

## 4

THE ACCOUNTING CYCLE:  
REPORTING FINANCIAL  
RESULTS

Did you score ?



## Learning Objectives

After studying this chapter, you should be able to:

1. Explain the purpose of adjusting entries.
2. Describe and prepare the four basic types of adjusting entries.
3. Explain how the principles of *realization* and *matching* relate to adjusting entries.
4. Explain the principle of materiality.
5. Prepare an income statement, a statement of retained earnings, and a balance sheet.
6. Explain how the income statement and the statement of retained earnings relate to the balance sheet.
7. Explain the principle of *adequate disclosure*.
8. Explain the purposes of *closing entries*; prepare these entries.
9. Prepare an after-closing trial balance.
10. Evaluate net income and solvency.
11. Explain how *interim* financial statements are prepared in a business that closes its accounts only at year-end.
- \*12. Prepare a worksheet and explain its usefulness

\* *Supplemental Topic*, "The Worksheet."

## ADJUSTING ENTRIES

### LO 1

Explain the purpose of adjusting entries.

There is more to the measurement of business income than merely recording simple revenue and expense transactions that affect only a single accounting period. Certain transactions affect the revenues or expenses of *two or more* accounting periods. The purpose of adjusting entries is to assign to each accounting period appropriate amounts of revenue and expense. For example, Overnight Auto Service Limited purchased shop supplies that will be used for several months. Thus, an adjusting entry is required to record the expense associated with the shop supplies that Overnight *uses* each month. Similarly, Overnight's building needs an adjusting entry to allocate its cost to the accounting periods in which the building is used.

### The Need for Adjusting Entries

For purposes of measuring income and preparing financial statements, the life of a business is divided into a series of *accounting periods*. This practice enables decision makers to compare the financial statements of successive periods and to identify significant trends on a timely basis.

But measuring net income for a relatively short accounting period—such as a month, a quarter, or a year—poses a problem because, as mentioned above, some business activities affect the revenues and expenses of *multiple accounting periods*. Therefore, **adjusting entries** are needed at the end of each accounting period to make certain that appropriate amounts of revenue and expense are reported in the company's income statement.

For example, magazine publishers often sell two- or three-year subscriptions to their publications. Even when subscriptions are for one year or less, the subscription period may overlap the publishers' accounting periods. Thus, at the end of each accounting period, these publishers make adjusting entries recognizing the portion of their advance receipts that have been earned during the current period. Most companies also purchase insurance policies that benefit more than one period. Therefore, an adjusting entry is needed to make certain that an appropriate portion of each policy's total cost is reported in the income statement as insurance expense for the period. In short, adjusting entries are needed whenever transactions affect the revenues or expenses of more than one accounting period. These entries assign revenues to the period in which they are *earned*, and expenses to the periods in which related goods or services are *used*.

In theory, a business could make adjusting entries on a daily basis. But as a practical matter, these entries are made *only at the end of each accounting period*. For most companies, adjusting entries are made on a monthly basis.

### LO 2

Describe and prepare the four basic types of adjusting entries.

### Types of Adjusting Entries

The number of adjustments needed at the end of each accounting period depends entirely upon the nature of the company's business activities. Most adjusting entries fall into one of five general categories. However, only the following four are covered in this chapter:<sup>1</sup>

1. *Converting assets to expenses.* An expenditure (or cost) that will benefit more than one accounting period usually is recorded by debiting an asset account (for example, Supplies, Unexpired Insurance, Building, and so on) and by crediting Cash and/or a liability account. In each future period that benefits from the use of this asset, an adjusting entry is made to allocate a portion of the asset's cost from the balance sheet to the income statement as an expense. This adjusting entry is recorded by debiting

<sup>1</sup> A fifth category of adjusting entries consists of adjustments related to updating a bank account balance or the valuation of certain assets, such as marketable securities and accounts receivable. These adjustments are explained and illustrated in Chapters 5 and 6.

the appropriate expense account (for example, Supplies Expense, Insurance Expense, or Depreciation Expense<sup>2</sup>) and crediting the related asset account or contra-asset account, which is explained on page 139. (for example, Supplies, Unexpired Insurance, or Accumulated Depreciation).

2. *Converting liabilities to revenues.* A business may collect cash in advance for services to be rendered in future accounting periods. Transactions of this nature are usually recorded by debiting Cash and by crediting a liability account (typically called Unearned Revenue). In the period that services are actually rendered, an adjusting entry is made to allocate a portion of the liability from the balance sheet to the income statement to recognize the revenue earned for services provided during the period. The adjusting entry is recorded by debiting the liability (Unearned Revenue) and by crediting *Revenue Earned* (or a similar account) for the value of the services.
3. *Accruing unrecorded expenses.* An expense may be incurred in the current accounting period even though no bill has been received or no cash payment will occur until a future period. These *accrued* expenses are recorded by an adjusting entry made at the end of each accounting period. The adjusting entry is recorded by debiting the appropriate expense account (for example, Interest Expense or Salaries Expense) and by crediting the related liability (for example, Interest Payable or Salaries Payable).
4. *Accruing unrecorded revenues.* Revenues may be earned (or *accrued*) during the current period, even though the billing of customers has not yet occurred or the collection of cash will not occur until a future period. Unrecorded earned revenues require an adjusting entry at the end of the accounting period. The adjusting entry is recorded by debiting the appropriate asset (for example, Accounts Receivable or Interest Receivable) and by crediting the appropriate revenue account (for example, Service Revenue Earned or Interest Earned).

