its income statement for the service performed. The journal entries for June and July would be as follows.

| June | Accounts Receivable <br> Service Revenue | xxx | xxx |
| :--- | :---: | :---: | :---: |
| July | Cash <br> Accounts Receivable | xxx | xxx |


| DECISION CHEGKPOINTS | INFO NEEDED FOR DECISION | TOOL TO USE FOR DEGISION | HOW TO EVALUATE RESULTS |
| :---: | :---: | :---: | :---: |
| At what point should the company record revenue? | Need to understand the nature of the company's business | Record revenue when earned. A service business earns revenue when it performs a service. | Recognizing revenue too early overstates current period revenue; recognizing it too late understates current period revenue. |

## THE EXPENSE RECOGNITION PRINCIPLE

In recognizing expenses, a simple rule is followed: "Let the expenses follow the revenues." Thus, expense recognition is tied to revenue recognition. Applied to the preceding example, this means that the salary expense Conrad incurred in performing the cleaning service on June 30 should be reported in the same period in which it recognizes the service revenue. The critical issue in expense recognition is determining when the expense makes its contribution to revenue. This may or may not be the same period in which the expense is paid. If Conrad does not pay the salary incurred on June 30 until July, it would report salaries payable on its June 30 balance sheet.

The practice of expense recognition is referred to as the expense recognition principle (often referred to as the matching principle). It dictates that efforts (expenses) be matched with results (revenues). Illustration 4-1 shows these relationships.


Illustration 4-1 GAAP relationships in revenue and expense recognition
DECISION GHECKPOINTS INFO NEEDED FOR DECISIO

At what point should the company record expenses?

Need to understand the nature of the company's business

## TOOL TO USE FOR DEGISION HOW TO EVALUATE RESULTS

Expenses should "follow" revenues-that is, match the effort (expense) with the result (revenue).

Recognizing expenses too early overstates current period expense; recognizing them too late understates current period expense.


## Ethics Insight

## Cooking the Books?

Allegations of abuse of the revenue recognition principle have become all too common in recent years. For example, it was alleged that Krispy Kreme sometimes doubled the number of doughnuts shipped to wholesale customers at the end of a quarter to boost quarterly results. The customers shipped the unsold doughnuts back after the beginning of the next quarter for a refund. Conversely, Computer Associates International was accused of backdating sales-that is, saying that a sale that occurred at the beginning of one quarter occurred at the end of the previous quarter in order to achieve the previous quarter's sales targets.


What motivates sales executives and finance and accounting executives to participate in activities that result in inaccurate reporting of revenues? (See page 223.)

## ACCRUAL VERSUS CASH BASIS OF ACCOUNTING

Accrual-basis accounting means that transactions that change a company's financial statements are recorded in the periods in which the events occur, even if cash was not exchanged. For example, using the accrual basis means that companies recognize revenues when earned (the revenue recognition principle), even if cash was not received. Likewise, under the accrual basis, companies recognize expenses when incurred (the expense recognition principle), even if cash was not paid.

An alternative to the accrual basis is the cash basis. Under cash-basis accounting, companies record revenue only when cash is received. They record expense only when cash is paid. The cash basis of accounting is prohibited under generally accepted accounting principles. Why? Because it does not record revenue when earned, thus violating the revenue recognition principle. Similarly, it does not record expenses when incurred, which violates the expense recognition principle.

Illustration 4-2 compares accrual-based numbers and cash-based numbers. Suppose that Fresh Colors paints a large building in 2011. In 2011, it incurs and pays total expenses (salaries and paint costs) of $\$ 50,000$. It bills the customer $\$ 80,000$, but does not receive payment until 2012. On an accrual basis, Fresh Colors reports $\$ 80,000$ of revenue during 2011 because that is when it is earned. The company matches expenses of $\$ 50,000$ to the $\$ 80,000$ of revenue. Thus, 2011 net income is $\$ 30,000(\$ 80,000-\$ 50,000)$. The $\$ 30,000$ of net income reported for 2011 indicates the profitability of Fresh Colors' efforts during that period.

If, instead, Fresh Colors were to use cash-basis accounting, it would report $\$ 50,000$ of expenses in 2011 and $\$ 80,000$ of revenues during 2012. As shown in Illustration 4-2, it would report a loss of $\$ 50,000$ in 2011 and would report net income of $\$ 80,000$ in 2012. Clearly, the cash-basis measures are misleading because the financial performance of the company would be misstated for both 2011 and 2012.

Illustration 4-2 Accrualversus cash-basis accounting

|  | 2011 | 2012 |
| :---: | :---: | :---: |
| Activity | Purchased paint, painted building, paid employees | Received payment for work done in 2011 |
| Accrual basis | Revenue $\$ 80,000$ <br> Expense 50,000 <br> Net income $\$ 30,000$ | Revenue $\$$ 0 <br> Expense  0 <br> Net income $\$$ 0 |
| Cash basis | Revenue <br> Expense $\$$0 <br> Net loss <br> $\underline{50,000}$  <br> $(50,000)$  | Revenue <br> Expense $\$ 80,000$ <br> Net income $\quad$0 <br> 80,000 |



## Investor Insight

## Reporting Revenue Accurately

Until recently, electronics manufacturer Apple was required to spread the revenues earned from iPhone sales over the two-year period following the sale of the phone. Accounting standards required this because it was argued that Apple was obligated to provide software updates after the phone was sold. Therefore, since Apple had service obligations after the initial date of sale, it was forced to spread the revenue over a two-year period. However, since the company received full payment upfront, the cash flows from iPhones significantly exceeded the revenue reported from iPhone sales in each accounting period. It also meant that the rapid growth of iPhone sales was not fully reflected in the revenue amounts reported in Apple's income statement. A new accounting standard now enables Apple to report nearly all of its iPhone revenue at the point of sale. It was estimated that 2009 revenues would have been about $17 \%$ higher, and earnings per share would have been almost $50 \%$ higher, under the new rule.


In the past, why was it argued that Apple should spread the recognition of iPhone revenue over a two-year period, rather than recording it upfront? (See page 223.)

## 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, companies make adjusting entries. Adjusting entries ensure that the revenue recognition and expense recognition principles are followed.

Adjusting entries are necessary because the trial balance-the first pulling together of the transaction data-may not contain up-to-date and complete data. This is true for several reasons:

1. Some events are not recorded daily because it is not efficient to do so. Examples are the use of supplies and the earning of wages by employees.


## study objective 5

Explain why adjusting entries are needed, and identify the major types of adjusting entries.

International Note Internal controls are a system of checks and balances designed to detect and prevent fraud and errors. The Sarbanes-Oxley Act requires U.S. companies to enhance their systems of internal control. However, many foreign companies do not have to meet strict internal control requirements. Some U.S. companies believe that this gives foreign firms an unfair advantage because developing and maintaining internal controls can be very expensive.

## Illustration 4-3

Categories of adjusting entries
2. Some costs are not recorded during the accounting period because these costs expire with the passage of time rather than as a result of recurring daily transactions. Examples are charges related to the use of buildings and equipment, 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 a company prepares financial statements. The company analyzes each account in the trial balance to determine whether it is complete and up to date for financial statement purposes. Every adjusting entry will include one income statement account and one balance sheet account.

## TYPES OF ADJUSTING ENTRIES

Adjusting entries are classified as either deferrals or accruals. As Illustration 4-3 shows, each of these classes has two subcategories.

## Deferrals:

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.

Subsequent sections give examples of each type of adjustment. Each example is based on the October 31 trial balance of Sierra Corporation, from Chapter 3, reproduced in Illustration 4-4. Note that Retained Earnings, with a zero balance, has been added to this trial balance. We will explain its use later.


SIERRA CORPORATION
Trial Balance
October 31, 2012

|  | Debit | Credit |
| :--- | ---: | ---: |
| Cash | $\$ 15,200$ |  |
| Supplies | 2,500 |  |
| Prepaid Insurance 600 <br> Equipment  | 5,000 |  |
| Notes Payable |  | $\$ 5,000$ |
| Accounts Payable |  | 2,500 |
| Unearned Service Revenue |  | 10,000 |
| Common Stock <br> Retained Earnings <br> Dividends | 500 | 0 |
| Service Revenue <br> Salaries Expense <br> Rent Expense | 4,000 | 10,000 |
|  | $\underline{928,700}$ | $\underline{\$ 28,700}$ |

We assume that Sierra Corporation uses an accounting period of one month. Thus, monthly adjusting entries are made. The entries are dated October 31.

## ADJUSTING ENTRIES FOR DEFERRALS

To defer means to postpone or delay. Deferrals are costs or revenues that are recognized at a date later than the point when cash was originally exchanged. Companies make adjusting entries for deferrals to record the portion of the deferred item that was incurred as an expense or earned as revenue during the current accounting period. The two types of deferrals are prepaid expenses and unearned revenues.

## Prepaid Expenses

Companies record payments of expenses that will benefit more than one accounting period as assets called prepaid expenses or prepayments. When expenses are prepaid, an asset account is increased (debited) to show the service or benefit that the company will receive in the future. Examples of common prepayments are insurance, supplies, advertising, and rent. In addition, companies make prepayments when they purchase buildings and equipment.

Prepaid expenses are costs that expire either with the passage of time (e.g., rent and insurance) or through use (e.g., supplies). The expiration of these costs does not require daily entries, which would be impractical and unnecessary. Accordingly, companies postpone the recognition of such cost expirations until they prepare financial statements. At each statement date, they make adjusting entries to record the expenses applicable to the current accounting period and to show the remaining amounts in the asset accounts.

Prior to adjustment, assets are overstated and expenses are understated. Therefore, as shown in Illustration 4-5, an adjusting entry for prepaid expenses results in an increase (a debit) to an expense account and a decrease (a credit) to an asset account.


Let's look in more detail at some specific types of prepaid expenses, beginning with supplies.

SUPPLIES. The purchase of supplies, such as paper and envelopes, results in an increase (a debit) to an asset account. During the accounting period, the company uses supplies. Rather than record supplies expense as the supplies are used, companies recognize supplies expense at the end of the accounting period. At the end of the accounting period, the company counts the remaining supplies. The difference between the unadjusted balance in the Supplies (asset) account and the actual cost of supplies on hand represents the supplies used (an expense) for that period.

Recall from Chapter 3 that Sierra Corporation purchased supplies costing $\$ 2,500$ on October 5 . Sierra recorded the purchase by increasing (debiting) 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 of supplies used is

Prepare adjusting entries for deferrals.

Illustration 4-5 Adjusting entries for prepaid expenses

## Supplies

Oct. 5


Supplies purchased; record asset


Oct. 31 Supplies used; record supplies expense
$\$ 1,500(\$ 2,500-\$ 1,000)$. This use of supplies decreases an asset, Supplies. It also decreases stockholders' equity by increasing an expense account, Supplies Expense. This is shown in Illustration 4-6.

Illustration 4-6
Adjustment for supplies



[^0]After adjustment, the asset account Supplies shows a balance of $\$ 1,000$, which is equal to 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 Sierra does not make the adjusting entry, October expenses will be understated and net income overstated by $\$ 1,500$. Moreover, both assets and stockholders' equity will be overstated by $\$ 1,500$ on the October 31 balance sheet.

INSURANCE. Companies purchase insurance to protect themselves from losses due to fire, theft, and unforeseen events. Insurance must be paid in advance, often for more than one year. The cost of insurance (premiums) paid in advance is recorded as an increase (debit) in the asset account Prepaid Insurance. At the financial statement date, companies increase (debit) Insurance Expense and decrease (credit) Prepaid Insurance for the cost of insurance that has expired during the period.

On October 4, Sierra Corporation paid $\$ 600$ for a one-year fire insurance policy. Coverage began on October 1. Sierra recorded the payment by increasing (debiting) Prepaid Insurance. This account shows a balance of $\$ 600$ in the October 31 trial balance. Insurance of $\$ 50(\$ 600 \div 12)$ expires each month. The expiration of prepaid insurance decreases an asset, Prepaid Insurance. It also decreases stockholders' equity by increasing an expense account, Insurance Expense.

As shown in Illustration 4-7, the asset Prepaid Insurance shows a balance of $\$ 550$, which represents the unexpired cost for the remaining 11 months of coverage. At the same time, the balance in Insurance Expense equals the insurance cost that expired in October. If Sierra does not make this adjustment, October expenses are understated by $\$ 50$ and net income is overstated by $\$ 50$. Moreover,
as the accounting equation shows, both assets and stockholders' equity will be overstated by $\$ 50$ on the October 31 balance sheet.


DEPRECIATION. A company typically owns a variety of assets that have long lives, such as buildings, equipment, and motor vehicles. The period of service is referred to as the usefull life of the asset. Because a building is expected to provide service for many years, it is recorded as an asset, rather than an expense, on the date it is acquired. As explained in chapter 2, companies record such assets at cost, as required by the cost principle. To follow the expense recognition principle, companies allocate a portion of this cost as an expense during each period of the asset's useful life. Depreciation is the process of allocating the cost of an asset to expense over its useful life.

Need for adjustment. The acquisition of long-lived assets is essentially a long-term prepayment for the use of an asset. An adjusting entry for depreciation is needed to recognize the cost that has been used (an expense) during the period and to report the unused cost (an asset) at the end of the period. One very important point to understand: Depreciation is an allocation concept, not a valuation concept. That is, depreciation allocates an asset's cost to the periods in which it is used. Depreciation does not attempt to report the actual change in the value of the asset.

For Sierra Corporation, assume that depreciation on the equipment is $\$ 480$ a year, or $\$ 40$ per month. As shown in Illustration 4-8 (page 172), rather than decrease (credit) the asset account directly, Sierra instead credits Accumulated De-preciation-Equipment. Accumulated Depreciation is called a contra asset account. Such an account is offset against an asset account on the balance sheet. Thus, the Accumulated Depreciation-Equipment account offsets the asset Equipment. This account keeps track of the total amount of depreciation expense taken over the life of the asset. To keep the accounting equation in balance, Sierra decreases stockholders' equity by increasing an expense account, Depreciation Expense.

The balance in the Accumulated Depreciation-Equipment account will increase $\$ 40$ each month, and the balance in Equipment remains $\$ 5,000$.

Illustration 4-7
Adjustment for insurance


Equipment purchased; record asset

| Equipment |  |  |  |
| :---: | :---: | :---: | :---: |
| Oct | Nov | Dec | Jan |
| $\$ 40$ | $\$ 40$ | $\$ 40$ | $\$ 40$ |
| Feb | March | April | May |
| $\$ 40$ | $\$ 40$ | $\$ 40$ | $\$ 40$ |
| June | July | Aug | Sept |
| $\$ 40$ | $\$ 40$ | $\$ 40$ | $\$ 40$ |
| Depreciation $=\$ 480 /$ year |  |  |  |

Oct. 31
Depreciation recognized; record depreciation expense

Illustration 4-8
Adjustment for depreciation


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

Illustration 4-9 Balance sheet presentation of accumulated depreciation

Alternative Terminology Book value is also referred to as carrying value.

Statement presentation. As noted above, Accumulated DepreciationEquipment is a contra asset account. It is offset against Equipment on the balance sheet. The normal balance of a contra asset account is a credit. A theoretical alternative to using a contra asset account would be to decrease (credit) the asset account by the amount of depreciation each period. But using the contra account is preferable for a simple reason: It discloses both the original cost of the equipment and the total cost that has expired to date. Thus, in the balance sheet, Sierra deducts Accumulated Depreciation-Equipment from the related asset account, as shown in Illustration 4-9.

| Equipment | $\$, 000$ <br> Less: Accumulated depreciation—equipment |
| :--- | ---: |
| $\mathbf{\$ 4 , 9 6 0}$ |  |

Book value is the difference between the cost of any depreciable asset and its related accumulated depreciation. In Illustration 4-9, the book value of the equipment at the balance sheet date is $\$ 4,960$. The book value and the fair value of the asset are generally two different values. As noted earlier, the purpose of depreciation is not valuation but a means of cost allocation.

Depreciation expense identifies the portion of an asset's cost that expired during the period (in this case, in October). The accounting equation shows that without this adjusting entry, total assets, total stockholders' equity, and net income are overstated by $\$ 40$ and depreciation expense is understated by $\$ 40$.

Illustration 4-10 summarizes the accounting for prepaid expenses.

## Unearned Revenues

Companies record cash received before revenue is earned by increasing (crediting) a liability account called unearned revenues. Items like rent, magazine subscriptions,

| ACCOUNTING FOR PREPAID EXPENSES |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Reason for <br> Adjustment | Accounts Before <br> Adjustment | Adjusting <br> Entry |
| Insurance, supplies, <br> advertising, rent, <br> depreciation | Prepaid expenses <br> recorded in asset <br> accounts have <br> been used. | Assets <br> overstated. <br> Expenses <br> understated. | Dr. Expenses |

and customer deposits for future service may result in unearned revenues. Airlines such as United, American, and Delta, for instance, treat receipts from the sale of tickets as unearned revenue until the flight service is provided.

Unearned revenues are the opposite of prepaid expenses. Indeed, unearned revenue on the books of one company is likely to be a prepaid expense 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 a company receives payment for services to be provided in a future accounting period, it increases (credits) an unearned revenue (a liability) account to recognize the liability that exists. The company subsequently earns revenues by providing service. During the accounting period it is not practical to make daily entries as the company earns the revenue. Instead, we delay recognition of earned revenue until the adjustment process. Then the company makes an adjusting entry to record the revenue earned during the period and to show the liability that remains at the end of the accounting period. Typically, prior to adjustment, liabilities are overstated and revenues are understated. Therefore, as shown in Illustration 4-11, the adjusting entry for unearned revenues results in a decrease (a debit) to a liability account and an increase (a credit) to a revenue account.