Each of these adjusting entry categories is illustrated in the diagram on page 132.

### Characteristics of Adjusting Entries

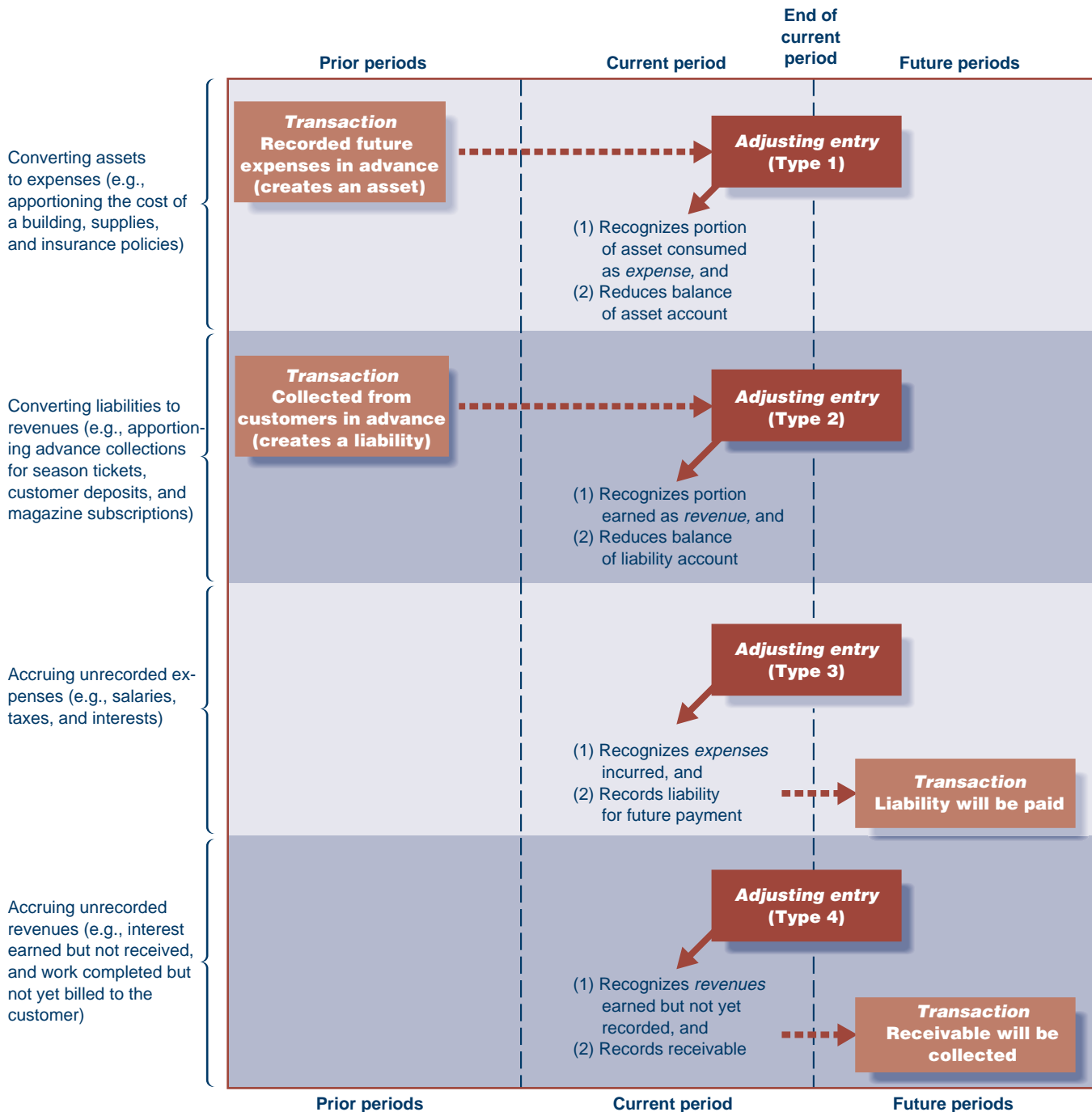
It will be helpful to keep in mind two important characteristics of all adjusting entries. First, every adjusting entry *involves the recognition of either revenues or expenses*. Revenues and expenses represent changes in shareholders' equity. However, shareholders' equity cannot change by itself; *there also must be a corresponding change in either assets or liabilities*. Thus, every adjusting entry affects both an income statement account (revenue or expense) and a balance sheet account (asset or liability). At this point, adjusting entries do not include an entry to Cash (adjusting entries involving cash are covered in Chapter 5, as mentioned earlier).

Second, adjusting entries are based on the concepts of accrual accounting, *not upon monthly bills or month-end transactions*. No one sends Overnight Auto Service Limited a bill saying, "Shop Supply Expense for month is \$500." Yet, Overnight must be aware of the need to record the estimated cost of shop supplies consumed if it is to measure income properly for the period. Making adjusting entries requires a greater understanding of accrual accounting concepts than does the recording of routine business transactions. In many businesses, the adjusting process is performed by the controller or by a professional accountant, rather than by the regular accounting staff.

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<sup>2</sup> While section 3060 of the *CICA Handbook* uses the term "amortization" to encompass the commonly used terms "depreciation" and "depletion," it indicates that the latter two terms may also be used. In practice, the terms "depreciation" and "depletion" are still most widely used. For example, the term depreciation is used in six of the seven examples cited in the most recent CICA's *Financial Reporting in Canada* (25th Edition, 2000). Accordingly, the terms "depreciation" and "depletion" are used in this text.

**ADJUSTING ENTRIES:  
A "LINK" BETWEEN ACCOUNTING PERIODS**



**Year-End at Overnight Auto Service Limited**

To illustrate the various types of adjusting entries, we will again use our example involving Overnight Auto Service Limited. Chapter 3 concluded with Overnight’s trial balance dated February 28, 2002 (the end of the company’s second month of operations). We will now skip ahead to *December 31, 2002*—the end of Overnight’s first year of operations. This will enable us to illustrate the preparation of *annual* financial statements, rather than statements that cover only a single month.

Most companies make adjusting entries every *month*. We will assume that Overnight has been following this approach throughout 2002. The company's *unadjusted* trial balance dated December 31, 2002, appears below. It is referred to as an unadjusted trial balance because Overnight last made adjusting entries on *November 30*; therefore, it is still necessary to make adjusting entries for the month of December.

<b>OVERNIGHT AUTO SERVICE</b>			
<b>Trial Balance</b>			
<b>December 31, 2002</b>			
Cash		\$ 11,270	
Accounts receivable		6,500	
Shop supplies		1,800	
Unexpired insurance		4,500	
Land		52,000	
Building		36,000	
Accumulated depreciation: building			\$ 1,500
Tools and equipment		12,000	
Accumulated depreciation: tools and equipment			2,000
Notes payable			4,000
Accounts payable			2,690
Income taxes payable			6,025
Unearned rent revenue			9,000
Capital stock			80,000
Retained earnings			0
Dividends	2,300		
Repair service revenue			181,250
Advertising expense	3,900		
Salaries and wages expense	106,870		
Supplies expense	6,900		
Depreciation expense: building	1,500		
Depreciation expense: tools and equipment	2,000		
Utilities expense	19,400		
Insurance expense	13,500		
Income taxes expense	6,025		
		<u>\$286,465</u>	<u>\$286,465</u>

In the next few pages we illustrate several transactions, as well as the related adjusting entries. Both are shown in the format of general journal entries. To help distinguish between transactions and adjusting entries, transactions will be shown in *blue*, and adjusting entries will be printed in *red*.

### Converting Assets to Expenses

When a business makes an expenditure that will benefit more than one accounting period, the amount usually is debited to an asset account. At the end of each period benefiting from this expenditure, an adjusting entry is made to transfer an appropriate portion of the cost from the asset account to an expense account. This adjusting entry reflects the fact that part of the asset has been used up—or become an expense—during the current accounting period.

An adjusting entry to convert an asset to an expense consists of a debit to an expense account and a credit to an asset account (or contra-asset account). Examples of these ad-

justments include the entries to apportion the costs of **prepaid expenses** and entries to record depreciation expense.

**Prepaid Expenses** Payments in advance are often made for such items as insurance, rent, and office supplies. If the advance payment (or prepayment) will benefit more than just the current accounting period, the cost *represents an asset* rather than an expense. The cost of this asset will be allocated to expense in the accounting periods in which the services or the supplies are used. In summary, *prepaid expenses are assets*; they become expenses only as the goods or services are used up.

**Shop Supplies** To illustrate, consider Overnight’s accounting policies for shop supplies. As supplies are purchased, their cost is debited to the asset account Shop Supplies. It is not practical to make journal entries every few minutes as supplies are used. Instead, an estimate is made of the supplies remaining on hand at the end of each month; the supplies that are not on hand are assumed to have been used.

Prior to making adjusting entries at December 31, the balance in Overnight’s Shop Supplies account is \$1,800. The balance of this asset account represents shop supplies on hand on November 30. The Supplies Expense account shows a balance of \$6,900, which represents the cost of supplies used through November 30. Assume that approximately \$1,200 of shop supplies remain on hand at December 31. This suggests that supplies costing about \$600 have been *used in December*; thus, the following *adjusting entry* is made:

*Transferring the cost of supplies used from the asset account to expense*

Dec. 31	Supplies Expense . . . . .	600	
	Shop Supplies . . . . .		600
	Estimate of shop supplies used in December.		

This adjusting entry serves two purposes: (1) it charges to expense the cost of supplies used in December, and (2) it reduces the balance of the Shop Supplies account to \$1,200—the amount of supplies estimated to be on hand at December 31.

**Insurance Policies** Insurance policies also are a prepaid expense. These policies provide a service, insurance protection, over a specific period of time. As the time passes, the insurance policy *expires*—that is, it is used up in business operations.