Sierra Corporation received \$1,200 on October 2 from R. Knox for guide services for multi-day trips expected to be completed by December 31. Sierra credited the payment to Unearned Service Revenue, and this liability account shows a balance of $\$ 1,200$ in the October 31 trial balance. From an evaluation of the service Sierra performed for Knox during October, the company determines that it has earned $\$ 400$ in October. The liability (Unearned Service Revenue) is therefore decreased, and stockholders' equity (Service Revenue) is increased.

As shown in Illustration 4-12 (page 174), the liability Unearned Service Revenue now shows a balance of $\$ 800$. That amount represents the remaining guide services expected to be performed in the future. At the same time, Service Revenue shows total revenue earned in October of $\$ 10,400$. Without this adjustment, revenues and net income are understated by $\$ 400$ in the income statement.

Illustration 4-10
Accounting for prepaid expenses


Illustration 4-11 Adjusting entries for unearned revenues

Illustration 4-12 Service revenue accounts after adjustment

Moreover, liabilities are overstated and stockholders' equity is understated by $\$ 400$ on the October 31 balance sheet.


Illustration 4-13 summarizes the accounting for unearned revenues.

Illustration 4-13
Accounting for unearned revenues

ACCOUNTING FOR UNEARNED REVENUES

Examples
Rent, magazine subscriptions, customer deposits for future service

| Reason for <br> Adjustment | Accounts Before <br> Adjustment | Adjusting <br> Entry |
| :--- | :--- | :--- |
| Unearned revenues | Liabilities | Dr. Liabilities |
| recorded in liability | overstated. | Cr. Revenues |
| accounts have been | Revenues <br> understated. |  |



## Accounting Across the Organization

## Turning Gift Cards into Revenue

Those of you who are marketing majors (and even most of you who are not) know that gift cards are among the hottest marketing tools in merchandising today. Customers purchase gift cards and give them to someone for later use. In a recent year, gift-card sales topped $\$ 95$ billion.

Although these programs are popular with marketing executives, they create accounting questions. Should revenue be recorded at the time the gift card is sold, or when it is exercised? How should expired gift cards be accounted for? In its 2009 balance sheet, Best Buy reported unearned revenue related to gift cards of $\$ 479$ million.

Source: Robert Berner, "Gift Cards: No Gift to Investors," Business Week (March 14, 2005), p. 86.
Suppose that Robert Jones purchases a $\$ 100$ gift card at Best Buy on December 24, 2011, and gives it to his wife, Mary Jones, on December 25, 2011. On January 3, 2012, Mary uses the card to purchase $\$ 100$ worth of CDs. When do you think Best Buy should recognize revenue and why? (See page 223.)

## Do itH

The ledger of Hammond, Inc., on March 31, 2012, includes these se lected accounts before adjusting entries are prepared.

|  | Debit | Credit |
| :--- | ---: | ---: |
| Prepaid Insurance | $\$ 3,600$ |  |
| Supplies | 2,800 |  |
| Equipment | 25,000 |  |
| Accumulated Depreciation-Equipment |  | $\$ 5,000$ |
| Unearned Service 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 equipment depreciates $\$ 200$ a month
4. One-half of the unearned service revenue was earned in March.

Prepare the adjusting entries for the month of March.

## Solution

| 1. Insurance Expense Prepaid Insurance <br> (To record insurance expired) | 100 | 100 |
| :---: | :---: | :---: |
| 2. Supplies Expense Supplies <br> (To record supplies used) | 2,000 | 2,000 |
| 3. Depreciation Expense <br> Accumulated Depreciation-Equipment <br> (To record monthly depreciation) | 200 | 200 |
| 4. Unearned Service Revenue <br> Service Revenue <br> (To record revenue earned) | 4,600 | 4,600 |

Related exercise material: BE4-4, BE4-5, BE4-6, BE4-7, and Do itt 4-1.

ADJUSTING ENTRIES FOR DEFERRALS

## 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 deferrals. Failure to adjust for deferrals leads to overstatement of the asset or liability and understatement of the related expense or revenue.


## ADJUSTING ENTRIES FOR ACCRUALS

The second category of adjusting entries is accruals. Prior to an accrual adjustment, the revenue account (and the related asset account) or the expense account (and the related liability account) are understated. Thus, the adjusting entry for accruals will increase both a balance sheet and an income statement account.

## Accrued Revenues

Revenues earned but not yet 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. These are unrecorded because the earning of interest does not involve daily transactions. Companies do not record interest revenue on a daily basis because it is often impractical to do so. Accrued revenues also may result from services that have been performed but not yet billed nor collected, as in the case of commissions and fees. These may be unrecorded because only a portion of the total service has been provided and the clients won't be billed until the service has been completed.

An adjusting entry records the receivable that exists at the balance sheet date and the revenue earned during the period. Prior to adjustment, both assets and revenues are understated. As shown in Illustration 4-14 (page 176), an adjusting entry for accrued revenues results in an increase (a debit) to an asset account and an increase (a credit) to a revenue account.
study objective 5
Prepare adjusting entries for accruals.

Accrued Revenues
Oct. 31


Revenue and receivable are recorded for unbilled services Nov. 10


Cash is received; receivable is reduced

Illustration 4-14 Adjusting entries for accrued revenues

Helpful Hint For accruals, there may have been no prior entry, and the accounts requiring adjustment may both have zero balances prior to adjustment.

Ethics Note Computer Associates International was accused of backdating sales-that is, saying that a sale that occurred at the beginning of one quarter occurred at the end of the previous quarter, in order to achieve the previous quarter's sales targets.


In October, Sierra Corporation earned $\$ 200$ for guide services that were not billed to clients on or before October 31. Because these services are not billed, they are not recorded. The accrual of unrecorded service revenue increases an asset account, Accounts Receivable. It also increases stockholders' equity by increasing a revenue account, Service Revenue, as shown in Illustration 4-15.

Illustration 4-15 Adjustment for accrued revenue


Equation analyses summarize the effects of transactions on the three elements of the accounting equation, as well as the effect on cash flows.
A
+200
-200

Cash Flows
+200

The asset Accounts Receivable shows that clients owe Sierra \$200 at the balance sheet date. The balance of $\$ 10,600$ in Service Revenue represents the total revenue Sierra earned during the month $(\$ 10,000+\$ 400+\$ 200)$. Without the adjusting entry, assets and stockholders' equity on the balance sheet and revenues and net income on the income statement are understated.

On November 10, Sierra receives cash of $\$ 200$ for the services performed in October and makes the following entry.

Nov. 10
Cash
Accounts Receivable 200
(To record cash collected on account)

The company records the collection of the receivables by a debit (increase) to Cash and a credit (decrease) to Accounts Receivable.

Illustration 4-16 summarizes the accounting for accrued revenues.

| ACCOUNTING FOR ACCRUED REVENUES |  |  |  |
| :---: | :---: | :---: | :---: |
| Examples | Reason for Adjustment | Accounts Before Adjustment | Adjusting <br> Entry |
| Interest, rent, services performed but not collected | Revenues have been earned but not yet received in cash or recorded. | Assets understated. Revenues understated. | Dr. Assets Cr. Revenues |

Illustration 4-16
Accounting for accrued revenues

Ethics Note A report released by Fannie Mae's board of directors stated that improper adjusting entries at the mortgage-finance company resulted in delayed recognition of expenses caused by interest-rate changes. The motivation for such accounting apparently was the desire to hit earnings estimates.

Illustration 4-17
Adjusting entries for accrued expenses

Illustration 4-18 Formula for computing interest

Helpful Hint In computing interest, we express the time period as a fraction of a year.

As Illustration 4-19 shows, the accrual of interest at October 31 increases a liability account, Interest Payable. It also decreases stockholders' equity by increasing an expense account, Interest Expense.

Illustration 4-19 Adjustment for accrued interest


Interest Expense shows the interest charges for the month of October. Interest Payable shows the amount of interest the company owes at the statement date. Sierra will not pay the interest until the note comes due at the end of three months. Companies use the Interest Payable account, instead of crediting Notes Payable, to disclose the two different types of obligations-interest and principalin the accounts and statements. Without this adjusting entry, liabilities and interest expense are understated, and net income and stockholders' equity are overstated.


## International Insight

## Cashing In on Accrual Accounting

The Chinese government, like most governments, uses cash accounting. It was therefore interesting when it was recently reported that for about $\$ 38$ billion of expenditures in a recent budget projection, the Chinese government decided to use accrual accounting versus cash accounting. It decided to expense the amount in the year in which it was originally allocated rather than when the payments would be made. Why did it do this? It enabled the government to keep its projected budget deficit below a $3 \%$ threshold. While it was able to keep its projected shortfall below 3\%, China did suffer some criticism for its inconsistent accounting. Critics charge that this inconsistent treatment reduces the transparency of China's accounting information. That is, it is not easy for outsiders to accurately evaluate what is really going on.

Source: Andrew Batson, "China Altered Budget Accounting to Reduce Deficit Figure," Wall Street Journal Online (March 15, 2010).

?
Accrual accounting is often considered superior to cash accounting. Why, then, were some people critical of China's use of accrual accounting in this instance? (See page 223.)

ACCRUED SALARIES. Companies pay for some types of expenses, such as employee salaries and commissions, after the services have been performed. Sierra paid salaries on October 26 for its employees' first two weeks of work; the next payment of salaries will not occur until November 9. As Illustration 4-20 shows, three working days remain in October (October 29-31).


At October 31, the salaries for these three days represent an accrued expense and a related liability to Sierra. The employees receive total salaries of $\$ 2,000$ for a five-day work week, or $\$ 400$ per day. Thus, accrued salaries at October 31 are $\$ 1,200(\$ 400 \times 3)$. This accrual increases a liability, Salaries Payable. It also decreases stockholders' equity by increasing an expense account, Salaries Expense, as shown in Illustration 4-21.

Illustration 4-20 Calendar showing Sierra Corporation's pay periods

Illustration 4-21 Adjustment for accrued salaries


After this adjustment, the balance in Salaries Expense of \$5,200 (13 days $\times$ $\$ 400)$ is the actual salary expense for October. The balance in Salaries Payable

Illustration 4-22
Accounting for accrued expenses
of $\$ 1,200$ is the amount of the liability for salaries Sierra owes as of October 31. Without the $\mathbf{\$ 1 , 2 0 0}$ adjustment for salaries, Sierra's expenses are understated $\$ 1,200$ and its liabilities are understated $\mathbf{\$ 1 , 2 0 0}$.

Sierra Corporation pays salaries every two weeks. Consequently, the next payday is November 9 , when the company will again pay total salaries of $\$ 4,000$. The payment consists of $\$ 1,200$ of salaries payable at October 31 plus $\$ 2,800$ of salaries expense for November ( 7 working days, as shown in the November calendar $\times$ \$400). Therefore, Sierra makes the following entry on November 9.

| Nov. 9 | Salaries Payable <br> Salaries Expense <br> Cash <br> (To record November 9 payroll) | 1,200 |  |
| :--- | :--- | :--- | :--- |
|  |  | 2,800 |  |
|  | (T),000 |  |  |

This entry eliminates the liability for Salaries Payable that Sierra recorded in the October 31 adjusting entry, and it records the proper amount of Salaries Expense for the period between November 1 and November 9.

Illustration 4-22 summarizes the accounting for accrued expenses

## ACCOUNTING FOR ACCRUED EXPENSES

| Examples | Reason for <br> Adjustment | Accounts Before <br> Adjustment | Adjusting <br> Entry |  |
| :--- | :--- | :--- | :--- | :--- |
| Interest, rent, | Expenses have been <br> Incurred but not yet paid <br> salaries | Expenses understated. Dr. Expenses <br> in cash or recorded.  |  | Cr. Liabilities understated. |

## before you go on...

## ADJUSTING ENTRIES FOR ACCRUALS

## 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.



## Do it

Micro Computer Services Inc. began operations on August 1, 2012. At the end of August 2012, management attempted to prepare monthly financial statements. The following information relates to August.

1. At August 31, the company owed its employees $\$ 800$ in salaries that will be paid on September 1
2. On August 1 , the company borrowed $\$ 30,000$ from a local bank on a 15 -year mortgage. The annual interest rate is $10 \%$.
3. Revenue earned but unrecorded for August totaled $\$ 1,100$.

Prepare the adjusting entries needed at August 31, 2012.

## Solution

| 1. Salaries Expense Salaries Payable <br> (To record accrued salaries) | 800 | 800 |
| :---: | :---: | :---: |
| 2. Interest Expense Interest Payable <br> (To record accrued interest: $\left.\$ 30,000 \times 10 \% \times \frac{1}{12}=\$ 250\right)$ | 250 | 250 |
| 3. Accounts Receivable Service Revenue (To record revenue earned) | 1,100 | 1,100 |

## SUMMARY OF BASIC RELATIONSHIPS

Illustration 4-23 summarizes the four basic types of adjusting entries. Take some time to study and analyze the adjusting entries. Be sure to note that each adjusting entry affects one balance sheet account and one income statement account.

| Type of Adjustment | Accounts Before Adjustment | Adjusting Entry |
| :---: | :---: | :---: |
| Prepaid expenses | Assets overstated Expenses understated | Dr. Expenses Cr. Assets |
| Unearned revenues | Liabilities overstated Revenues understated | Dr. Liabilities Cr. Revenues |
| Accrued revenues | Assets understated <br> Revenues understated | Dr. Assets Cr. Revenues |
| Accrued expenses | Expenses understated Liabilities understated | Dr. Expenses Cr. Liabilities |

Illustrations 4-24 and 4-25 (page 182) show the journalizing and posting of adjusting entries for Sierra Corporation on October 31. When reviewing the general ledger in Illustration 4-25, note that for learning purposes, we have highlighted the adjustments in color.

| GENERAL JOURNAL |  |  |  |
| :---: | :---: | :---: | :---: |
| Date | Account Titles and Explanation | Debit | Credit |
| 2010 | Adjusting Entries |  |  |
| Oct. 31 | Supplies Expense Supplies (To record supplies used) | 1,500 | 1,500 |
| 31 | Insurance Expense Prepaid Insurance <br> (To record insurance expired) | 50 | 50 |
| 31 | Depreciation Expense <br> Accumulated Depreciation-Equipment <br> (To record monthly depreciation) | 40 | 40 |
| 31 | Unearned Service Revenue Service Revenue (To record revenue earned) | 400 | 400 |
| 31 | Accounts Receivable Service Revenue (To record revenue earned) | 200 | 200 |
| 31 | Interest Expense <br> Interest Payable <br> (To record interest on notes payable) | 50 | 50 |
| 31 | Salaries Expense <br> Salaries Payable <br> (To record accrued salaries) | 1,200 | 1,200 |

Illustration 4-23
Summary of adjusting entries

Illustration 4-24 General journal showing adjusting entries

Illustration 4-25 General ledger after adjustments


## The Adjusted Trial Balance and Financial Statements

After a company has journalized and posted all adjusting entries, it prepares another trial balance from the ledger accounts. This trial balance is called an adjusted trial balance. It shows the balances of all accounts, including those adjusted, at the end of the accounting period. The purpose of an adjusted trial balance is to prove the equality of the total debit balances and the total credit balances in the ledger after all adjustments. Because the accounts contain all data needed for financial statements, the adjusted trial balance is the primary basis for the preparation of financial statements.

## PREPARING THE ADJUSTED TRIAL BALANCE

Illustration 4-26 presents the adjusted trial balance for Sierra Corporation prepared from the ledger accounts in Illustration 4-25. The amounts affected by the adjusting entries are highlighted in color.


## study objective 6

Describe the nature and purpose of the adjusted trial balance.

Illustration 4-26
Adjusted trial balance

## PREPARING FINANCIAL STATEMENTS

Companies can prepare financial statements directly from an adjusted trial balance. Illustrations 4-27 and 4-28 present the interrelationships of data in the adjusted trial balance of Sierra Corporation. As Illustration 4-27 shows, companies prepare the income statement from the revenue and expense accounts. Similarly, they derive the retained earnings statement from the retained earnings account, dividends account, and the net income (or net loss) shown in the income statement. As Illustration 4-28 shows, companies then prepare the balance sheet from the asset, liability, and stockholders' equity accounts. They obtain the amount reported for retained earnings on the balance sheet from the ending balance in the retained earnings statement.

Illustration 4-27
Preparation of the income statement and retained earnings statement from the adjusted trial balance


## Illustration 4-28

Preparation of the balance sheet from the adjusted trial balance

before you go on...
Do it.
Skolnick Co. was organized on April 1, 2012. The company prepares
TRIAL BALANCE quarterly financial statements. The adjusted trial balance amounts at June 30 are shown below:

|  | Debits |  |  |
| :--- | ---: | :--- | ---: |
| Cash | $\$ 6,700$ | Accumulated Depreciation—Equipment | $\$ 850$ |
| Accounts Receivable | 600 | Notes Payable | 5,000 |
| Prepaid Rent | 900 | Accounts Payable | 1,510 |
| Supplies | 1,000 | Salaries and Wages Payable | 400 |
| Equipment | 15,000 | Interest Payable | 50 |
| Dividends | 600 | Unearned Rent Revenue | 500 |
| Salaries and Wages Expense | 9,400 | Common Stock | 14,000 |
| Rent Expense | 1,500 | Service Revenue | 14,200 |
| Depreciation Expense | 850 | Rent Revenue | 800 |
| Supplies Expense | 200 |  |  |
| Utilities Expense | 510 |  | $\underline{\$ 37,310}$ |
| Interest Expense | 50 |  |  |
| Total debits | $\underline{\$ 37,310}$ | Total credits |  |

## Action Plan

- In an adjusted trial balance, all asset, liability, revenue, and expense accounts are properly stated.
- To determine the ending balance in Retained Earnings, add net income and subtract dividends.
(a) Determine the net income for the quarter April 1 to June 30.
(b) Determine the total assets and total liabilities at June 30, 2012 for Skolnick Co.
(c) Determine the amount that appears for Retained Earnings.