To illustrate, assume that on March 1, Overnight purchased for \$18,000 a one-year insurance policy providing comprehensive liability insurance and insurance against fire and damage to customers’ vehicles while in Overnight’s facilities. This expenditure (a *transaction*) was debited to an asset account, as follows:

*Purchase of 12 months of insurance coverage*

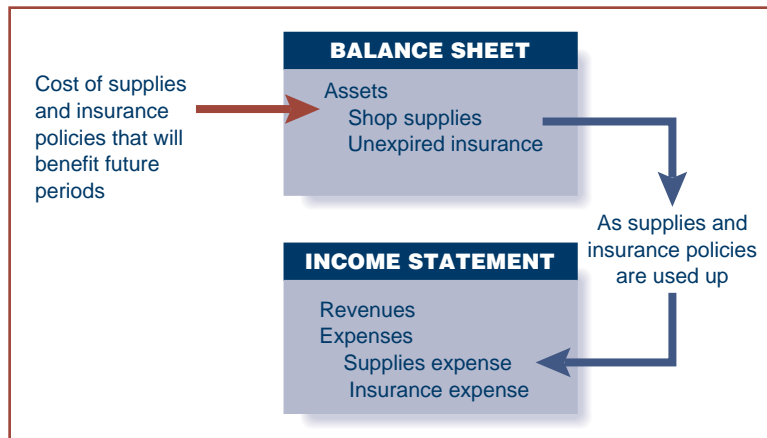
Mar. 1	Unexpired Insurance . . . . .	18,000	
	Cash . . . . .		18,000
	Purchased an insurance policy providing coverage for the next 12 months.		

This \$18,000 expenditure provides insurance coverage for a period of one full year. Therefore, one-twelfth of this cost, or \$1,500, is recognized as insurance expense every month. The \$13,500 insurance expense reported in Overnight’s trial balance represents the portion of the insurance policy that has expired between March 1 and November 30 (\$1,500/mo. × 9 months). The \$4,500 amount of unexpired insurance shown in the trial balance is the remaining cost of the 12-month policy still in effect as of November 30 (\$1,500/mo. × 3 months). By December 31, another full month of the policy has expired. Thus, the insurance expense for December is recorded by the following *adjusting entry* at month-end:

*Cost of insurance coverage expiring in December*

Dec. 31	Insurance Expense . . . . .	1,500	
	Unexpired Insurance . . . . .		1,500
	Insurance expense for December.		

Note the similarities between the *effects* of this adjusting entry and the one that we made previously for shop supplies. In both cases, the entries transfer to expense that portion of an asset used up during the period. This flow of costs from the balance sheet to the income statement is illustrated below:



*As an asset is used up, it becomes an expense*



### You as a Car Owner

Car owners typically pay insurance premiums six months in advance. Assume that you recently paid your six-month premium of \$600 on February 1 (for coverage through July 31). On March 31, you decide to switch insurance companies. You call your existing agent and ask that your policy be cancelled. Are you entitled to a refund? If so, why, and how much will it be?

\*Our comments appear on page 194.



**YOUR TURN**

**Recording Prepayments Directly in the Expense Accounts** In our illustration, payments for shop supplies and for insurance covering more than one period were debited to asset accounts. However, some companies follow an alternative policy of debiting such prepayments directly to an expense account, such as Supplies Expense. At the end of the period, the adjusting entry then would be to debit Shop Supplies and credit Supplies Expense for the cost of supplies that had *not* been used.

This alternative method leads to the *same results* as does the procedure used by Overnight. Under either approach, the cost of supplies used during the current period is treated as an *expense*, and the cost of supplies still on hand is carried forward in the balance sheet as an *asset*.

In this book, we will follow Overnight's practice of recording prepayments in asset accounts and then making adjustments to transfer these costs to expense accounts as the assets expire. This approach correctly describes the *conceptual flow of costs* through the elements of financial statements, that is, a prepayment *is* an asset that later becomes an expense. The alternative approach is used widely in practice only because it is an efficient "shortcut," which standardizes the recording of transactions and may reduce the number of adjusting entries needed at the end of the period. Remember, our goal in this course is to develop your ability to understand and use accounting information, not to train you in alternative bookkeeping procedures.

The idea of shop supplies and insurance policies being used up over several months is easy to understand. But the same concept also applies to such assets as buildings and equipment. These assets are converted to expenses through the process of *depreciation*.

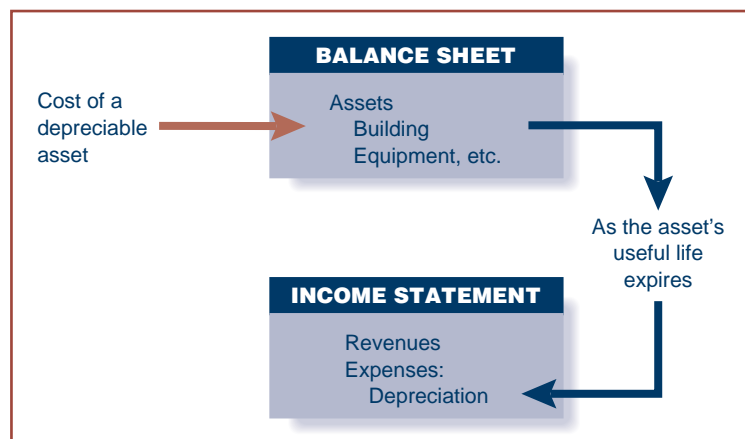
## The Concept of Depreciation

**Depreciable assets** are *physical objects* that retain their size and shape but that eventually wear out or become obsolete. They are not physically consumed, as are such assets as supplies, but nonetheless their economic usefulness diminishes over time. Examples of depreciable assets include buildings and all types of equipment, fixtures, furnishings—and even railroad tracks. Land, however, is *not* viewed as a depreciable asset, as it has an *unlimited* useful life.

Each period, a portion of a depreciable asset's usefulness *expires*. Therefore, a corresponding portion of its cost is recognized as *depreciation expense*.