## Solution

(a) The net income is determined by adding revenues and subtracting expenses. The net income is computed as follows.
Revenues

| Service revenue | $\$ 14,200$ |
| :--- | ---: |
| Rent revenue | 800 |

Rent revenue
800
Total revenues
\$15,000
Expenses

| Salaries and wages expense | $\$ 9,400$ |  |
| :--- | ---: | ---: |
| Rent expense | 1,500 |  |
| Depreciation expense | 850 |  |
| Utilities expense | 510 |  |
| Supplies expense | 200 |  |
| Interest expense | 50 |  |
| $\quad$ Total expenses |  | $\underline{12,510}$ |
| Net income |  | $\underline{\$ 2,490}$ |

(b) Total assets and liabilities are computed as follows.

|  | Assets |  | Liabilities |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Cash | \$ 6,700 | Notes payable | \$5,000 |
|  | Accounts receivable | 600 | Accounts payable | 1,510 |
|  | Supplies | 1,000 | Unearned rent revenue | 500 |
|  | Prepaid rent | 900 | Salaries and wages |  |
|  | Equipment 15,000 |  | payable | 400 |
|  | Less: Accumulated depreciationequipment $\quad 850$ | 14,150 | Interest payable | 50 |
|  | Total assets | \$23,350 | Total liabilities | \$7,460 |
| (c) | Retained earnings, April 1 | \$ 0 |  |  |
|  | Add: Net income | 2,490 |  |  |
|  | Less: Dividends | 600 |  |  |
|  | Retained earnings, June 30 | \$1,890 |  |  |

Related exercise material: BE4-9, BE4-10, BE4-11, BE4-12, Do ity 4-3, E4-12, E4-13, E4-15, and E4-16.

## Closing the Books

Alternative Terminology
Temporary accounts are sometimes called nominal accounts, and permanent accounts are sometimes called real accounts.

In previous chapters, you learned that revenue and expense accounts and the dividends account are subdivisions of retained earnings, which is reported in the stockholders' equity section of the balance sheet. Because revenues, expenses, and dividends relate to only a given accounting period, they are considered temporary accounts. In contrast, all balance sheet accounts are considered permanent accounts because their balances are carried forward into future accounting periods. Illustration 4-29 identifies the accounts in each category.

## PREPARING CLOSING ENTRIES

At the end of the accounting period, companies transfer the temporary account balances to the permanent stockholders' equity account-Retained Earningsthrough the preparation of closing entries. Closing entries transfer net income

(or net loss) and dividends to Retained Earnings, so the balance in Retained Earnings agrees with the retained earnings statement. For example, notice that in the adjusted trial balance in Illustration 4-24 (page 183). Retained Earnings has a balance of zero. Prior to the closing entries, the balance in Retained Earnings will be its beginning-of-the-period balance. (For Sierra, this is zero because it is Sierra's first month of operations.)

In addition to updating Retained Earnings to its correct ending balance, closing entries produce a zero balance in each temporary account. As a result, these accounts are ready to accumulate data about revenues, expenses, and dividends that occur in the next accounting period. Permanent accounts are not closed.

When companies prepare closing entries, they could close each income statement account directly to Retained Earnings. However, to do so would result in excessive detail in the retained earnings account. Accordingly, companies close the revenue and expense accounts to another temporary account, Income Summary, and they transfer only the resulting net income or net loss from this account to Retained Earnings. Illustration 4-30 depicts the closing process. While it still takes the average large company seven days to close, some companies such as Cisco employ technology that allows them to do a so-called "virtual close" almost instantaneously any time during the year. Besides dramatically reducing the cost of closing, the virtual close provides companies with accurate data for decision making whenever they desire it.


Illustration 4-30 The closing process

Illustration 4-31 Closing entries journalized

Helpful Hint Income Summary is a very descriptive title: Companies close total revenues to Income Summary and total expenses to Income Summary. The balance in the Income Summary is a net income or net loss.

Illustration 4-31 shows the closing entries for Sierra Corporation. Illustration 4-32 diagrams the posting process for Sierra Corporation's closing entries.

| GENERAL JOURNAL |  |  |  |
| :---: | :---: | :---: | :---: |
| Date | Account Titles and Explanation | Debit | Credit |
| $\begin{aligned} & 2012 \\ & \text { Oct. } 31 \end{aligned}$ | Closing Entries <br> Service Revenue Income Summary (To close revenue account) | 10,600 | 10,600 |
| 31 | Income Summary <br> Salaries Expense <br> Supplies Expense <br> Rent Expense <br> Insurance Expense <br> Interest Expense <br> Depreciation Expense <br> (To close expense accounts) | 7,740 | $\begin{array}{r} 5,200 \\ 1,500 \\ 900 \\ 50 \\ 50 \\ 40 \tag{3} \end{array}$ |
| 31 | Income Summary <br> Retained Earnings <br> (To close net income to retained earnings) <br> (4) | 2,860 | 2,860 |
| 31 | Retained Earnings <br> Dividends <br> (To close dividends to retained earnings) | 500 | 500 |

## PREPARING A POST-CLOSING TRIAL BALANCE

After a company journalizes and posts all closing entries, it prepares another trial balance, called a post-closing trial balance, from the ledger. A post-closing trial balance is a list of all permanent accounts and their balances after closing entries are journalized and posted. The purpose of this trial balance is to prove the equality of the permanent account balances that the company carries forward into the next accounting period. Since all temporary accounts will have zero balances, the post-closing trial balance will contain only permanentbalance sheet-accounts.

before you go on...

## Do ft

After making entries to close its revenue and expense accounts to Income
CLOSING ENTRIES
Summary, Hancock Company has the following balances.

| Dividends | $\$ 15,000$ |
| :--- | ---: |
| Retained Earnings | 42,000 |
| Income Summary | 18,000 (credit balance) |

Prepare the closing entries at December 31 that affect the stockholders' equity accounts.

## Solution

Dec. 31
Income Summary
Retained Earnings
(To close net income to retained earnings)
31 Retained Earnings Dividends (To close dividends to retained earnings)

## Action Plan

- Close Income Summary to Retained Earnings.
- Close Dividends to Retained Earnings.
navigator

[^1]study objective $\&$
Describe the required steps in the accounting cycle.

## SUMMARY OF THE ACCOUNTING CYCLE

Illustration 4-33 shows the required steps in the accounting cycle. You can see that the cycle begins with the analysis of business transactions and ends with the preparation of a post-closing trial balance. Companies perform the steps in the cycle in sequence and repeat them in each accounting period.

## Illustration 4-33

Required steps in the accounting cycle


Steps 1-3 may occur daily during the accounting period, as explained in Chapter 3. Companies perform Steps $4-7$ on a periodic basis, such as monthly, quarterly, or annually. Steps 8 and 9 , closing entries and a post-closing trial balance, usually take place only at the end of a company's annual accounting period.

## Quality of Earnings

"Did you make your numbers today?" is a question asked often in both large and small businesses. Companies and employees are continually under pressure to "make the numbers"-that is, to have earnings that are in line with expectations. As a consequence it is not surprising that many companies practice earnings management. Earnings management is the planned timing of revenues, expenses, gains, and losses to smooth out bumps in net income. The quality of
earnings is greatly affected when a company manages earnings up or down to meet some targeted earnings number. A company that has a high quality of earnings provides full and transparent information that will not confuse or mislead users of the financial statements. A company with questionable quality of earnings may mislead investors and creditors, who believe they are relying on relevant and reliable information. As a consequence, investors and creditors lose confidence in financial reporting, and it becomes difficult for our capital markets to work efficiently.

Companies manage earnings in a variety of ways. One way is through the use of one-time items to prop up earnings numbers. For example, ConAgra Foods recorded a nonrecurring gain from the sale of Pilgrim's Pride stock for $\$ 186$ million to help meet an earnings projection for the quarter.

Another way is to inflate revenue numbers in the short-run to the detriment of the long-run. For example, Bristol-Myers Squibb provided sales incentives to its wholesalers to encourage them to buy products at the end of the quarter (often referred to as channel-stuffing). As a result Bristol-Myers was able to meet its sales projections. The problem was that the wholesalers could not sell that amount of merchandise and ended up returning it to Bristol-Myers. The result was that Bristol-Myers had to restate its income numbers.

Companies also manage earnings through improper adjusting entries. Regulators investigated Xerox for accusations that it was booking too much revenue up-front on multi-year contract sales. Financial executives at Office Max resigned amid accusations that the company was recognizing rebates from its vendors too early and therefore overstating revenue. Finally, WorldCom's abuse of adjusting entries to meet its net income targets is unsurpassed: It used adjusting entries to increase net income by reclassifying liabilities as revenue and reclassifying expenses as assets. Investigations of the company's books after it went bankrupt revealed adjusting entries of more than a billion dollars that had no supporting documentation.

The good news is that, as a result of investor pressure as well as the SarbanesOxley Act, many companies are trying to improve the quality of their financial reporting. For example, hotel operator Marriott is now providing detailed information on the write-offs it has on loan guarantees it gives hotels. General Electric has decided to provide more detail on its revenues and operating profits for individual businesses it owns. IBM is attempting to provide a better breakdown of its earnings. At the same time, regulators are taking a tough stand on the issue of quality of earnings. For example, one regulator noted that companies may be required to restate their financials every single time that they account for any transaction that had no legitimate purpose but was done solely for an accounting purpose, such as to smooth net income.

In this chapter, you learned that adjusting entries are used to adjust numbers that would otherwise be stated on a cash basis. Sierra Corporation's income statement (Illustration 4-27, page 184) shows net income of $\$ 2,860$. The statement of cash flows reports a form of cash basis income referred to as "Net cash provided by operating activities." For example, Illustration 1-8 (page 15), which shows a statement of cash flows, reports net cash provided by operating activities of $\$ 5,700$ for Sierra. Net income and net cash provided by operating activities often differ. The difference for Sierra is $\$ 2,840(\$ 5,700-\$ 2,860)$. The following summary shows the causes of this difference of $\$ 2,840$.

## KEEPING AN EYE

 ON GASHstudy objective 9
Understand the causes of differences between net income and cash provided by operating activities.

|  | Computation of Net Cash Provided by Operating Activities | Computation of <br> Net Income |
| :---: | :---: | :---: |
| (1) Cash received in advance from customer | \$ 1,200 | \$ 0 |
| (2) Cash received from customers for services provided | 10,000 | 10,000 |
| (3) Services provided for cash received previously in (1) | 0 | 400 |
| (4) Services provided on account | 0 | 200 |
| (5) Payment of rent | (900) | (900) |
| (6) Purchase of insurance | (600) | 0 |
| (7) Payment of employee salaries | $(4,000)$ | $(4,000)$ |
| (8) Use of supplies | 0 | $(1,500)$ |
| (9) Use of insurance | 0 | (50) |
| (10) Depreciation | 0 | (40) |
| (11) Interest cost incurred, but not paid | 0 | (50) |
| (12) Salaries incurred, but not paid | 0 | $(1,200)$ |
|  | \$ 5,700 | \$ 2,860 |

For each item included in the computation of net cash provided by operating activities, you should confirm that cash was either received or paid. For each item in the income statement, the company should confirm that revenue was earned (even when cash was not received) or that an expense was incurred (even when cash was not paid).

## USING THE DECISION TOOLKIT

Humana Corporation provides managed health care services to approximately 7 million people. Headquartered in Louisville, Kentucky, it has over 13,700 employees in 15 states and Puerto Rico. A simplified version of Humana's December 31, 2009, adjusted trial balance is shown at the top of the next page.

## Instructions

From the trial balance, prepare an income statement, retained earnings statement, and classified balance sheet. Be sure to prepare them in that order, since each statement depends on information determined in the preceding statement.



## Summary of Study Objectives

1 Explain the revenue recognition principle and the expense recognition principle. The revenue recognition principle dictates that companies recognize revenue in the accounting period in which it is earned. The expense recognition principle dictates that companies recognize expenses when expenses make their contribution to revenues.
2 Differentiate between the cash basis and the accrual basis of accounting. Under the cash basis, companies record events only in the periods in which the company receives or pays cash. Accrual-based accounting means that companies record, in the periods in which the events occur, events that change a company's financial statements even if cash has not been exchanged.
3 Explain why adjusting entries are needed, and identify the major types of adjusting entries. Companies make adjusting entries at the end of an accounting period.

These entries ensure that companies record revenues in the period in which they are earned and that companies recognize expenses in the period in which they are incurred. The major types of adjusting entries are prepaid expenses, unearned revenues, accrued revenues, and accrued expenses.
4 Prepare adjusting entries for deferrals. Deferrals are either prepaid expenses or unearned revenues. Companies make adjusting entries for deferrals at the statement date to record the portion of the deferred item that represents the expense incurred or the revenue earned in the current accounting period.
5 Prepare adjusting entries for accruals. Accruals are either accrued revenues or accrued expenses. Adjusting entries for accruals record revenues earned and expenses incurred in the current accounting period that have not been recognized through daily entries.

6 Describe the nature and purpose of the adjusted trial balance. An adjusted trial balance is a trial balance that shows the balances of all accounts, including those that have been adjusted, at the end of an accounting period. The purpose of an adjusted trial balance is to show the effects of all financial events that have occurred during the accounting period.
7 Explain the purpose of closing entries. One purpose of closing entries is to transfer net income or net loss for the period to Retained Earnings. A second purpose is to "zero-out" all temporary accounts (revenue accounts, expense accounts, and dividends) so that they start each new period with a zero balance. To accomplish this, companies "close" all temporary accounts at the end of an accounting period. They make separate entries to close revenues and expenses to Income Summary; Income Summary to Retained Earnings;
and Dividends to Retained Earnings. Only temporary accounts are closed.
8 Describe the required steps in the accounting cycle. The required steps in the accounting cycle are: (a) analyze business transactions, (b) journalize the transactions, (c) post to ledger accounts, (d) prepare a trial balance, (e) journalize and post adjusting entries, (f) prepare an adjusted trial balance, (g) prepare financial statements, (h) journalize and post closing entries, and (i) prepare a post-closing trial balance.

9 Understand the causes of differences between net income and net cash provided by operating activities. Net income is based on accrual accounting, which relies on the adjustment process. Net cash provided by operating activities is determined by adding cash received from operating the business and subtracting cash expended during operations.



## appendix 4A

## Adjusting Entries in an Automated World-Using a Worksheet

In the previous discussion, we used T accounts and trial balances to arrive at the amounts used to prepare financial statements. Accountants frequently use a device known as a worksheet to determine these amounts. A worksheet is a multiple-column form that may be used in the adjustment process and in preparing financial statements. Accountants can prepare worksheets manually, but today most use computer spreadsheets.

As its name suggests, the worksheet is a working tool for the accountant. A worksheet is not a permanent accounting record; it is neither a journal nor a part of the general ledger. The worksheet is merely a supplemental device used to make it easier to prepare adjusting entries and the financial statements. Small companies with relatively few accounts and adjustments may not need a worksheet. In large companies with numerous accounts and many adjustments, a worksheet is almost indispensable.
study objective 1 O
Describe the purpose and the basic form of a worksheet.

Illustration 4A-1 Form
and procedure for a
worksheet


Illustration 4A-1 shows the basic form of a worksheet. Note the headings: The worksheet starts with two columns for the Trial Balance. The next two columns record all Adjustments. Next is the Adjusted Trial Balance. The last two sets of columns correspond to the Income Statement and the Balance Sheet. All items listed in the Adjusted Trial Balance columns are included in either the Income Statement or the Balance Sheet columns.

## Summary of Study Objective for Appendix 4A

10 Describe the purpose and the basic form of a worksheet. The worksheet is a device to make it easier to prepare adjusting entries and the financial statements. Companies often prepare a worksheet on a
computer spreadsheet. The sets of columns of the worksheet are, from left to right, the unadjusted trial balance, adjustments, adjusted trial balance, income statement, and balance sheet.

## Glossary

Accrual-basis accounting (p.166) Accounting basis in which companies record, in the periods in which the events occur, transactions that change a company's financial statements, even if cash was not exchanged.
Accrued expenses (p. 177) Expenses incurred but not yet paid in cash or recorded.
Accrued revenues (p.175) Revenues earned but not yet received in cash or recorded.
Adjusted trial balance (p. 183) A list of accounts and their balances after all adjustments have been made.
Adjusting entries (p.167) Entries made at the end of an accounting period to ensure that the revenue recognition and expense recognition principles are followed.
Book value ( $p$. 172) The difference between the cost of a depreciable asset and its related accumulated depreciation.
Cash-basis accounting (p. 166) Accounting basis in which a company records revenue only when it receives cash, and an expense only when it pays cash.
Closing entries (p. 186) Entries at the end of an accounting period to transfer the balances of temporary accounts to a permanent stockholders' equity account, Retained Earnings.
Contra asset account (p. 171) An account that is offset against an asset account on the balance sheet.
Depreciation (p. 171) The process of allocating the cost of an asset to expense over its useful life.
Earnings management (p.190) The planned timing of revenues, expenses, gains, and losses to smooth out bumps in net income.
Expense recognition principle (matching principle) (p. 165) The principle that dictates that companies match efforts (expenses) with results (revenues).
Fiscal year (p. 164, in margin) An accounting period that is one year long.

Income Summary (p. 187) A temporary account used in closing revenue and expense accounts.
Periodicity assumption (p.164) An assumption that the economic life of a business can be divided into artificial time periods.
Permanent accounts (p. 186) Balance sheet accounts whose balances are carried forward to the next accounting period.
Post-closing trial balance (p. 188) A list of permanent accounts and their balances after a company has journalized and posted closing entries.
Prepaid expenses (prepayments) (p.169) Assets that result from the payment of expenses that benefit more than one accounting period.
Quality of earnings (p.191) Indicates the level of full and transparent information that a company provides to users of its financial statements.
Revenue recognition principle (p. 164) The principle that companies recognize revenue in the accounting period in which it is earned.
Reversing entry (p. 190, in margin) An entry made at the beginning of the next accounting period; the exact opposite of the adjusting entry made in the previous period.
Temporary accounts ( $p$. 186) Revenue, expense, and dividend accounts whose balances a company transfers to Retained Earnings at the end of an accounting period. Unearned revenues ( $p$. 172) Cash received before a company earns revenues and recorded as a liability until earned.
Useful life ( $p$. 171) The length of service of a productive asset.
Worksheet (p. 195) A multiple-column form that companies may use in the adjustment process and in preparing financial statements.

## Comprehensive Do ith

Terry Thomas and a group of investors incorporate the Green Thumb Lawn Care Corporation on April 1. At April 30, the trial balance shows the following balances for selected accounts.

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

Analysis reveals the following additional data pertaining to these accounts.

1. Prepaid insurance is the cost of a 2 -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 6 -month, $12 \%$ note.

## 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.

4. Seven customers paid for the company's 6-month lawn service package of $\$ 600$ beginning in April. These customers received the first month of services in April.
5. Lawn services performed for 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 Comprehensive Do ith
GENERAL JOURNAL

| Date | Account Titles and Explanation | Debit | Credit |
| :---: | :---: | :---: | :---: |
|  | Adjusting Entries |  |  |
| Apr. 30 | Insurance Expense Prepaid Insurance (To record insurance expired: $\$ 3,600 \div 24=\$ 150$ per month) | 150 | 150 |
| 30 | Depreciation Expense <br> Accumulated Depreciation-Equipment (To record monthly depreciation) | 500 | 500 |
| 30 | Interest Expense <br> Interest Payable <br> (To accrue interest on notes payable: $\$ 20,000 \times 12 \% \times \frac{1}{12}=\$ 200$ | 200 | 200 |
| 30 | Unearned Service Revenue <br> Service Revenue (To record revenue earned: $\$ 600 \div 6=\$ 100$; $\$ 100$ per month $\times 7=\$ 700$ ) | 700 | 700 |
| 30 | Accounts Receivable <br> Service Revenue (To accrue revenue earned but not billed or collected) | 1,500 | 1,500 |

Self-Test, Brief Exercises, Exercises, Problem Set A, and many more resources are available for practice in WileyPLUS

## Self-Test Questions

Answers are on page 223.
(SO 1) 1. What is the periodicity assumption?
(a) Companies should recognize revenue in the accounting period in which it is earned.
(b) Companies should match expenses with revenues.
(c) The economic life of a business can be divided into artificial time periods.
(d) The fiscal year should correspond with the calendar year.
(SO 1) 2. Which principle dictates that efforts (expenses) be recorded with accomplishments (revenues)?
(a) Expense recognition principle.
(b) Cost principle.
(c) Periodicity principle.
(d) Revenue recognition principle.
3. $\propto$ Which one of these statements about the (SO 2)
accrual basis of accounting is false?
(a) Companies record events that change their financial statements in the period in which events occur, even if cash was not exchanged.
(b) Companies recognize revenue in the period in which it is earned.
(c) This basis is in accord with generally accepted accounting principles.
(d) Companies record revenue only when they receive cash, and record expense only when they pay out cash.
4. Adjusting entries are made to ensure that:
(a) expenses are recognized in the period in which they are incurred.
(b) revenues are recorded in the period in which they are earned.
(c) balance sheet and income statement accounts have correct balances at the end of an accounting period.
(d) All of the above.
$(S 04,5) \quad$ 5. Each of the following is a major type (or category) of adjusting entry except:
(a) prepaid expenses.
(c) accrued expenses
(b) accrued revenues.
(d) earned expenses.
6. The trial balance shows Supplies $\$ 1,350$ and Supplies Expense $\$ 0$. If $\$ 600$ of supplies are on hand at the end of the period, the adjusting entry is:

| (a) Supplies | 600 |  |
| :--- | :---: | :---: |
| Supplies Expense | 750 | 600 |
| (b) Supplies |  | 750 |
| Supplies Expense | 750 |  |
| (c) Supplies Expense |  | 750 |
| Supplies | 600 | 600 |

7. Adjustments for unearned revenues:
(a) decrease liabilities and increase revenues.
(b) increase liabilities and increase revenues.
(c) increase assets and increase revenues.
(d) decrease revenues and decrease assets.
8. Adjustments for prepaid expenses:
(a) decrease assets and increase revenues.
(b) decrease expenses and increase assets.
(c) decrease assets and increase expenses.
(d) decrease revenues and increase assets.
9. Queenan Company computes depreciation on delivery equipment at $\$ 1,000$ for the month of June. The adjusting entry to record this depreciation is as follows:

| (a) Depreciation Expense <br> Accumulated Depreciation- <br> Queenan Company | 1,000 |  |
| :--- | :--- | :--- |
| (b) Depreciation Expense <br> Equipment | 1,000 | 1,000 |
| (c) Depreciation Expense <br> Accumulated Depreciation- <br> Equipment | 1,000 | 1,000 |
| (d) Equipment Expense <br> Accumulated Depreciation- <br> Equipment | 1,000 | 1,000 |

10. Adjustments for accrued revenues:
(a) increase assets and increase liabilities.
(b) increase assets and increase revenues.
(c) decrease assets and decrease revenues.
(d) decrease liabilities and increase revenues.
11. Colleen Mooney earned a salary of $\$ 400$ for the last week of September. She will be paid on October 1. The adjusting entry for Colleen's employer at September 30 is:
(a) No entry is required.
(b) Salaries and Wages Expense 400 Salaries and Wages Payable
(c) Salaries and Wages Expense Cash
(d) Salaries and Wages Payable Cash
400
12. Which statement is incorrect concerning the ad- (SO 6) justed trial balance?
(a) An adjusted trial balance proves the equality of the total debit balances and the total credit balances in the ledger after all adjustments are made.
(b) The adjusted trial balance provides the primary basis for the preparation of financial statements.
(c) The adjusted trial balance does not list temporary accounts.
(d) The company prepares the adjusted trial balance after it has journalized and posted the adjusting entries.
13. Which account will have a zero balance after a company has journalized and posted closing entries?
(a) Service Revenue.
(b) Supplies.
(c) Prepaid Insurance.
(d) Accumulated Depreciation.
14. Which types of accounts will appear in the post- (SO 7) closing trial balance?
(a) Permanent accounts.
(b) Temporary accounts.
(c) Expense accounts.
(d) None of the above.
15. All of the following are required steps in the accounting cycle except:

Go to the book's companion website, www. wiley.com/college/kimmel, to access additional Self-Test Questions.


Note: All asterisked Questions relate to material in the appendix to the chapter.

## Questions

1. (a) How does the periodicity assumption affect an accountant's analysis of accounting transactions?
(b) Explain the term fiscal year.
2. Identify and state two generally accepted accounting principles that relate to adjusting the accounts.
3. $\simeq$ Don Wishne, a lawyer, accepts a legal engagement in March, performs the work in April, and is paid in May. If Wishne's law firm prepares monthly financial statements, when should it recognize revenue from this engagement? Why?
4. $\bumpeq$ In completing the engagement in question 3, Wishne pays no costs in March, $\$ 2,500$ in April, and $\$ 2,200$ in May (incurred in April). How much expense should the firm deduct from revenues in the month when it recognizes the revenue? Why?
5. "The cost principle of accounting requires adjusting entries." Do you agree? Explain.
6. Why may the financial information in an unadjusted trial balance not be up-to-date and complete?
7. Distinguish between the two categories of adjusting entries, and identify the types of adjustments applicable to each category.
8. What types of accounts does a company debit and credit in a prepaid expense adjusting entry?
9. "Depreciation is a process of valuation that results in the reporting of the fair value of the asset." Do you agree? Explain.
10. Explain the differences between depreciation expense and accumulated depreciation.
11. Greenstreet Company purchased equipment for $\$ 15,000$. By the current balance sheet date, the company had depreciated $\$ 7,000$. Indicate the balance sheet presentation of the data.
12. What types of accounts are debited and credited in an unearned revenue adjusting entry?
13. Data Technologies provides maintenance service for computers and office equipment for companies throughout the Northeast. The sales manager is elated because she closed a $\$ 300,000$ three-year maintenance contract on December 29, 2011, two days before the company's year-end. "Now we will hit this year's net income target for sure," she crowed. The customer is required to pay $\$ 100,000$ on December 29 (the day the deal was closed). Two more payments of $\$ 100,000$ each are also required on December 29, 2012 and 2013. Discuss the effect that this event will have on the company's financial statements.
14. ValuMart, a large national retail chain, is nearing its fiscal year-end. It appears that the company is not going to hit its revenue and net income targets. The company's marketing manager, Chris Ahrentzen, suggests running a promotion selling $\$ 50$ gift cards for $\$ 45$. He believes that this would be very popular and would enable the company to meet its targets for revenue and net income. What do you think of this idea?
15. © A company fails to recognize revenue earned but not yet received. Which of the following types of accounts are involved in the adjusting entry: (a) asset, (b) liability, (c) revenue, or (d) expense? For the accounts selected, indicate whether they would be debited or credited in the entry.
16. $\simeq$ A company fails to recognize an expense incurred but not paid. Indicate which of the following
types of accounts is debited and which is credited in the adjusting entry: (a) asset, (b) liability, (c) revenue, or (d) expense.
17. $\simeq$ A company makes an accrued revenue adjusting entry for $\$ 780$ and an accrued expense adjusting entry for $\$ 510$. How much was net income understated prior to these entries? Explain.
18. On January 9 a company pays $\$ 6,200$ for salaries, of which $\$ 1,100$ was reported as Salaries and Wages Payable on December 31. Give the entry to record the payment.
19. For each of the following items before adjustment, indicate the type of adjusting entry-prepaid expense, unearned revenue, accrued revenue, and accrued ex-pense-that is needed to correct the misstatement. If an item could result in more than one type of adjusting entry, indicate each of the types.
(a) Assets are understated.
(b) Liabilities are overstated.
(c) Liabilities are understated.
(d) Expenses are understated.
(e) Assets are overstated.
(f) Revenue is understated.
20. One-half of the adjusting entry is given below. Indicate the account title for the other half of the entry.
(a) Salaries and Wages Expense is debited.
(b) Depreciation Expense is debited.
(c) Interest Payable is credited.
(d) Supplies is credited.
(e) Accounts Receivable is debited.
(f) Unearned Service Revenue is debited.
21. "An adjusting entry may affect more than one balance sheet or income statement account." Do you agree? Why or why not?
22. Which balance sheet account provides evidence that Tootsie Roll records sales on an accrual basis rather than a cash basis? Explain.
23. Why is it possible to prepare financial statements directly from an adjusted trial balance?
24. $\subset=\leq$
(a) What information do accrual basis financial statements provide that cash basis statements do not?
(b) What information do cash basis financial statements provide that accrual basis statements do not?
25. What is the relationship, if any, between the amount shown in the adjusted trial balance column for an account and that account's ledger balance?
26. Identify the account(s) debited and credited in each of the four closing entries, assuming the company has net income for the year.
27. Some companies employ technologies that allow them to do a so-called "virtual close." This enables them to close their books nearly instantaneously any time during the year. What advantages does a "virtual close" provide?
28. Describe the nature of the Income Summary account, and identify the types of summary data that may be posted to this account.
29. What items are disclosed on a post-closing trial balance, and what is its purpose?
30. Which of these accounts would not appear in the post-closing trial balance? Interest Payable, Equipment, Depreciation Expense, Dividends, Unearned Service Revenue, Accumulated DepreciationEquipment, and Service Revenue.
31. Indicate, in the sequence in which they are made, the three required steps in the accounting cycle that involve journalizing.
32. Identify, in the sequence in which they are prepared, the three trial balances that are required in the accounting cycle.
33. $\square$ Explain the terms earnings management and quality of earnings.
34. Give examples of how companies manage earnings.
*35. What is the purpose of a worksheet?
*36. What is the basic form of a worksheet?

## Brief Exercises

BE4-1 Transactions that affect earnings do not necessarily affect cash. Identify the effect, if any, that each of the following transactions would have upon cash and net income. The first transaction has been completed as an example.

Cash | Net |
| :---: |
| Income |

BE4-2 The ledger of Hubbard Company includes the following accounts. Explain why each account may require adjustment.
(a) Prepaid Insurance.
(b) Depreciation Expense.
(c) Unearned Service Revenue.
(d) Interest Payable.

BE4-3 Dicker Company accumulates the following adjustment data at December 31. Indicate (1) the type of adjustment (prepaid expense, accrued revenue, and so on) and (2) the status of the accounts before adjustment (overstated or understated).
(a) Supplies of $\$ 400$ are on hand. Supplies account shows $\$ 1,600$ balance.
(b) Service Revenue earned but unbilled total $\$ 700$.
(c) Interest of $\$ 300$ has accumulated on a note payable.
(d) Rent collected in advance totaling $\$ 1,100$ has been earned.

BE4-4 Stagg Advertising Company's trial balance at December 31 shows Supplies $\$ 8,800$ and Supplies Expense $\$ 0$. On December 31 there are $\$ 1,100$ 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.
BE4-5 At the end of its first year, the trial balance of Jules Company shows Equipment $\$ 22,000$ and zero balances in Accumulated Depreciation-Equipment and Depreciation Expense. Depreciation for the year is estimated to be $\$ 2,750$. Prepare the adjusting entry for depreciation at December 31, post the adjustments to T accounts, and indicate the balance sheet presentation of the equipment at December 31.
BE4-6 On July 1, 2012, Ryhn Co. pays $\$ 12,400$ to Craig Insurance Co. for a 2 -year insurance contract. Both companies have fiscal years ending December 31. For Ryhn Co., journalize and post the entry on July 1 and the adjusting entry on December 31.
BE4-7 Using the data in BE4-6, journalize and post the entry on July 1 and the adjusting entry on December 31 for Craig Insurance Co. Craig uses the accounts Unearned Service Revenue and Service Revenue.
BE4-8 The bookkeeper for Forseth Company asks you to prepare the following accrual adjusting entries at December 31.

## Identify impact of

 transactions on cash and net income.(SO 2, 9), C

Indicate why adjusting entries are needed.
(SO 3), C

Identify the major types of adjusting entries.
(SO 3), AN
$\bigcirc$

Prepare adjusting entry for supplies.
(SO 4), AP

Prepare adjusting entry for depreciation.
(SO 4), AP
Prepare adjusting entry for prepaid expense. (SO 4), AP
Prepare adjusting entry for unearned revenue. (SO 4), AP

Prepare adjusting entries for accruals.
(SO 5), AP

Analyze accounts in an adjusted trial balance. (SO 6), AN


Prepare an income statement from an adjusted trial balance.
(SO 6), AP
Prepare a retained earnings statement from an adjusted trial balance.
(SO 6), AP
Identify financial statement for selected accounts. (SO 6), K

Identify post-closing trial balance accounts. (SO 7), K

Prepare and post closing entries.
(SO 7), AP

List required steps in the accounting cycle sequence. (SO 8), K
(a) Interest on notes payable of $\$ 300$ is accrued.
(b) Service revenue earned but unbilled totals $\$ 1,700$.
(c) Salaries of $\$ 780$ earned by employees have not been recorded.

Use these account titles: Service Revenue, Accounts Receivable, Interest Expense, Interest Payable, Salaries and Wages Expense, and Salaries and Wages Payable.
BE4-9 The trial balance of LaGrace Company includes the following balance sheet accounts. Identify the accounts that might require adjustment. For each account that requires adjustment, indicate (1) the type of adjusting entry (prepaid expenses, unearned revenues, accrued revenues, and accrued expenses) and (2) the related account in the adjusting entry.
(a) Accounts Receivable
(e) Notes Payable.
(b) Prepaid Insurance.
(f) Interest Payable.
(c) Equipment.
(g) Unearned Service Revenue.
(d) Accumulated Depreciation-Equipment.

BE4-10 The adjusted trial balance of Hanlon Corporation at December 31, 2012, includes the following accounts: Retained Earnings $\$ 17,200$; Dividends $\$ 6,000$; Service Revenue $\$ 32,000$; Salaries and Wages Expense $\$ 14,000$; Insurance Expense $\$ 1,800$; Rent Expense $\$ 3,900$; Supplies Expense $\$ 1,500$; and Depreciation Expense $\$ 1,000$. Prepare an income statement for the year.
BE4-11 Partial adjusted trial balance data for Hanlon Corporation are presented in BE410. The balance in Retained Earnings is the balance as of January 1. Prepare a retained earnings statement for the year assuming net income is $\$ 10,400$.
BE4-12 The following selected accounts appear in the adjusted trial balance for Cohen Company. Indicate the financial statement on which each account would be reported.
(a) Accumulated Depreciation.
(e) Service Revenue.
(b) Depreciation Expense.
(f) Supplies.
(c) Retained Earnings (beginning).
(g) Accounts Payable.
(d) Dividends.

BE4-13 Using the data in BE4-12, identify the accounts that would be included in a post-closing trial balance.
BE4-14 The income statement for the Timberline Golf Club Inc. for the month ended July 31 shows Service Revenue $\$ 16,000$; Salaries and Wages Expense $\$ 8,400$; Maintenance and Repairs Expense $\$ 2,500$; and Income Tax Expense $\$ 1,000$. The statement of retained earnings shows an opening balance for Retained Earnings of \$20,000 and Dividends $\$ 1,300$.
(a) Prepare closing journal entries.
(b) What is the ending balance in Retained Earnings?

BE4-15 The required steps in the accounting cycle are listed in random order below. List the steps in proper sequence.
(a) Prepare a post-closing trial balance.
(b) Prepare an adjusted trial balance.
(c) Analyze business transactions.
(d) Prepare a trial balance.
(e) Journalize the transactions.
(f) Journalize and post closing entries.
(g) Prepare financial statements.
(h) Journalize and post adjusting entries.
(i) Post to ledger accounts.