**What Is Depreciation?** In accounting, the term **depreciation** (also called **amortization**) means the *systematic allocation of the cost of a depreciable asset to expense* over the asset's useful life. This process is illustrated below:

*Depreciation (Amortization): A process of allocating the cost of a depreciable asset to expense*



Note the similarity of this diagram to that on the previous page.

Depreciation is *not* an attempt to record changes in the asset's market value. In the short run, the market value of some depreciable assets may even increase, but the process of depreciation continues anyway. The rationale for depreciation lies in the *matching principle*. Our goal is to offset a reasonable portion of the asset's cost against revenues in each period of the asset's **useful life**.

Depreciation expense begins when a depreciable asset is purchased, and it continues over the life of the asset, but there are no daily "depreciation transactions." Therefore, *adjusting entries* are needed at the end of each accounting period to transfer an appropriate amount of the asset's cost to depreciation expense.

**Depreciation Is Only an Estimate** The appropriate amount of depreciation expense is *only an estimate*. After all, we cannot look at a building or a piece of equipment and determine precisely how much of its economic usefulness has expired during the current period.

The most widely used means of estimating periodic depreciation expense is the **straight-line method of depreciation**. Under the straight-line approach, an *equal portion* of the asset's cost is allocated to depreciation expense in every period of the asset's estimated useful life. The formula for computing depreciation expense by the straight-line method is shown at the top of the following page:<sup>3</sup>

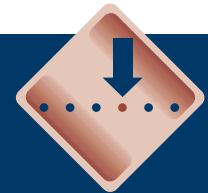
<sup>3</sup> At this point in our discussion, we are ignoring any possible *residual value* that might be recovered upon disposal of the asset. Residual values are discussed in Chapter 8. We will assume that Overnight Auto Service Limited depreciates its assets using the straight-line method computed without any residual values.



$$\text{Depreciation expense (per period)} = \frac{\text{Cost of the asset}}{\text{Estimated useful life}}$$

The use of an *estimated useful life* is the major reason that depreciation expense is *only an estimate*. In most cases, management does not know in advance exactly how long the asset will remain in use.

How long does a building last? For purposes of computing depreciation expense, most companies estimate about 30 or 40 years. But the Empire State Building was built in 1931, and it is not likely to be torn down anytime soon. And how about the Windsor Castle or the CN Tower? While these are not "typical" examples, they illustrate the difficulty in estimating in advance just how long depreciable assets may remain in use.



**CASE IN POINT**

**Depreciation of Overnight's Building** Overnight purchased its building for \$36,000 on January 22. Because the building was old, its estimated remaining useful life is only 20 years. Therefore, the building's monthly depreciation expense is \$150 (\$36,000 cost ÷ 240 months). We will assume that Overnight did *not* record any depreciation expense in January because it operated for only a small part of the month. Thus, the building's \$1,500 depreciation expense reported in Overnight's trial balance on page 133 represents 10 *full months* of depreciation recorded in 2002, from February 1 through November 30 (\$150/mo. × 10 months). An additional \$150 of depreciation expense is still needed on the building for December (bringing the total to be reported in the income statement for the year to \$1,650).

The adjusting entry to record depreciation expense on Overnight's building for the month of December appears below:

Dec. 31	Depreciation Expense: Building . . . . .	150	
	Accumulated Depreciation: Building . . . . .		150
	Monthly depreciation on building (\$36,000 ÷ 240 mo.).		<u>150</u>

*The adjusting entry for monthly depreciation on the building*

The Depreciation Expense: Building account will appear in Overnight's income statement along with other expenses for the year ended December 31, 2002. The balance in the Accumulated Depreciation: Building account will be reported in the December 31 balance sheet as a deduction from the Building account, as shown below:

Building . . . . .	\$36,000
Less: Accumulated depreciation: building . . . . .	<u>(1,650)</u>
Book value . . . . .	<u>\$34,350</u>

*How accumulated depreciation appears on the balance sheet*

Accumulated Depreciation: Building is a **contra-asset account** because (1) it has a credit balance, and (2) it is offset against an asset account (Building) to produce the book value for the asset. Accountants often use the term **book value** (or *carrying value*) to describe the net valuation of an asset in a company's accounting records. For depreciable assets, such as buildings and equipment, book value is equal to the cost of the asset, less the related amount of accumulated depreciation. The end result of crediting the Accumulated Depreciation: Building account is much the same as if the credit had been

made directly to the Building account, that is, the book value reported on the balance sheet for the building is reduced from \$36,000 to \$34,350.

Book value is of significance primarily for accounting purposes. It represents costs that will be offset against the revenues of future periods. It also gives users of financial statements an indication of the age of a company's depreciable assets (older assets tend to have larger amounts of accumulated depreciation associated with them than newer assets). It is important to realize that the computation of book value is based upon an asset's *historical cost*. Thus, book value is *not* intended to represent an asset's *current market value*.

**Depreciation of Tools and Equipment** Overnight depreciates its tools and equipment over a period of five years (60 months) using the straight-line method. The December 31 trial balance shows that the company owns tools and equipment that cost \$12,000. Therefore, the adjusting entry to record December's depreciation expense is:

Monthly depreciation on tools and equipment

Dec. 31	Depreciation Expense: Tools and Equipment . . . . .	200
	Accumulated Depreciation: Tools and Equipment . . . . .	200
	Monthly depreciation on tools and equipment ( $\$12,000 \div 60$ months = \$200 mo.)	