## Do itH Review

Do rit. 4-1 The ledger of Witzling, Inc. on March 31, 2012, includes the following selected accounts before adjusting entries.

Prepare adjusting entries for deferrals.
(SO 4), AP

|  | Debit | Credit |
| :--- | ---: | ---: |
| Prepaid Insurance | 2,400 |  |
| Supplies | 2,500 |  |
| Equipment | 30,000 |  |
| Unearned Service Revenue |  | 10,000 |

An analysis of the accounts shows the following:

1. Insurance expires at the rate of $\$ 300$ per month.
2. Supplies on hand total $\$ 900$.
3. The office equipment depreciates $\$ 200$ per month.
4. $2 / 5$ of the unearned service revenue was earned in March.

Prepare the adjusting entries for the month of March.
Do it: 4-2 Tammy Krause is the new owner of Tammy's Computer Services. At the end of July 2012, her first month of ownership, Tammy is trying to prepare monthly financial statements. She has the following information for the month.

1. At July 31, Krause owed employees $\$ 1,100$ in salaries that the company will pay in August.
2. On July 1, Krause borrowed $\$ 20,000$ from a local bank on a 10 -year note. The annual interest rate is $9 \%$.
3. Service revenue unrecorded in July totaled $\$ 1,600$.

Prepare the adjusting entries needed at July 31, 2012.
Do it: 4-3 Indicate in which financial statement each of the following adjusted trial balance accounts would be presented.

| Service Revenue | Accounts Receivable |
| :--- | :--- |
| Notes Payable | Accumulated Depreciation |
| Common Stock | Utilities Expense |

Do it: 4-4 After closing revenues and expense, Natraj Company shows the following account balances.

| Dividends | $\$ 22,000$ |
| :--- | ---: |
| Retained Earnings | 70,000 |
| Income Summary | 36,000 (credit balance) |

Prepare the remaining closing entries at December 31.

## Exercises

E4-1 The following independent situations require professional judgment for determining when to recognize revenue from the transactions.
(a) Southwest Airlines sells you an advance-purchase airline ticket in September for your flight home at Christmas.
(b) Ultimate Electronics sells you a home theatre on a "no money down and full payment in three months" promotional deal.
(c) The Toronto Blue Jays sell season tickets online to games in the Skydome. Fans can purchase the tickets at any time, although the season doesn't officially begin until April. The major league baseball season runs from April through October.
(d) You borrow money in August from RBC Financial Group. The loan and the interest are repayable in full in November.
(e) In August, you order a sweater from Sears using its online catalog. The sweater arrives in September, and you charge it to your Sears credit card. You receive and pay the Sears bill in October.

## Instructions

Identify when revenue should be recognized in each of the above situations.
E4-2 These are the assumptions, principles, and constraints discussed in this and previous chapters.

1. Economic entity assumption.
2. Materiality constraint.
3. Expense recognition principle.
4. Full disclosure principle.
5. Monetary unit assumption.
6. Going concern assumption.
7. Periodicity assumption.
8. Revenue recognition principle.
9. Cost principle.
10. Cost constraint.

Prepare adjusting entries for accruals.
(SO 5), AP

Prepare financial statements from adjusted trial balance. (SO 6), C

Prepare closing entries. (SO 7), AP

Identify point of revenue recognition.
(SO 1), C
$\bigcirc$

Identify accounting assumptions, principles, and constraints. (SO 1), K

Identify the violated assumption, principle, or constraint. (SO 1), C

Convert earnings from cash to accrual basis. (SO 2, 4, 5, 9), AP

Determine cash-basis and accrual-basis earnings.
(SO 2, 9), AP
$0-1$

## Instructions

Identify by number the accounting assumption, principle, or constraint that describes each situation below. Do not use a number more than once.
__ (a) Is the rationale for why plant assets are not reported at liquidation value. (Do not use the cost principle.)
_ (b) Indicates that personal and business record-keeping should be separately maintained.
$\qquad$ (c) Ensures that all relevant financial information is reported.
$\qquad$ (d) Assumes that the dollar is the "measuring stick" used to report on financial performance.
__ (e) Requires that accounting standards be followed for all significant items.
$\qquad$ (f) Separates financial information into time periods for reporting purposes.(g) Requires recognition of expenses in the same period as related revenues.
$\qquad$ (h) Indicates that fair value changes subsequent to purchase are not recorded in the accounts.

E4-3 Here are some accounting reporting situations.
(a) Dorfner Company recognizes revenue at the end of the production cycle but before sale. The price of the product, as well as the amount that can be sold, is not certain.
(b) Rayms Company is in its fifth year of operation and has yet to issue financial statements. (Do not use the full disclosure principle.)
(c) Tariq, Inc. is carrying inventory at its original cost of $\$ 100,000$. Inventory has a fair value of $\$ 110,000$.
(d) Leer Hospital Supply Corporation reports only current assets and current liabilities on its balance sheet. Property, plant, and equipment and bonds payable are reported as current assets and current liabilities, respectively. Liquidation of the company is unlikely.
(e) Kim Company has inventory on hand that cost $\$ 400,000$. Kim reports inventory on its balance sheet at its current fair value of $\$ 425,000$.
(f) Kris Piwek, president of Classic Music Company, bought a computer for her personal use. She paid for the computer by using company funds and debited the "Computers" account.

## Instructions

For each situation, list the assumption, principle, or constraint that has been violated, if any. Some of these assumptions, principles, and constraints were presented in earlier chapters. List only one answer for each situation.
E4-4 Your examination of the records of a company that follows the cash basis of accounting tells you that the company's reported cash basis earnings in 2012 are $\$ 33,640$. If this firm had followed accrual basis accounting practices, it would have reported the following year-end balances.

|  | $\underline{\mathbf{2 0 1 2}}$ |  | $\mathbf{2 0 1 1}$ |
| :--- | ---: | ---: | ---: |
| Accounts receivable | $\$ 3,400$ |  | $\$ 2,800$ |
| Supplies on hand | 1,300 |  | 1,460 |
| Unpaid wages owed | 2,000 |  | 2,400 |
| Other unpaid amounts | 1,400 |  | 1,100 |

## Instructions

Determine the company's net earnings on an accrual basis for 2012. Show all your calculations in an orderly fashion.
E4-5 In its first year of operations, Lazirko Company earned $\$ 28,000$ in service revenue, $\$ 6,000$ of which was on account and still outstanding at year-end. The remaining $\$ 22,000$ was received in cash from customers.

The company incurred operating expenses of $\$ 15,800$. Of these expenses, $\$ 12,000$ were paid in cash; $\$ 3,800$ was still owed on account at year-end. In addition, Lazirko prepaid $\$ 2,400$ for insurance coverage that would not be used until the second year of operations.

## Instructions

(a) Calculate the first year's net earnings under the cash basis of accounting, and calculate the first year's net earnings under the accrual basis of accounting.
(b) Which basis of accounting (cash or accrual) provides more useful information for decision makers?

E4-6 Mt. Horeb Company, a ski tuning and repair shop, opened in November 2011. The company carefully kept track of all its cash receipts and cash payments. The following information is available at the end of the ski season, April 30, 2012.

|  | Cash Receipts | Cash <br> Payments |
| :---: | :---: | :---: |
| Issue of common shares | \$20,000 |  |
| Payment for repair equipment |  | \$ 9,200 |
| Rent payments |  | 1,225 |
| Newspaper advertising payment |  | 375 |
| Utility bills payments |  | 970 |
| Part-time helper's wages payments |  | 2,600 |
| Income tax payment |  | 10,000 |
| Cash receipts from ski and snowboard repair services | 32,150 |  |
| Subtotals | 52,150 | 24,370 |
| Cash balance |  | 27,780 |
| Totals | \$52,150 | \$52,150 |

You learn that the repair equipment has an estimated useful life of 4 years. The company rents space at a cost of $\$ 175$ per month on a one-year lease. The lease contract requires payment of the first and last months' rent in advance, which was done. The part-time helper is owed $\$ 420$ at April 30, 2012, for unpaid wages. At April 30, 2012, customers owe Mt. Horeb Company $\$ 420$ for services they have received but have not yet paid for.

## Instructions

(a) Prepare an accrual-basis income statement for the 6 months ended April 30, 2012.
(b) Prepare the April 30, 2012, classified balance sheet.

E4-7 KidVid, a maker of electronic games for kids, has just completed its first year of operations. The company's sales growth was explosive. To encourage large national stores to carry its products, KidVid offered 180-day financing-meaning its largest customers do not pay for nearly 6 months. Because KidVid is a new company, its components suppliers insist on being paid cash on delivery. Also, it had to pay up front for 2 years of insurance. At the end of the year, KidVid owed employees for one full month of salaries, but due to a cash shortfall, it promised to pay them the first week of next year.

## Instructions

(a) Explain how cash and accrual accounting would differ for each of the events listed above and describe the proper accrual accounting.
(b) Assume that at the end of the year KidVid reported a favorable net income, yet the company's management is concerned because the company is very short of cash. Explain how KidVid could have positive net income and yet run out of cash.

E4-8 Peng Company accumulates the following adjustment data at December 31.
(a) Service Revenue earned but unbilled totals $\$ 600$.
(b) Store supplies of $\$ 160$ are on hand. Supplies account shows $\$ 1,900$ balance.
(c) Utility expenses of $\$ 275$ are unpaid.
(d) Service revenue of $\$ 490$ collected in advance has been earned.
(e) Salaries of $\$ 620$ are unpaid.
(f) Prepaid insurance totaling $\$ 400$ has expired.

## Instructions

For each item, indicate (1) the type of adjustment (prepaid expense, unearned revenue, accrued revenue, or accrued expense) and (2) the status of the accounts before adjustment (overstated or understated).
E4-9 The ledger of Sagovic Rental Agency on March 31 of the current year includes the selected accounts on page 206 before adjusting entries have been prepared.

Convert earnings from cash to accrual basis; prepare accrual-based financial statements.
(S0 2, 4, 5, 9), AP ©

Identify differences between cash and accrual accounting. (SO 2, 3, 9), C

Identify types of adjustments and accounts before adjustment.
(SO 3, 4, 5), AN

Prepare adjusting entries from selected account data. (SO 4, 5), AP

Prepare adjusting entries (SO 4, 5), AP

Prepare adjusting entries (SO 4, 5), AP

Prepare a correct income statement.
(SO 1, 4, 5, 6), AP


|  | Debits | Credits |
| :--- | ---: | ---: |
| Prepaid Insurance | $\$ 3,600$ |  |
| Supplies | 3,000 |  |
| Equipment | 25,000 |  |
| Accumulated Depreciation-Equipment |  | $\$ 8,400$ |
| Notes Payable |  | 20,000 |
| Unearned Rent Revenue |  | 12,400 |
| Rent Revenue | 0 | 60,000 |
| Interest Expense | 14,000 |  |
| Salaries and Wages Expense |  |  |

An analysis of the accounts shows the following.

1. The equipment depreciates $\$ 280$ per month.
2. Half of the unearned rent revenue was earned during the quarter.
3. Interest of $\$ 400$ is accrued on the notes payable.
4. Supplies on hand total $\$ 850$.
5. Insurance expires at the rate of $\$ 400$ per month.

## Instructions

Prepare the adjusting entries at March 31, assuming that adjusting entries are made quarterly. Additional accounts are: Depreciation Expense, Insurance Expense, Interest Payable, and Supplies Expense.
E4-10 Adam Singh, D.D.S., opened an incorporated dental practice on January 1, 2012. During the first month of operations the following transactions occurred:

1. Performed services for patients who had dental plan insurance. At January 31, \$760 of such services was earned but not yet billed to the insurance companies.
2. Utility expenses incurred but not paid prior to January 31 totaled $\$ 450$.
3. Purchased dental equipment on January 1 for $\$ 80,000$, paying $\$ 20,000$ in cash and signing a $\$ 60,000,3$-year note payable (Interest is paid each December 31). The equipment depreciates $\$ 400$ per month. Interest is $\$ 500$ per month.
4. Purchased a 1-year malpractice insurance policy on January 1 for $\$ 24,000$.
5. Purchased $\$ 1,750$ of dental supplies (recorded as increase to Supplies). On January 31 determined that $\$ 550$ of supplies were on hand.

## Instructions

Prepare the adjusting entries on January 31. Account titles are: Accumulated DepreciationEquipment, Depreciation Expense, Service Revenue, Accounts Receivable, Insurance Expense, Interest Expense, Interest Payable, Prepaid Insurance, Supplies, Supplies Expense, Utilities Expense, and Utilities Payable.
E4-11 The unadjusted trial balance for Sierra Corp. is shown in Illustration 4-4 (page 168). In lieu of the adjusting entries shown in the text at October 31, assume the following adjustment data.

1. Supplies on hand at October 31 total $\$ 500$.
2. Expired insurance for the month is $\$ 100$.
3. Depreciation for the month is $\$ 75$.
4. As of October $31, \$ 800$ of the previously recorded unearned revenue had been earned.
5. Services provided but unbilled (and no receivable has been recorded) at October 31 are $\$ 280$.
6. Interest expense accrued at October 31 is $\$ 70$.
7. Accrued salaries at October 31 are $\$ 1,400$.

## Instructions

Prepare the adjusting entries for the items above.
E4-12 The income statement of Kaleta Co. for the month of July shows net income of \$1,500 based on Service Revenue $\$ 5,500$; Salaries and Wages Expense $\$ 2,100$; Supplies Expense $\$ 900$, and Utilities Expense $\$ 500$. In reviewing the statement, you discover the following:

1. Insurance expired during July of $\$ 350$ was omitted.
2. Supplies expense includes $\$ 200$ of supplies that are still on hand at July 31.
3. Depreciation on equipment of $\$ 150$ was omitted.
4. Accrued but unpaid wages at July 31 of $\$ 360$ were not included.
5. Revenue earned but unrecorded totaled $\$ 700$.

## Instructions

Prepare a correct income statement for July 2012.

E4-13 This is a partial adjusted trial balance of Fenske Company.
FENSKE COMPANY
Adjusted Trial Balance January 31, 2012

|  | Debit | Credit |
| :--- | ---: | ---: |
| Supplies | $\$ 700$ |  |
| Prepaid Insurance | 1,560 |  |
| Salaries and Wages Payable |  | $\$ 1,060$ |
| Unearned Service Revenue | 950 | 750 |
| Supplies Expense | 520 |  |
| Insurance Expense | 1,800 |  |
| Salaries and Wages Expense |  | 2,000 |
| Service Revenue |  |  |

## Instructions

Answer these questions, assuming the year begins January 1.
(a) If the amount in Supplies Expense is the January 31 adjusting entry, and $\$ 300$ of supplies was purchased in January, what was the balance in Supplies on January 1?
(b) If the amount in Insurance Expense is the January 31 adjusting entry, and the original insurance premium was for 1 year, what was the total premium and when was the policy purchased?
(c) If $\$ 2,500$ of salaries was paid in January, what was the balance in Salaries and Wages Payable at December 31, 2011?
(d) If $\$ 1,800$ was received in January for services performed in January, what was the balance in Unearned Service Revenue at December 31, 2011?

E4-14 A partial adjusted trial balance for Fenske Company is given in E4-13.

## Instructions

Prepare the closing entries at January 31, 2012.
E4-15 Selected accounts of Sandin Company are shown here.


## Instructions

After analyzing the accounts, journalize (a) the July transactions and (b) the adjusting entries that were made on July 31. (Hint: July transactions were for cash.)

E4-16 The trial balances shown on page 208 are before and after adjustment for Amit Company at the end of its fiscal year.

Analyze adjusted data.

Prepare closing entries.

Journalize basic transactions and adjusting entries.
(SO 4, 5, 6), AN

Prepare adjusting entries from analysis of trial balance.


Prepare financial statements from adjusted trial balance.

Prepare closing entries.
(SO 6), AP (SO 7), AP

Record transactions on accrual basis; convert revenue to cash receipts. (SO 2, 4, 9), AP

## Cash

Accounts Receivable
Supplies
Prepaid Insurance
Equipment
Accumulated Depreciation-Equipment
Accounts Payable
Salaries and Wages Payable

| Unearned Rent Revenue | 1,800 | 800 |
| :--- | ---: | ---: |

Retained Earning
$\begin{array}{ll}\text { Dividends } & 2,800\end{array}$
Service Revenue
Rent Revenue
Salaries and Wages Expense
Supplies Expense
Rent Expense
Insurance Expense
Depreciation Expense
AMIT COMPANY
Trial Balance
August 31, 2012

| Before Adjustment |  | After <br> Adjustment |  |
| :---: | :---: | :---: | :---: |
| Dr. | Cr. | Dr. | Cr. |
| \$10,900 |  | \$10,900 |  |
| 8,800 |  | 9,400 |  |
| 2,500 |  | 500 |  |
| 4,000 |  | 2,500 |  |
| 16,000 |  | 16,000 |  |
|  | \$ 3,600 |  | \$ 4,800 |
|  | 5,800 |  | 5,800 |
|  | 0 |  | 1,100 |
|  | 1,800 |  | 800 |
|  | 10,000 |  | 10,000 |
|  | 5,500 |  | 5,500 |
| 2,800 |  | 2,800 |  |
|  | 34,000 |  | 34,600 |
|  | 12,100 |  | 13,100 |
| 17,000 |  | 18,100 |  |
| 0 |  | 2,000 |  |
| 10,800 |  | 10,800 |  |
| 0 |  | 1,500 |  |
| 0 |  | 1,200 |  |
| \$72,800 | \$72,800 | $\underline{\text { \$75,700 }}$ | \$75,700 |

## Instructions

Prepare the adjusting entries that were made.
E4-17 The adjusted trial balance for Amit Company is given in E4-16.

## Instructions

Prepare the income and retained earnings statements for the year and the classified balance sheet at August 31.

E4-18 The adjusted trial balance for Amit Company is given in E4-16.

## Instructions

Prepare the closing entries for the temporary accounts at August 31.

## Exercises: Set B and Challenge Exercises

Visit the book's companion website, at www.wiley.com/college/kimmel, and choose the Student Companion site to access Exercise Set B and Challenge Exercises.

## Problems: Set A

P4-1A The following selected data are taken from the comparative financial statements of Superior Curling Club. The club prepares its financial statements using the accrual basis of accounting.

| September 30 | 2012 | 2011 |
| :---: | :---: | :---: |
| Accounts receivable for member dues | \$ 15,000 | \$ 19,000 |
| Unearned sales revenue | 20,000 | 23,000 |
| Service revenue (from member dues) | 151,000 | \$135,000 |

Dues are billed to members based upon their use of the club's facilities. Unearned sales revenues arise from the sale of tickets to events, such as the Skins Game.

## Instructions

(Hint: You will find it helpful to use T accounts to analyze the following data. You must analyze these data sequentially, as missing information must first be deduced before moving on. Post your journal entries as you progress, rather than waiting until the end.)
(a) Prepare journal entries for each of the following events that took place during 2012.

1. Dues receivable from members from 2011 were all collected during 2012.
2. Unearned sales revenue at the end of 2011 was all earned during 2012.
3. Additional tickets were sold for $\$ 44,000$ cash during 2012; a portion of these were used by the purchasers during the year. The entire balance remaining in Unearned Sales Revenue relates to the upcoming Skins Game in 2012.
4. Dues for the 2011-2012 fiscal year were billed to members.
5. Dues receivable for 2012 (i.e., those billed in item (4) above) were partially collected.
(b) Determine the amount of cash received by the Club from the above transactions during the year ended September 30, 2012.

P4-2A Gil Vogel started his own consulting firm, Vogel Consulting, on June 1, 2012. The trial balance at June 30 is as follows.

## VOGEL CONSULTING

## Trial Balance

June 30, 2012

|  | Debit | Credit |
| :--- | ---: | ---: |
| Cash | $\$ 6,850$ |  |
| Accounts Receivable | 7,000 |  |
| Prepaid Insurance | 2,880 |  |
| Supplies | 2,000 |  |
| Equipment | 15,000 |  |
| Accounts Payable |  | $\$ 4,230$ |
| Unearned Service Revenue |  | 5,200 |
| Common Stock |  | 22,000 |
| Service Revenue |  | 8,300 |
| Salaries and Wages Expense | 4,000 |  |
| Rent Expense | $\underline{2,000}$ | $\underline{\$ 39,730}$ |
|  | $\underline{\$ 39,730}$ |  |

In addition to those accounts listed on the trial balance, the chart of accounts for Vogel also contains the following accounts: Accumulated Depreciation-Equipment, Utilities Payable, Salaries and Wages Payable, Depreciation Expense, Insurance Expense, Utilities Expense, and Supplies Expense.

Other data:

1. Supplies on hand at June 30 total $\$ 720$.
2. A utility bill for $\$ 180$ has not been recorded and will not be paid until next month.
3. The insurance policy is for a year.
4. $\$ 4,100$ of unearned service revenue has been earned at the end of the month.
5. Salaries of $\$ 1,250$ are accrued at June 30 .
6. The equipment has a 5 -year life with no salvage value and is being depreciated at $\$ 250$ per month for 60 months.
7. Invoices representing $\$ 3,900$ of services performed during the month have not been recorded as of June 30.

## Instructions

(a) Prepare the adjusting entries for the month of June.
(b) Post the adjusting entries to the ledger accounts. Enter the totals from the trial balance as beginning account balances. Use T accounts.
(c) Prepare an adjusted trial balance at June 30, 2012.

Prepare adjusting entries, post to ledger accounts, and prepare adjusted trial balance.

## (SO 4, 5, 6), AP



Prepare adjusting entries, adjusted trial balance, and financial statements.
(SO 4, 5, 6, 7), AP

| (c) Rent revenue | $\$ 11,500$ |
| :---: | ---: |
| Tot. adj. trial | $\$ 114,630$ |
| balance | $\$ 3,570$ |

Prepare adjusting entries and financial statements; identify accounts to be closed.

## (SO 4, 5, 6, 7), AP

GLS

P4-3A The Vang Hotel opened for business on May 1, 2012. Here is its trial balance before adjustment on May 31.

## VANG HOTEL

## Trial Balance

May 31, 2012

|  | Debit | Credit |
| :---: | :---: | :---: |
| Cash | \$ 2,500 |  |
| Prepaid Insurance | 1,800 |  |
| Supplies | 2,600 |  |
| Land | 15,000 |  |
| Buildings | 70,000 |  |
| Equipment | 16,800 |  |
| Accounts Payable |  | \$ 4,700 |
| Unearned Rent Revenue |  | 3,300 |
| Mortgage Payable |  | 36,000 |
| Common Stock |  | 60,000 |
| Rent Revenue |  | 9,000 |
| Salaries and Wages Expense | 3,000 |  |
| Utilities Expense | 800 |  |
| Advertising Expense | 500 |  |
|  | \$113,000 | \$113,000 |

Other data:

1. Insurance expires at the rate of $\$ 450$ per month.
2. A count of supplies shows $\$ 1,050$ of unused supplies on May 31.
3. Annual depreciation is $\$ 3,600$ on the building and $\$ 3,000$ on equipment.
4. The mortgage interest rate is $6 \%$. (The mortgage was taken out on May 1.)
5. Unearned rent of $\$ 2,500$ has been earned.
6. Salaries of $\$ 900$ are accrued and unpaid at May 31.

## Instructions

(a) Journalize the adjusting entries on May 31.
(b) Prepare a ledger using T accounts. Enter the trial balance amounts and post the adjusting entries.
(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 classified balance sheet at May 31.
(e) Identify which accounts should be closed on May 31.

P4-4A Rolling Hills Golf Inc. was organized on July 1, 2012. Quarterly financial statements are prepared. The trial balance and adjusted trial balance on September 30 are shown here.

ROLLING HILLS GOLF INC.
Trial Balance
September 30, 2012

| Cash | \$ 6,700 |  |  |
| :---: | :---: | :---: | :---: |
| Accounts Receivable | 400 |  |  |
| Prepaid Rent | 1,800 |  |  |
| Supplies | 1,200 |  |  |
| Equipment | 15,000 |  |  |
| Accumulated Depreciation-Equipment |  |  | 350 |
| Notes Payable |  | \$ 5,000 | 5,000 |
| Accounts Payable |  | 1,070 | 1,070 |
| Salaries and Wages Payable |  |  | 600 |
| Interest Payable |  |  | 50 |
| Unearned Rent Revenue |  | 1,000 | 800 |
| Common Stock |  | 14,000 | 4,000 |
| Retained Earnings |  | 0 | 0 |
| Dividends | 600 |  |  |

Service Revenue
Rent Revenue
Salaries and Wages Expense
Rent Expense
Depreciation Expense
Supplies Expense
Utilities Expense
Interest Expense

| Unadjusted |  | Adjusted |  |
| :---: | :---: | :---: | :---: |
| Dr. | Cr. | Dr. | Cr. |
|  | 14,100 |  | 14,700 |
|  | 700 |  | 900 |
| 8,800 |  | 9,400 |  |
| 900 |  | 1,800 |  |
|  |  | 350 |  |
|  |  | 1,020 |  |
| 470 |  | 470 |  |
|  |  | 50 |  |
| \$35,870 | \$35,870 | \$37,470 | \$37,470 |

## Instructions

(a) Journalize the adjusting entries that were made.
(b) Prepare an income statement and a retained earnings statement for the 3 months ending September 30 and a classified balance sheet at September 30.
(c) Identify which accounts should be closed on September 30.
(d) If the note bears interest at $12 \%$, how many months has it been outstanding?

P4-5A A review of the ledger of Terrell Company at December 31, 2012, produces these data pertaining to the preparation of annual adjusting entries.

1. Prepaid Insurance $\$ 15,200$. The company has separate insurance policies on its buildings and its motor vehicles. Policy B4564 on the building was purchased on July 1, 2011, for $\$ 9,600$. The policy has a term of 3 years. Policy A2958 on the vehicles was purchased on January 1, 2012, for $\$ 7,200$. This policy has a term of 18 months.
2. Unearned Sales Revenue $\$ 22,800$ : The company began selling magazine subscriptions on October 1, 2012, on an annual basis. The selling price of a subscription is $\$ 24$. A review of subscription contracts reveals the following.

| Subscription Start Date |  | Number of Subscriptions |
| :---: | :---: | :---: |
| October 1 |  | 250 |
| November 1 | 300 |  |
| December 1 | $\underline{400}$ |  |
|  | 950 |  |

3. Notes Payable, $\$ 40,000$ : This balance consists of a note for 6 months at an annual interest rate of $7 \%$, dated October 1.
4. Salaries Payable $\$ 0$ : There are eight salaried employees. Salaries are paid every Friday for the current week. Five employees receive a salary of $\$ 600$ each per week, and three employees earn $\$ 700$ each per week. Assume December 31 is a Wednesday. Employees do not work weekends. All employees worked the last 3 days of December.

## Instructions

Prepare the adjusting entries at December 31, 2012.
P4-6A Open Road Travel Court was organized on July 1, 2011, by Tiffany Lampkins. Tiffany is a good manager but a poor accountant. From the trial balance prepared by a part-time bookkeeper, Tiffany prepared the following income statement for her fourth quarter, which ended June 30, 2012.

Prepare adjusting entries. (SO 4, 5), AP

Prepare adjusting entries and a corrected income statement.
(SO 4, 5), AN

## OPEN ROAD TRAVEL COURT <br> Income Statement <br> For the Quarter Ended June 30, 2012

| Revenues <br> Rent revenues <br> Operating expenses |  | $\$ 212,000$ |
| :--- | ---: | ---: |
| $\quad$ Advertising | $\$ 3,800$ |  |
| Salaries and wages | 80,500 |  |
| Utilities | 900 |  |
| Depreciation | 2,700 |  |
| Maintenance and repairs | 4,300 |  |
| $\quad$Total operating expenses |  | $\underline{\underline{9119,800}}$ |
| Net income |  |  |

(b) Net income
\$33,285

Tiffany suspected that something was wrong with the statement because net income had never exceeded $\$ 30,000$ in any one quarter. Knowing that you are an experienced accountant, she asks you to review the income statement and other data.

You first look at the trial balance. In addition to the account balances reported above in the income statement, the trial balance contains the following additional selected balances at June 30, 2012.

| Supplies | $\$ 8,200$ |
| :--- | ---: |
| Prepaid Insurance | 14,400 |
| Note Payable | 14,000 |

You then make inquiries and discover the following.

1. Travel court rental revenues include advanced rental payments received for summer occupancy, in the amount of $\$ 57,000$.
2. There were $\$ 1,800$ of supplies on hand at June 30 .
3. Prepaid insurance resulted from the payment of a one-year policy on April 1, 2012.
4. The mail in July 2012 brought the following bills: advertising for the week of June 24, $\$ 110$; repairs made June 18, \$4,450; and utilities for the month of June, $\$ 215$.
5. There are three employees who receive wages that total $\$ 300$ per day. At June 30, four days' wages have been incurred but not paid.
6. The note payable is a $6 \%$ note dated May 1, 2012, and due on July 31, 2012.
7. Income tax of $\$ 13,400$ for the quarter is due in July but has not yet been recorded.

## Instructions

(a) Prepare any adjusting journal entries required at June 30, 2012.
(b) Prepare a correct income statement for the quarter ended June 30, 2012.
(c) Explain to Tiffany the generally accepted accounting principles that she did not recognize in preparing her income statement and their effect on her results.
Journalize transactions and follow through accounting cycle to preparation of financial statements. (SO 4, 5, 6), AP

P4-7A On November 1, 2012, the following were the account balances of Tate Equipment Repair.

|  | Debits |  | Credits |
| :--- | ---: | :--- | ---: |
|  | $\$ 2,790$ | Accumulated Depreciation-Equipment | $\$ 500$ |
| Cash | 2,910 | Accounts Payable | 2,300 |
| Accounts Receivable | 1,120 | Unearned Service Revenue | 400 |
| Supplies | 10,000 | Salaries and Wages Payable | 620 |
| Equipment |  | Common Stock | 10,000 |
|  |  | Retained Earnings | 3,000 |
|  | $\underline{\$ 16,820}$ |  | $\underline{\$ 16,820}$ |

During November, the following summary transactions were completed.
Nov. 8 Paid $\$ 1,220$ for salaries due employees, of which $\$ 600$ is for November and $\$ 620$ is for October salaries payable.
10 Received $\$ 1,800$ cash from customers in payment of account.
12 Received $\$ 1,700$ cash for services performed in November.
15 Purchased store equipment on account \$3,600.
17 Purchased supplies on account $\$ 1,300$.
20 Paid creditors $\$ 2,500$ of accounts payable due.
22 Paid November rent $\$ 480$.
25 Paid salaries $\$ 1,000$.
27 Performed services on account and billed customers for services provided $\$ 900$.
29 Received $\$ 750$ from customers for services to be provided in the future.
Adjustment data:

1. Supplies on hand are valued at $\$ 1,100$.
2. Accrued salaries payable are $\$ 480$.
3. Depreciation for the month is $\$ 250$.
4. Unearned service revenue of $\$ 500$ is earned.

## Instructions

(a) Enter the November 1 balances in the ledger accounts. (Use T accounts.)
(b) Journalize the November transactions.
(c) Post to the ledger accounts. Use Service Revenue, Depreciation Expense, Supplies Expense, Salaries and Wages Expense, and Rent Expense.
(d) Prepare a trial balance at November 30.
(e) Journalize and post adjusting entries.
(f) Prepare an adjusted trial balance.
(g) Prepare an income statement and a retained earnings statement for November and a classified balance sheet at November 30.

P4-8A Dana La Fontsee opened Pro Window Washing Inc. on July 1, 2012. During July the following transactions were completed.

July 1 Issued 12,000 shares of common stock for $\$ 12,000$ cash.
1 Purchased used truck for $\$ 8,000$, paying $\$ 2,000$ cash and the balance on account.
3 Purchased cleaning supplies for $\$ 900$ on account.
5 Paid $\$ 1,800$ cash on 1-year insurance policy effective July 1.
12 Billed customers \$3,700 for cleaning services.
18 Paid \$1,000 cash on amount owed on truck and \$500 on amount owed on cleaning supplies.
20 Paid \$2,000 cash for employee salaries.
21 Collected \$1,600 cash from customers billed on July 12.
25 Billed customers $\$ 2,500$ for cleaning services.
31 Paid $\$ 290$ for maintenance of the truck during month.
31 Declared and paid $\$ 600$ cash dividend.
The chart of accounts for Pro Window Washing contains the following accounts: Cash, Accounts Receivable, Supplies, Prepaid Insurance, Equipment, Accumulated DepreciationEquipment, Accounts Payable, Salaries and Wages Payable, Common Stock, Retained Earnings, Dividends, Income Summary, Service Revenue, Maintenance and Repairs Expense, Supplies Expense, Depreciation Expense, Insurance Expense, Salaries and Wages Expense.

## Instructions

(a) Journalize the July transactions.
(b) Post to the ledger accounts. (Use T accounts.)
(c) Prepare a trial balance at July 31.
(d) Journalize the following adjustments.
(1) Services provided but unbilled and uncollected at July 31 were $\$ 1,700$.
(2) Depreciation on equipment for the month was $\$ 180$.
(3) One-twelfth of the insurance expired.
(4) An inventory count shows $\$ 320$ of cleaning supplies on hand at July 31.
(5) Accrued but unpaid employee salaries were $\$ 400$.
(e) Post adjusting entries to the T accounts.
(f) Prepare an adjusted trial balance.
(g) Prepare the income statement and a retained earnings statement for July and a classified balance sheet at July 31.
(h) Journalize and post closing entries and complete the closing process.
(i) Prepare a post-closing trial balance at July 31.

## Problems: Set B

P4-1B The following data are taken from the comparative balance sheets of Glenview Club, which prepares its financial statements using the accrual basis of accounting.

| December 31 | 2012 | 2011 |
| :---: | :---: | :---: |
| Accounts receivable for member fees | \$12,000 | \$18,000 |
| Unearned service revenue | 17,000 | 11,000 |

Fees are billed to members based upon their use of the club's facilities. Unearned service revenues arise from the sale of gift certificates, which members can apply to their future

| (f) Cash | $\$ 5,410$ |
| :--- | ---: |
| (g) Tot. assets | $\$ 21,500$ |


| (f) Cash | $\$ 1,840$ |
| :--- | ---: |
| Tot. adj. trial | $\$ 22,680$ |
| $\quad$ balance | $\$ 1,030$ |

Complete all steps in accounting cycle.
(SO 4, 5, 6, 7, 8), AP
GLS
(g) Tot. assets

Record transactions on accrual basis; convert revenue to cash receipts. (SO 2, 4, 9), AP
(b) Cash
received
\$184,000

Prepare adjusting entries, post to ledger accounts, and prepare an adjusted trial balance.
(SO 4, 5, 6), AP
GLS

use of club facilities. The 2012 income statement for the club showed that service revenue of $\$ 172,000$ was earned during the year.

## Instructions

(Hint: You will find it helpful to use T accounts to analyze these data.)
(a) Prepare journal entries for each of the following events that took place during 2012.

1. Fees receivable from 2011 were all collected during 2012.
2. Gift certificates outstanding at the end of 2011 were all redeemed during 2012.
3. An additional $\$ 40,000$ worth of gift certificates were sold during 2012; a portion of these were used by the recipients during the year; the remainder were still outstanding at the end of 2012.
4. Fees for 2012 were billed to members.
5. Fees receivable for 2012 (i.e., those billed in item (4) above) were partially collected.
(b) Determine the amount of cash received by the club with respect to fees during 2012.