Again, we assume that Overnight did *not* record depreciation expense for tools and equipment in January because it operated for only a small part of the month. Thus, the related \$2,000 depreciation expense reported in Overnight's trial balance on page 133 represents 10 *full months* of depreciation, from February 1 through November 30 ( $\$200/\text{mo.} \times 10$  months). The tools and equipment still require an additional \$200 of depreciation for December (bringing the total to be reported in the income statement for the year to \$2,200).

What is the book value of Overnight's tools and equipment at December 31, 2002? If you said \$9,800, you are right.<sup>4</sup>

**Depreciation Is a "Noncash" Expense** We have made the point that net income does *not* represent an inflow of cash or any other asset. Rather, it is a *computation* of the overall effect of certain business transactions on shareholders' equity. The computation and recognition of depreciation expense illustrate this point.

As depreciable assets "expire," shareholders' equity declines; but *there is no corresponding cash outlay* in the current period. For this reason, depreciation often is called a "noncash expense." Often, it represents the *largest difference* between net income and the cash flows (receipts and payments) resulting from business operations.

### Converting Liabilities to Revenues

In some instances, customers may *pay in advance* for services to be rendered in future accounting periods. For example, a football team collects much of its revenue in advance through the sale of season tickets. Health clubs collect in advance by selling long-term membership contracts. Airlines sell many of their tickets well in advance of a scheduled flight.

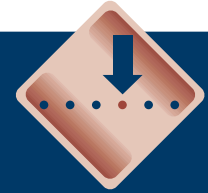
For accounting purposes, amounts collected in advance *do not represent revenue* because these amounts have *not yet been earned*. Amounts collected from customers in advance are recorded by debiting the Cash account and crediting an *unearned revenue* account. **Unearned revenue** also may be called *deferred revenue*.

When a company collects money in advance from its customers, it has an *obligation* to render services in the future. Therefore, the balance of an unearned revenue account

<sup>4</sup> Cost, \$12,000, less accumulated depreciation, which amounts to \$2,200 after the December 31 adjusting entry.

is considered to be a liability; it appears in the liability section of the balance sheet, not in the income statement. Unearned revenue differs from other liabilities because it usually will be settled by rendering services, rather than by making payment in cash. In short, it will be *worked off* rather than *paid off*. Of course, if the business is unable to render the service, it must discharge this liability by refunding money to its customers.

One of the largest liabilities on the 2000 balance sheet of **Air Canada** is “Advance ticket sales.” This account, with a balance of \$498 million, represents unearned revenue resulting from the sale of tickets for future flights. Most of this unearned revenue will be earned as the future flights occur. Some customers, however, will change their plans and will return their tickets to Air Canada for a cash refund.



**CASE IN POINT**

When the company renders the services for which customers have paid in advance, it is working off its liability to these customers and is earning the revenue. At the end of the accounting period, an adjusting entry is made to transfer an appropriate amount from the unearned revenue account to a revenue account. This adjusting entry consists of a debit to a liability account (unearned revenue) and a credit to a revenue account.

To illustrate these concepts, assume that on December 1, Harbour Cab Co. agreed to rent space in Overnight’s building to provide indoor storage for some of its cabs. The agreed-upon rent is \$3,000 per month, and Harbour Cab paid for the first three months in advance. The journal entry to record this *transaction* on December 1 was:

Dec. 1	Cash . . . . .	9,000	Unearned Rent Revenue . . . . .	9,000	Collected in advance from Harbour Cab for rental of storage space for three months.	An “advance”—it is not revenue; it is a liability
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Remember that Unearned Rent Revenue is a *liability* account, *not a revenue* account. Overnight will earn rental revenue *gradually* over a three-month period as it provides storage facilities for Harbour Cab. At the end of each of these three months, Overnight will make an *adjusting entry*, transferring \$3,000 from the Unearned Rent Revenue account to an earned revenue account, Rent Revenue Earned, which will appear in Overnight’s income statement. The first in this series of monthly transfers will be made at December 31 with the following adjusting entry:

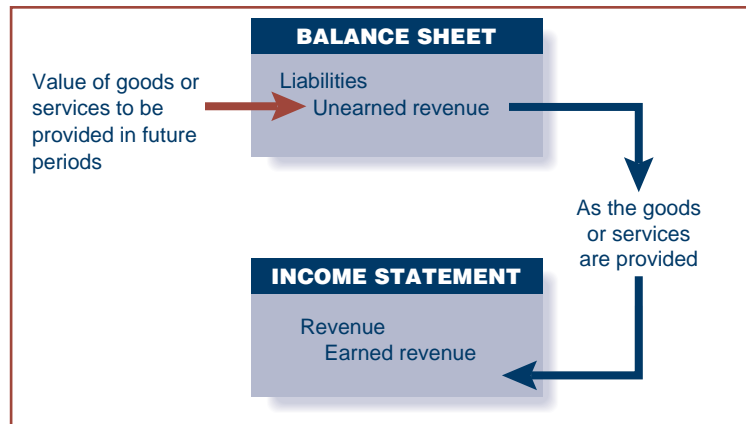
Dec. 31	Unearned Rent Revenue . . . . .	3,000	Rent Revenue Earned . . . . .	3,000	Portion of rent received in advance from Harbour Cab that was earned in December (\$9,000 ÷ 3 mo.).	An adjusting entry showing that some unearned revenue has now been earned
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After this adjusting entry has been posted, the Unearned Rent Revenue account will have a \$6,000 credit balance. This balance represents Overnight’s obligation to render service worth \$6,000 over the next two months and will appear in the liability section of the company’s balance sheet. The Rent Revenue Earned account will appear in Overnight’s income statement.

The transfer of unearned revenue to earned revenue is illustrated at the top of the next page.

**Recording Advance Collections Directly in the Revenue Accounts** We have stressed that amounts collected from customers in advance represent liabilities, not revenue. However, some companies follow an accounting policy of crediting these advance collections directly to revenue accounts. The adjusting entry then should consist of a

As unearned revenue is earned, it becomes earned revenue.



debit to the revenue account and a credit to the unearned revenue account for the portion of the advance payments *not yet earned*. This alternative accounting practice leads to the same results as does the method used in our illustration.

In this book, we will follow the originally described practice of crediting advance payments from customers to an unearned revenue account.

### Accruing Unrecorded Expenses

This type of adjusting entry recognizes expenses that will be paid in *future* transactions; therefore, no cost has yet been recorded in the accounting records. Salaries of employees and interest on borrowed money are common examples of expenses that accumulate from day to day but that usually are not recorded until they are paid. These expenses are said to **accrue** over time, that is, to grow or to accumulate. At the end of the accounting period, an adjusting entry should be made to record any expenses that have accrued but that have not yet been recorded. Since these expenses will be paid at a future date, the adjusting entry consists of a debit to an expense account and a credit to a liability account. We shall now use the example of Overnight Auto Service Limited to illustrate this type of adjusting entry.

**Accrual of Wages (or Salaries) Expense** Overnight, like many businesses, pays its hourly employees every other Friday. This month, however, ends on a Tuesday—three days before the next scheduled payday. Thus, Overnight’s hourly employees have worked for more than a week in December *for which they have not yet been paid*. Salaried employees, however, are paid at the end of each month.

Time cards indicate that at December 31, the company owes its hourly employees approximately \$1,950 for work performed in December.<sup>5</sup> The following adjusting entry should be made to record this amount both as Salaries and wages expense of the current period and as a liability:

<i>Wages owed as of month-end</i>	Dec. 31 Salaries and Wages Expense . . . . . 1,950 Salaries and Wages Payable. . . . . 1,950 To accrue wages owed to employees but unpaid as of month-end.
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This adjusting entry increases Overnight’s salaries and wages expense for 2002 and also creates a liability—salaries and wages payable—that will appear in the December 31 balance sheet.

<sup>5</sup> In preparing a formal payroll, wages and payroll taxes must be computed “down to the last cent.” But this is not a payroll; it is an amount to be used in the company’s financial statements. Therefore, a reasonable estimate will suffice. The accounting principle of *materiality* is discussed later in this chapter.

On Friday, January 3, Overnight will pay its regular biweekly payroll. Let us assume that this payroll amounts to \$2,397. In this case, the entry to record payment will be as shown below.<sup>6</sup>

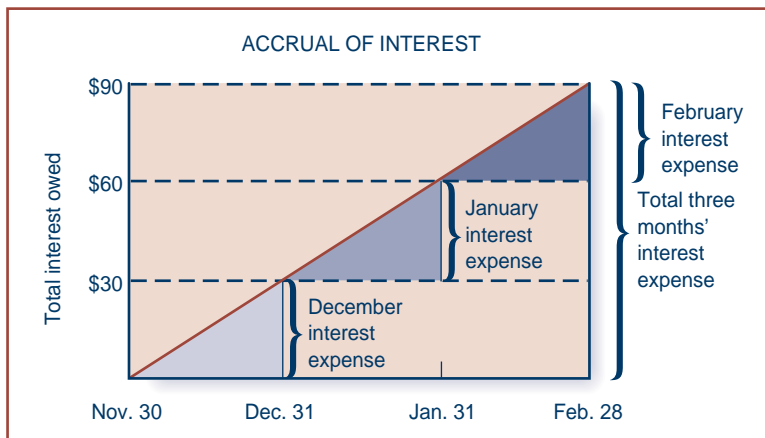
Jan. 3	Salaries and Wages Expense . . . . .	447	<i>Payment of wages earned in two accounting periods</i>
	Salaries and Wages Payable . . . . .	1,950	
	Cash . . . . .	2,397	
	Biweekly payroll, \$1,950 of which had been accrued at December 31.		

**Accrual of Interest Expense** On January 22, 2002, Overnight purchased its building, an old bus garage, from the Metropolitan Transit Authority for \$36,000. Overnight paid \$6,000 cash, and issued a 90-day note payable for the balance owed. Overnight paid the \$30,000 obligation in April. There was no interest expense associated with this note payable because it was *non-interest-bearing*.

On November 30, 2002, Overnight borrowed \$4,000 from National Bank by issuing an *interest-bearing* note payable. This loan is to be repaid in three months (on February 28, 2003), along with interest computed at an annual rate of 9 percent. The entry made on November 30 to record this borrowing transaction appears below:

Nov. 30	Cash . . . . .	4,000	
	Notes Payable . . . . .	4,000	
	Borrowed cash from National Bank, issuing a 9%, \$4,000 note payable, due in three months.		