P4-2B Pamela Quinn started her own consulting firm, Quinn Consulting, on May 1, 2012. The trial balance at May 31 is as shown below.

## QUINN CONSULTING

## Trial Balance

 May 31, 2012|  | Debit | Credit |
| :--- | ---: | ---: |
| Cash | $\$ 7,500$ |  |
| Accounts Receivable | 3,000 |  |
| Prepaid Insurance | 3,600 |  |
| Supplies | 12,500 |  |
| Equipment |  | $\$ 3,500$ |
| Accounts Payable | 4,000 |  |
| Unearned Service Revenue |  | 19,100 |
| Common Stock |  | 7,500 |
| Service Revenue | $\underline{1,000}$ |  |
| Salaries and Wages Expense | $\underline{\$ 34,100}$ | $\underline{\$ 34,100}$ |
| Rent Expense |  |  |

In addition to those accounts listed on the trial balance, the chart of accounts for Quinn Consulting also contains the following accounts: Accumulated Depreciation-Equipment, Salaries and Wages Payable, Depreciation Expense, Insurance Expense, Utilities Expense, and Supplies Expense.
Other data:

1. $\$ 750$ of supplies have been used during the month.
2. Utility costs incurred but not paid are $\$ 260$.
3. The insurance policy is for 2 years.
4. $\$ 1,500$ of the balance in the Unearned Service Revenue account remains unearned at the end of the month.
5. Assume May 31 is a Thursday and employees are paid on Fridays. Quinn Consulting has two employees that are paid $\$ 600$ each for a 5 -day work week.
6. The equipment has a 5 -year life with no salvage value and is being depreciated at $\$ 200$ per month for 60 months.
7. Invoices representing $\$ 1,980$ of services performed during the month have not been recorded as of May 31.

## Instructions

(a) Prepare the adjusting entries for the month of May.
(b) Post the adjusting entries to the ledger accounts. Enter the totals from the trial balance as beginning account balances. Use T accounts.
(c) Prepare an adjusted trial balance at May 31, 2012.

P4-3B Maquoketa Valley Resort opened for business on June 1 with eight air-conditioned units. Its trial balance before adjustment on August 31 is presented here.

## MAQUOKETA VALLEY RESORT <br> Trial Balance

August 31, 2012

|  | Debit | Credit |
| :---: | :---: | :---: |
| Cash | \$ 24,600 |  |
| Prepaid Insurance | 5,400 |  |
| Supplies | 4,300 |  |
| Land | 40,000 |  |
| Buildings | 132,000 |  |
| Equipment | 36,000 |  |
| Accounts Payable |  | \$ 6,500 |
| Unearned Rent Revenue |  | 6,800 |
| Mortgage Payable |  | 120,000 |
| Common Stock |  | 100,000 |
| Dividends | 5,000 |  |
| Rent Revenue |  | 80,000 |
| Salaries and Wages Expense | 53,000 |  |
| Utilities Expense | 9,400 |  |
| Maintenance and Repairs Expense | 3,600 |  |
|  | \$313,300 | \$313,300 |

Other data

1. Insurance expires at the rate of $\$ 450$ per month.
2. A count of supplies on August 31 shows $\$ 700$ of supplies on hand.
3. Annual depreciation is $\$ 6,600$ on buildings and $\$ 4,000$ on equipment.
4. Unearned rent of $\$ 5,000$ was earned prior to August 31.
5. Salaries of $\$ 600$ were unpaid at August 31.
6. Rentals of $\$ 1,600$ were due from tenants at August 31. (Use Accounts Receivable.)
7. The mortgage interest rate is $9 \%$ per year. (The mortgage was taken out August 1.)

## Instructions

(a) Journalize the adjusting entries on August 31 for the 3-month period June 1-August 31.
(b) Prepare a ledger using T accounts. Enter the trial balance amounts and post the adjusting entries.
(c) Prepare an adjusted trial balance on August 31.
(d) Prepare an income statement and a retained earnings statement for the 3 months ended August 31 and a classified balance sheet as of August 31.
(e) Identify which accounts should be closed on August 31

P4-4B Vedula Advertising Agency was founded by Murali Vedula in January 2007. Presented here are both the adjusted and unadjusted trial balances as of December 31, 2012.

## VEDULA ADVERTISING AGENCY <br> Trial Balance <br> December 31, 2012

Prepare adjusting entries, adjusted trial balance, and financial statements.
(SO 4, 5, 6, 7), AP

## GLS

| (c) Tot. adj. trial |  |
| :---: | ---: |
| balance | $\$ 319,050$ |
| (d) Net income | $\$ 11,500$ |

Prepare adjusting entries and financial statements; identify accounts to be closed.

Cash
Accounts Receivable
Supplies
Prepaid Insurance
Equipment
Accumulated Depreciation-
Equipment
Notes Payable
Accounts Payable
Interest Payable

| Unadjusted |  |
| :---: | :---: |
| Dr. | Cr. |
| $\$ 11,000$ |  |
| 16,000 |  |
| 9,400 |  |
| 3,350 |  |
| 60,000 |  |


| Adjusted |  |
| :---: | :---: |
| Dr. | Cr. |
| $\$ 11,000$ |  |
| 19,500 |  |
| 6,500 |  |
| 1,790 |  |
| 60,000 |  |


|  | Unadjusted |  | Adjusted |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Dr. | Cr. | Dr. | Cr. |
| Unearned Service Revenue |  | 5,000 |  | 3,100 |
| Salaries and Wages Payable |  | 0 |  | 820 |
| Common Stock |  | 20,000 |  | 20,000 |
| Retained Earnings |  | 5,500 |  | 5,500 |
| Dividends | 10,000 |  | 10,000 |  |
| Service Revenue |  | 57,600 |  | 63,000 |
| Salaries and Wages Expense | 9,000 |  | 9,820 |  |
| Insurance Expense |  |  | 1,560 |  |
| Interest Expense |  |  | 560 |  |
| Depreciation Expense |  |  | 5,000 |  |
| Supplies Expense |  |  | 2,900 |  |
| Rent Expense | 4,350 |  | 4,350 |  |
|  | \$123,100 | \$123,100 | \$132,980 | \$132,980 |

## Instructions

(b) Net income $\quad \$ 38,810$ Tot. assets

Prepare adjusting entries. (SO 4, 5), AP
(a) Journalize the annual adjusting entries that were made.
(b) Prepare an income statement and a retained earnings statement for the year ended December 31, and a classified balance sheet at December 31.
(c) Identify which accounts should be closed on December 31.
(d) If the note has been outstanding 10 months, what is the annual interest rate on that note?
(e) If the company paid $\$ 10,500$ in salaries in 2012, what was the balance in Salaries and Wages Payable on December 31, 2011?

P4-5B A review of the ledger of Felipe Company at December 31, 2012, produces the following data pertaining to the preparation of annual adjusting entries.

1. Salaries and Wages Payable $\$ 0$ : There are eight salaried employees. Salaries are paid every Friday for the current week. Six employees receive a salary of $\$ 800$ each per week, and two employees earn $\$ 600$ each per week. Assume December 31 is a Tuesday. Employees do not work weekends. All employees worked the last 2 days of December.
2. Unearned Rent Revenue $\$ 300,000$ : The company began subleasing office space in its new building on November 1. Each tenant is required to make a $\$ 5,000$ security deposit that is not refundable until occupancy is terminated. At December 31 the company had the following rental contracts that are paid in full for the entire term of the lease.
$\left.\begin{array}{lcccc}\text { Date } & \begin{array}{c}\text { Term } \\ \text { (in months) }\end{array} & & \begin{array}{c}\text { Monthly } \\ \text { Rent }\end{array} & \end{array} \begin{array}{c}\text { Number } \\ \text { of Leases }\end{array}\right]$
3. Prepaid Advertising $\$ 13,200$ : This balance consists of payments on two advertising contracts. The contracts provide for monthly advertising in two trade magazines. The terms of the contracts are as follows.

| Contract | Date |  | Amount <br> A650 |
| :---: | :---: | :---: | :---: |
|  | May 1 |  | Number of <br> Magazine <br> Issues |
| Sept. 1 | 7,000 |  | 12 |
| 7,200 |  | 18 |  |

The first advertisement runs in the month in which the contract is signed.
4. Notes Payable $\$ 80,000$ : This balance consists of a note for 1 year at an annual interest rate of $8 \%$, dated April 1, 2012.

## Instructions

Prepare the adjusting entries at December 31, 2012. Show all computations.

P4-6B The Fly Right Travel Agency was organized on January 1, 2010, by Joe Kirkpatrick. Joe is a good manager but a poor accountant. From the trial balance prepared by a parttime bookkeeper, Joe prepared the following income statement for the quarter that ended March 31, 2012.

## FLY RIGHT TRAVEL AGENCY

 Income Statement
## For the Quarter Ended March 31, 2012

| Revenues |  |  |
| :--- | ---: | ---: |
| $\quad$ Service revenue |  | $\$ 50,000$ |
| Operating expenses | $\$ 2,600$ |  |
| $\quad$ Advertising | 400 |  |
| $\quad$ Depreciation | 1,500 |  |
| Income tax | 11,000 |  |
| Salaries and wages | 400 | $\underline{15,900}$ |
| $\quad$ Utilities |  | $\underline{\$ 34,100}$ |

Joe knew that something was wrong with the statement because net income had never exceeded $\$ 8,000$ in any one quarter. Knowing that you are an experienced accountant, he asks you to review the income statement and other data.

You first look at the trial balance. In addition to the account balances reported above in the income statement, the trial balance contains the following additional selected balances at March 31, 2012.

| Supplies | $\$ 2,900$ |
| :--- | ---: |
| Prepaid insurance | 3,360 |
| Notes payable | 12,000 |

You then make inquiries and discover the following:

1. Travel service revenue includes advance payments for cruises, $\$ 20,000$.
2. There were $\$ 800$ of supplies on hand at March 31 .
3. Prepaid insurance resulted from the payment of a one-year policy on January 1, 2012.
4. The mail on April 1, 2012, brought the utility bill for the month of March's heat, light, and power, $\$ 210$.
5. There are two employees who receive salaries of $\$ 80$ each per day. At March 31, four days' salaries have been incurred but not paid.
6. The note payable is a 6-month, $7 \%$ note dated January 1, 2012.

## Instructions

(a) Prepare any adjusting journal entries required at March 31, 2012.
(b) Prepare a correct income statement for the quarter ended March 31, 2012.
(c) Explain to Joe the generally accepted accounting principles that he did not recognize in preparing his income statement and their effect on his results.
P4-7B On September 1, 2012, the following were the account balances of Worthington Equipment Repair.

|  | Debits |  | Credits |
| :---: | :---: | :---: | :---: |
| Cash | \$ 4,880 | Accumulated Depreciation-Equipment | \$ 1,600 |
| Accounts Receivable | 3,420 | Accounts Payable | 3,100 |
| Supplies | 800 | Unearned Service Revenue | 400 |
| Equipment | 15,000 | Salaries and Wages Payable | 700 |
|  |  | Common Stock | 10,000 |
|  |  | Retained Earnings | 8,300 |
|  | \$24,100 |  | \$24,100 |

During September, the following summary transactions were completed.
Sept. 8 Paid $\$ 1,100$ for salaries due employees, of which $\$ 400$ is for September and $\$ 700$ is for August salaries payable.
10 Received $\$ 1,500$ cash from customers in payment of account.
12 Received $\$ 3,400$ cash for services performed in September.
15 Purchased store equipment on account \$3,000.

Prepare adjusting entries and a corrected income statement.
(SO 4, 5), AN

-
(f) Tot. adj. trial
balance
(g) Tot. assets
\$30,590

Complete all steps in accounting cycle.
(SO 4, 5, 6, 7, 8), AP

[^2]Sept. 17 Purchased supplies on account \$2,000.
20 Paid creditors $\$ 4,500$ of accounts payable due.
22 Paid September rent \$520.
25 Paid salaries \$1,200.
27 Performed services on account and billed customers for services provided \$2,040.
29 Received $\$ 650$ from customers for services to be provided in the future.
Adjustment data:

1. Supplies on hand $\$ 1,100$.
2. Accrued salaries payable $\$ 400$.
3. Depreciation $\$ 200$ per month.
4. Unearned service revenue of $\$ 280$ earned.

## Instructions

(a) Enter the September 1 balances in the ledger T accounts.
(b) Journalize the September transactions.
(c) Post to the ledger T accounts. Use Service Revenue, Depreciation Expense, Supplies Expense, Salaries and Wages Expense, and Rent Expense.
(d) Prepare a trial balance at September 30.
(e) Journalize and post adjusting entries.
(f) Prepare an adjusted trial balance.
(g) Prepare an income statement and a retained earnings statement for September and a classified balance sheet at September 30.

P4-8B Gina Balistrieri opened Genie Cleaners on March 1, 2012. During March, the following transactions were completed.

Mar. 1 Issued 10,000 shares of common stock for $\$ 15,000$ cash.
1 Purchased used truck for $\$ 8,000$, paying $\$ 3,000$ cash and the balance on account.
Purchased cleaning supplies for $\$ 1,500$ on account.
5 Paid $\$ 2,400$ cash on a 6-month insurance policy effective March 1.
14 Billed customers \$3,700 for cleaning services.
18 Paid \$1,500 cash on amount owed on truck and \$500 on amount owed on cleaning supplies.
Paid $\$ 1,750$ cash for employee salaries.
Collected \$1,600 cash from customers billed on March 14. Billed customers $\$ 4,200$ for cleaning services.
Paid \$350 for gas and oil used in truck during month (use Maintenance and Repairs Expense).
31 Declared and paid a $\$ 900$ cash dividend.
The chart of accounts for Genie Cleaners contains the following accounts: Cash, Accounts Receivable, Supplies, Prepaid Insurance, Equipment, Accumulated Depreciation-Equipment, Accounts Payable, Salaries and Wages Payable, Common Stock, Retained Earnings, Dividends, Income Summary, Service Revenue, Maintenance and Repairs Expense, Supplies Expense, Depreciation Expense, Insurance Expense, Salaries and Wages Expense.

## Instructions

(a) Journalize the March transactions.
(b) Post to the ledger accounts. (Use T accounts.)
(c) Prepare a trial balance at March 31.
(d) Journalize the following adjustments.

1. Earned but unbilled revenue at March 31 was $\$ 200$.
2. Depreciation on equipment for the month was $\$ 250$.
3. One-sixth of the insurance expired.
4. An inventory count shows $\$ 280$ of cleaning supplies on hand at March 31.
5. Accrued but unpaid employee salaries were $\$ 1,080$.
(e) Post adjusting entries to the T accounts.
(f) Prepare an adjusted trial balance.
(g) Prepare the income statement and a retained earnings statement for March and a classified balance sheet at March 31.
(h) Journalize and post closing entries and complete the closing process.
(i) Prepare a post-closing trial balance at March 31.

## Problems: Set C

Visit the book's companion website, at www.wiley.com/college/kimmel, and choose the Student Companion site to access Problem Set C.

## Continuing Cookie Chronicle

(Note: This is a continuation of the Cookie Chronicle from Chapters 1 through 3.)
CCC4 Cookie Creations is gearing up for the winter holiday season. During the month of December 2011, the following transactions occur.
Dec. 1 Natalie hires an assistant at an hourly wage of $\$ 8$ to help with cookie making and some administrative duties.
5 Natalie teaches the class that was booked on November 25. The balance outstanding is received.
8 Cookie Creations receives a check for the amount due from the neighborhood school for the class given on November 30.
9 Cookie Creations receives $\$ 750$ in advance from the local school board for five classes that the company will give during December and January.
15 Pays the cell phone invoice outstanding at November 30.
16 Issues a check to Natalie's brother for the amount owed for the design of the website.
19 Receives a deposit of $\$ 60$ on a cookie class scheduled for early January.
23 Additional revenue earned during the month for cookie-making classes amounts to $\$ 4,000$. (Natalie has not had time to account for each class individually.) $\$ 3,000$ in cash has been collected and $\$ 1,000$ is still outstanding. (This is in addition to the December 5 and December 9 transactions.)
23 Additional baking supplies purchased during the month for sugar, flour, and chocolate chips amount to $\$ 1,250$ cash.
23 Issues a check to Natalie's assistant for $\$ 800$. Her assistant worked approximately 100 hours from the time in which she was hired until December 23.
28 Pays a dividend of $\$ 500$ to the common shareholder (Natalie).
As of December 31, Cookie Creations' year-end, the following adjusting entry data are provided.

1. A count reveals that $\$ 45$ of brochures and posters were used.
2. Depreciation is recorded on the baking equipment purchased in November. The baking equipment has a useful life of 5 years. Assume that 2 months' worth of depreciation is required.
3. Amortization (which is similar to depreciation) is recorded on the website. (Credit the Website account directly for the amount of the amortization.) The website is amortized over a useful life of 2 years and was available for use on December 1.
4. Interest on the note payable is accrued. (Assume that 1.5 months of interest accrued during November and December.) Round to nearest dollar.
5. One month's worth of insurance has expired.
6. Natalie is unexpectedly telephoned on December 28 to give a cookie class at the neighborhood community center on December 31. In early January Cookie Creations sends an invoice for $\$ 450$ to the community center.
7. A count reveals that $\$ 1,025$ of baking supplies were used.
8. A cell phone invoice is received for $\$ 75$. The invoice is for services provided during the month of December and is due on January 15.
9. Because the cookie-making class occurred unexpectedly on December 28 and is for such a large group of children, Natalie's assistant helps out. Her assistant worked 7 hours at a rate of $\$ 8$ per hour.
10. An analysis of the unearned revenue account reveals that two of the five classes paid for by the local school board on December 9 still have not been taught by the end of December. The $\$ 60$ deposit received on December 19 for another class also remains unearned.

## Instructions

Using the information that you have gathered and the general ledger accounts that you have prepared through Chapter 3, plus the new information above, do the following.
(a) Journalize the above transactions.
(b) Post the December transactions. (Use the general ledger accounts prepared in Chapter 3.)
(c) Totals
(c) Prepare a trial balance at December 31, 2011
(d) Prepare and post adjusting journal entries for the month of December.
(e) Totals
\$8,804
(e) Prepare an adjusted trial balance as of December 31, 2011.
(f) Net income
(f) Prepare an income statement and a retained earnings statement for the 2-month period ending December 31, 2011, and a classified balance sheet as of December 31, 2011.
(g) Prepare and post closing entries as of December 31, 2011.
(h) Totals
\$6,065
(h) Prepare a post-closing trial balance.

## broadening your perspective

## Financial Reporting and Analysis

## FINANCIAL REPORTING PROBLEM: Tootsie Roll Industries, Inc.

BYP4-1 The financial statements of Tootsie Roll are presented in Appendix A at the end of this book.

## Instructions

(a) Using the consolidated income statement and balance sheet, identify items that may result in adjusting entries for deferrals.
(b) Using the consolidated income statement, identify two items that may result in adjusting entries for accruals.
(c) What was the amount of depreciation expense for 2009 and 2008? (You will need to examine the notes to the financial statements or the statement of cash flows.) Where was accumulated depreciation reported?
(d) What was the cash paid for income taxes during 2009, reported at the bottom of the consolidated statement of cash flows? What was income tax expense (provision for income taxes) for 2009?

## COMPARATIVE ANALYSIS PROBLEM: Tootsie Roll vs. Hershey

BYP4-2 The financial statements of The Hershey Company are presented in Appendix B, following the financial statements for Tootsie Roll in Appendix A.

## Instructions

(a) Identify two accounts on Hershey's balance sheet that provide evidence that Hershey uses accrual accounting. In each case, identify the income statement account that would be affected by the adjustment process.
(b) Identify two accounts on Tootsie Roll's balance sheet that provide evidence that Tootsie Roll uses accrual accounting (different from the two you listed for Hershey). In each case, identify the income statement account that would be affected by the adjustment process.

## RESEARCH CASE

BYP4-3 The February 13, 2010, issue of the Wall Street Journal includes an article by Scott Thurm entitled "For Some Firms, a Case of 'Quadrophobia'."

## Instructions

Read the article and answer the following.
(a) What method did the study's authors use to determine that companies were "managing" their earnings per share calculation?
(b) For the average company in the study, how much would the company have to boost earnings in order to increase earnings per share by $1 / 10$ of a cent?
(c) What examples did the authors cite of accounting adjustments that companies can make to boost net income enough that they can round up to the next highest cent? Why aren't these methods of adjustment considered illegal?
(d) What is an earnings restatement? What relationship did the authors identify about companies that restate earnings?
(e) What incentive do companies have to round up their earnings per share to the next highest cent?

## INTERPRETING FINANCIAL STATEMENTS

BYP4-4 Laser Recording Systems, founded in 1981, produces disks for use in the home market. The following is an excerpt from Laser Recording Systems' financial statements (all dollars in thousands).

## LASER RECORDING SYSTEMS

Management Discussion


#### Abstract

Accrued liabilities increased to $\$ 1,642$ at January 31, from $\$ 138$ at the end of the previous fiscal year. Compensation and related accruals increased $\$ 195$ due primarily to increases in accruals for severance, vacation, commissions, and relocation expenses Accrued professional services increased by $\$ 137$ primarily as a result of legal expenses related to several outstanding contractual disputes. Other expenses increased $\$ 35$, of which $\$ 18$ was for interest payable.


## Instructions

(a) Can you tell from the discussion whether Laser Recording Systems has prepaid its legal expenses and is now making an adjustment to the asset account Prepaid Legal Expenses, or whether the company is handling the legal expense via an accrued expense adjustment?
(b) Identify each of the adjustments Laser Recording Systems is discussing as one of the four types of possible adjustments discussed in the chapter. How is net income ultimately affected by each of the adjustments?
(c) What journal entry did Laser Recording make to record the accrued interest?

FINANCIAL ANALYSIS ON THE WEB
BYP4-5 Purpose: To learn about the functions of the Securities and Exchange Commission (SEC).
Address: www.sec.gov/about/whatwedo.shtml, or go to www.wiley.com/college/kimmel

## Instructions

Use the information in this site to answer the following questions
(a) What event spurred the creation of the SEC? Why was the SEC created?
(b) What are the four divisions of the SEC? Briefly describe the purpose of each.
(c) What are the responsibilities of the chief accountant?

## Critical Thinking

## DECISION MAKING ACROSS THE ORGANIZATION

BYP4-6 Council Bluff Park was organized on April 1, 2011, by Lori Delzer. Lori is a good manager but a poor accountant. From the trial balance prepared by a part-time bookkeeper, Lori prepared the following income statement for the quarter that ended March 31, 2012.

## COUNCIL BLUFF PARK <br> Income Statement <br> For the Ouarter Ended March 31, 2012

Revenues

| Rental revenues |  | $\$ 83,000$ |
| :--- | ---: | ---: |
| Operating expenses | $\$ 4,200$ |  |
| Advertising | 27,600 |  |
| Wages | 1,500 |  |
| Utilities | 800 |  |
| Depreciation | 2,800 |  |
| Repairs |  | $\underline{36,900}$ |
| $\quad$ Total operating expenses |  | $\$ 46,100$ |

Lori knew that something was wrong with the statement because net income had never exceeded $\$ 20,000$ in any one quarter. Knowing that you are an experienced accountant, she asks you to review the income statement and other data.

You first look at the trial balance. In addition to the account balances reported in the income statement, the ledger contains these selected balances at March 31, 2012.

| Supplies | $\$ 4,500$ |
| :--- | ---: |
| Prepaid Insurance | 7,200 |
| Notes Payable | 20,000 |

You then make inquiries and discover the following.

1. Rental revenues include advanced rentals for summer-month occupancy, $\$ 21,000$.
2. There were $\$ 600$ of supplies on hand at March 31 .
3. Prepaid insurance resulted from the payment of a 1-year policy on January 1, 2012.
4. The mail on April 1, 2012, brought the following bills: advertising for week of March 24, \$110; repairs made March 10, $\$ 1,040$; and utilities $\$ 240$.
5. There are four employees who receive wages totaling $\$ 290$ per day. At March 31, 3 days' wages have been incurred but not paid.
6. The note payable is a 3-month, 7\% note dated January 1, 2012.

## Instructions

With the class divided into groups, answer the following.
(a) Prepare a correct income statement for the quarter ended March 31, 2012.
(b) Explain to Lori the generally accepted accounting principles that she did not follow in preparing her income statement and their effect on her results.

## COMMUNICATION ACTIVITY

BYP4-7 On numerous occasions, proposals have surfaced to put the federal government on the accrual basis of accounting. This is no small issue because if this basis were used, it would mean that billions in unrecorded liabilities would have to be booked and the federal deficit would increase substantially.

## Instructions

(a) What is the difference between accrual-basis accounting and cash-basis accounting?
(b) Comment on why politicians prefer a cash-basis accounting system over an accrual-basis system.
(c) Write a letter to your senators explaining why you think the federal government should adopt the accrual basis of accounting.

## ETHICS CASE

BYP4-8 Prism Company is a pesticide manufacturer. Its sales declined greatly this year due to the passage of legislation outlawing the sale of several of Prism's chemical pesticides. During the coming year, Prism will have environmentally safe and competitive replacement chemicals to replace these discontinued products. Sales in the next year are expected to greatly exceed those of any prior year. Therefore, the decline in this year's sales and profits appears to be a one-year aberration.

Even so, the company president believes that a large dip in the current year's profits could cause a significant drop in the market price of Prism's stock and make it a takeover target. To avoid this possibility, he urges Brad Ellis, controller, in making this period's year-end adjusting entries to accrue every possible revenue and to defer as many expenses as possible. The president says to Brad, "We need the revenues this year, and next year we can easily absorb expenses deferred from this year. We can't let our stock price be hammered down!" Brad 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. Brad 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 the president's request and Brad's dating the adjusting entries December 31?
(c) Can Brad accrue revenues and defer expenses and still be ethical?

## "ALL ABOUT YOU" ACTIVITY

BYP4-9 Companies prepare balance sheets in order to know their financial position at a specific point in time. This enables them to make a comparison to their position at previous points in time and gives them a basis for planning for the future. In order to evaluate your financial position, you
can prepare a personal balance sheet. Assume that you have compiled the following information regarding your finances. (Hint: Some of the items might not be used in your personal balance sheet.)

| Amount owed on student loan balance (long-term) | $\$ 5,000$ |
| :--- | ---: |
| Balance in checking account | 1,200 |
| Certificate of deposit (6-month) | 3,000 |
| Annual earnings from part-time job | 11,300 |
| Automobile | 7,000 |
| Balance on automobile loan (current portion) | 1,500 |
| Balance on automobile loan (long-term portion) | 4,000 |
| Home computer | 800 |
| Amount owed to you by younger brother | 300 |
| Balance in money market account | 1,800 |
| Annual tuition | 6,400 |
| Video and stereo equipment | 1,250 |
| Balance owed on credit card (current portion) | 150 |
| Balance owed on credit card (long-term portion) | 1,650 |

## Instructions

Prepare a personal balance sheet using the format you have learned for a classified balance sheet for a company. For the equity account, use M. Y. Own, Capital.

## FASB CODIFICATION ACTIVITY

BYP4-10 If your school has a subscription to the FASB Codification, go to http://aaahq.org/ ascLogin.cfm to log in and prepare responses to the following.

## Instructions

Access the glossary ("Master Glossary") to answer the following.
(a) What is the definition of revenue?
(b) What is the definition of compensation?

## Answers to Insight and Accounting Across the Organization Questions

p. 166 Cooking the Books? Q: What motivates sales executives and finance and accounting executives to participate in activities that result in inaccurate reporting of revenues? A: Sales executives typically receive bonuses based on their ability to meet quarterly sales targets. In addition, they often face the possibility of losing their jobs if they miss those targets. Executives in accounting and finance are very aware of the earnings targets of Wall Street analysts and investors. If they fail to meet these targets, the company's stock price will fall. As a result of these pressures, executives sometimes knowingly engage in unethical efforts to misstate revenues. As a result of the Sarbanes-Oxley Act of 2002, the penalties for such behavior are now much more severe.
p. 167 Reporting Revenue Accurately $\mathbf{Q}$ : In the past, why was it argued that Apple should spread the recognition of iPhone revenue over a two-year period, rather than recording it upfront? A: Apple promises to provide software updates over the life of the phone's use. Because this represents an unfulfilled service obligation, it was argued that Apple should spread its revenue recognition over a two-year estimated life of the phone.
p. 174 Turning Gift Cards into Revenue Q: Suppose that Robert Jones purchases a $\$ 100$ gift card at Best Buy on December 24, 2011, and gives it to his wife, Mary Jones, on December 25, 2011. On January 3, 2012, Mary uses the card to purchase $\$ 100$ worth of CDs. When do you think Best Buy should recognize revenue and why? A: According to the revenue recognition principle, companies should recognize revenue when earned. In this case, revenue is not earned until Best Buy provides the goods. Thus, when Best Buy receives cash in exchange for the gift card on December 24, 2011, it should recognize a liability, Unearned Revenue, for $\$ 100$. On January 3, 2012, when Mary Jones exchanges the card for merchandise, Best Buy should recognize revenue and eliminate $\$ 100$ from the balance in the Unearned Revenue account.
p. 178 Cashing In on Accrual Accounting Q: Accrual accounting is often considered superior to cash accounting. Why, then, were some people critical of China's use of accrual accounting in this instance? A: In this case, some people were critical because, in general, China uses cash accounting. By switching to accrual accounting for this transaction, China was not being consistent in its accounting practices. Lack of consistency reduces the transparency and usefulness of accounting information.

## Answers to Self-Test Questions

1.c 2.a 3.d 4.d 5.d 6. c $(\$ 1,350-\$ 600=\$ 750)$
7.a 8.c 9.c 10.b
11. b
12. c
13. a 14. a 15. d

IFRS

## A Look at IFRS

It is often difficult for companies to determine in what time period they should report particular revenues and expenses. Both the IASB and FASB are working on a joint project to develop a common conceptual framework, as well as a revenue recognition project, that will enable companies to better use the same principles to record transactions consistently over time.

## KEY POINTS

- In this chapter, you learned accrual-basis accounting applied under GAAP. Companies applying IFRS also use accrual-basis accounting to ensure that they record transactions that change a company's financial statements in the period in which events occur.
- Similar to GAAP, cash-basis accounting is not in accordance with IFRS.
- IFRS also divides the economic life of companies into artificial time periods. Under both GAAP and IFRS, this is referred to as the periodicity assumption.
- IFRS requires that companies present a complete set of financial statements, including comparative information annually.
- GAAP has more than 100 rules dealing with revenue recognition. Many of these rules are industryspecific. In contrast, revenue recognition under IFRS is determined primarily by a single standard. Despite this large disparity in the amount of detailed guidance devoted to revenue recognition, the general revenue recognition principles required by GAAP that are used in this textbook are similar to those under IFRS.
- As the Feature Story illustrates, revenue recognition fraud is a major issue in U.S. financial reporting. The same situation occurs in other countries, as evidenced by revenue recognition breakdowns at Dutch software company Baan NV, Japanese electronics giant NEC, and Dutch grocer AHold NV.
- A specific standard exists for revenue recognition under IFRS (IAS 18). In general, the standard is based on the probability that the economic benefits associated with the transaction will flow to the company selling the goods, providing the service, or receiving investment income. In addition, the revenues and costs must be capable of being measured reliably. GAAP uses concepts such as realized, realizable (that is, it is received, or expected to be received), and earned as a basis for revenue recognition.
- Under IFRS, revaluation of items such as land and buildings is permitted. IFRS allows depreciation based on revaluation of assets, which is not permitted under GAAP.
- The terminology used for revenues and gains, and expenses and losses, differs somewhat between IFRS and GAAP. For example, income is defined as:

Increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from shareholders.
Income includes both revenues, which arise during the normal course of operating activities, and gains, which arise from activities outside of the normal sales of goods and services. The term income is not used this way under GAAP. Instead, under GAAP income refers to the net difference between revenues and expenses. Expenses are defined as:

Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity other than those relating to distributions to shareholders.
Note that under IFRS, expenses include both those costs incurred in the normal course of operations, as well as losses that are not part of normal operations. This in contrast to GAAP, which defines each separately.

- The procedures of the closing process are applicable to all companies whether they are using IFRS or GAAP.


## LOOKING TO THE FUTURE

The IASB and FASB are now involved in a joint project on revenue recognition. The purpose of this project is to develop comprehensive guidance on when to recognize revenue. Presently, the Boards are considering an approach that focuses on changes in assets and liabilities (rather than on earned and
realized) as the basis for revenue recognition. It is hoped that this approach will lead to more consistent accounting in this area. For more on this topic, see www.fasb.org/project/revenue_recognition.shtml.

## IFRS Self-Test Questions

1. GAAP:
(a) provides very detailed, industry-specific guidance on revenue recognition, compared to the general guidance provided by IFRS.
(b) provides only general guidance on revenue recognition, compared to the detailed guidance provided by IFRS.
(c) allows revenue to be recognized when a customer makes an order.
(d) requires that revenue not be recognized until cash is received.
2. Which of the following statements is false?
(a) IFRS employs the periodicity assumption.
(b) IFRS employs accrual accounting.
(c) IFRS requires that revenues and costs must be capable of being measured reliably.
(d) IFRS uses the cash basis of accounting.
3. As a result of the revenue recognition project being undertaken by the FASB and IASB:
(a) revenue recognition will place more emphasis on when revenue is earned.
(b) revenue recognition will place more emphasis on when revenue is realized.
(c) revenue recognition will place more emphasis on when changes occur in assets and liabilities.
(d) revenue will no longer be recorded unless cash has been received.
4. Which of the following is false?
(a) Under IFRS, the term income describes both revenues and gains.
(b) Under IFRS, the term expenses includes losses.
(c) Under IFRS, firms do not engage in the closing process.
(d) IFRS has fewer standards than GAAP that address revenue recognition.
5. Accrual-basis accounting:
(a) is optional under IFRS.
(b) results in companies recording transactions that change a company's financial statements in the period in which events occur.
(c) will likely be eliminated as a result of the IASB/FASB joint project on revenue recognition.
(d) is not consistent with the IASB conceptual framework.

## IFRS Concepts and Application

IFRS4-1 Compare and contrast the rules regarding revenue recognition under IFRS versus GAAP.
IFRS4-2 Under IFRS, do the definitions of revenues and expenses include gains and losses? Explain.

## INTERNATIONAL FINANCIAL REPORTING PROBLEM: Zetar p/c

IFRS4-3 The financial statements of Zetar plc are presented in Appendix C. The company's complete annual report, including the notes to its financial statements, is available at www.zetarplc.com. Visit Zetar's corporate website and answer the following questions from Zetar's 2009 annual report.
(a) From the notes to the financial statements, how does the company determine the amount of revenue to record at the time of a sale?
(b) From the notes to the financial statements, how does the company determine whether a sale has occurred?
(c) Using the consolidated income statement and consolidated statement of financial position, identify items that may result in adjusting entries for deferrals.
(d) Using the consolidated income statement, identify two items that may result in adjusting entries for accruals.

## Answers to IFRS Self-Test Questions

1. a 2. d 3. c 4. c 5. b


Remember to go back to the navigator box on the chapter opening page and check off your completed work.


[^0]:    Oct. 3I
    Insurance expired; record insurance expense

[^1]:    Related exercise material: BE4-13, BE4-14, Do itt 4-4, E4-14, and E4-18.

[^2]:    (f) Tot. adj. trial balance
    \$28,930 (g) Tot. assets