On February 28, Overnight must pay the bank \$4,090. This represents the \$4,000 amount borrowed, *plus \$90 interest* ( $\$4,000 \times 0.09 \times 3/12$ ).<sup>7</sup> The \$90 interest charge covers a period of *three months*. Although no payment will be made until February 28, 2003, interest expense is *incurred* (or accrued) at a rate of \$30 per month, as shown below:



The following adjusting entry is made at December 31 to charge December operations with one month's interest expense and to record the amount of interest owed to the bank at month-end:

<sup>6</sup> In this illustration, we do not address the details associated with payroll taxes and amounts withheld. These topics are presented on a disk accompanying this book.

<sup>7</sup> To simplify the interest calculation for demonstration purposes, the months rather than the days are used, and thus, the three days of grace for a note payable are not included.

Adjusting entry for interest expense incurred through Dec. 31

Dec. 31	Interest Expense . . . . .	30	
	Interest Payable . . . . .		30
	Interest expenses accrued during December on note payable (\$4,000 × 0.09 × 1/12).		

The \$30 interest expense that accrued in December will appear in Overnight’s 2002 income statement. Both the \$30 interest payable and the \$4,000 note payable to National Bank will appear as *liabilities* in the December 31, 2002, balance sheet (page 000).

Overnight will make a second adjusting entry recognizing another \$30 in interest expense on January 31 of the coming year. The entry on February 28 to record the repayment of this loan, including \$90 in interest charges, will be as follows:

Payment of interest expense incurred over several months

2003			
Feb. 28	Notes Payable . . . . .	4,000	
	Interest Payable . . . . .	60	
	Interest Expense . . . . .	30	
	Cash . . . . .		4,090
	Repaid \$4,000 note payable to National Bank, including \$90 in interest charges.		

**Accruing Unrecorded Revenues**

A business may earn revenues during the current accounting period but not bill the customer until a future accounting period. This situation is likely to occur if additional services are being performed for the same customer, in which case, the bill might not be prepared until all services are completed. Any revenue that has been *earned but not recorded* during the current accounting period should be recorded at the end of the period by means of an adjusting entry. This adjusting entry consists of a debit to an account receivable and a credit to the appropriate revenue account. The term *accrued revenue* often is used to describe revenue that has been earned during the period but that has not been recorded prior to the closing date.

To illustrate this type of adjusting entry, assume that in December, Overnight entered into an agreement to perform routine maintenance on several vans owned by Airport Shuttle Service. Overnight agreed to maintain these vans for a flat fee of \$1,500 per month, payable on the 15th of each month.

No entry was made to record the signing of this agreement because no services had yet been rendered. Overnight began rendering services on *December 15*, but the first monthly payment will not be received until January 15. Therefore, Overnight should make the following adjusting entry at December 31 to record the revenue *earned* from Airport Shuttle during the month.

Adjusting entry recognizing revenue earned but not yet billed or collected

Dec. 31	Accounts Receivable . . . . .	750	
	Repair Service Revenue . . . . .		750
	To recognize revenue from services rendered on Airport Shuttle maintenance contract during December. Account is settled on the 15th of the each month.		



**YOUR TURN**



**You as Overnight Service Department Manager**

As part of your employment agreement with Overnight you earn a 5 percent bonus based on Overnight’s profits each year. You were discussing this arrangement with friends after bowling at Jill’s Lounge, when one of them asked if your bonus would not be higher if the entire month’s revenue from Airport Shuttle Service (\$1,500) were recognized in December rather than only half the revenue (\$750) as illustrated above. How would you respond?

\*Our comments appear is on p. 194.

The collection of the first monthly fee from Airport Shuttle will occur in the next accounting period (January 15, to be exact). Of this \$1,500 cash receipt, half represents collection of the receivable recorded on December 31; the other half represents revenue earned in January. Thus, the entry to record the receipt of \$1,500 from Airport Shuttle on January 15 will be:

2003			
Jan. 15	Cash . . . . .	1,500	<i>Entry to record collection of accrued revenue</i>
	Accounts Receivable . . . . .	750	
	Repair Service Revenue . . . . .	750	
	Collected from Airport Shuttle for van maintenance, Dec. 15 through Jan. 15.		


The net result of the December 31 adjusting entry has been to divide the revenue from maintenance of Airport Shuttle’s vans between December and January in proportion to the services rendered during each month.

**Accruing Income Taxes Expense: The Final Adjusting Entry**

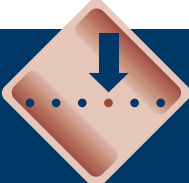
As a corporation earns taxable income, it incurs income taxes expense and also a liability to governmental tax authorities. This liability is paid in monthly instalments.

In its unadjusted trial balance (page 133), Overnight shows income taxes expense of \$6,025. This is the income taxes expense recognized from January 20, 2002 (the date Overnight opened for business) through November 30, 2002. Overnight, a small new corporation, does not pay its first year income taxes until three months after its year-end date. Thus, the \$6,025 liability for income taxes payable represents the income taxes accrued from January 20 to November 30.

The amount of income taxes expense accrued is only an *estimate*. The actual amount of income taxes cannot be determined until the company prepares its annual income tax return.



In Canada, income for income tax purposes computed using income tax regulations and rules often differs from income for financial reporting purposes created in compliance with GAAP. This is because the tax regulations and rules for computing revenues and expenses are not always consistent with GAAP. However, in Germany and Japan, the rules for recognizing revenues and expenses for income taxes are the same as those used for financial reporting.



**CASE IN POINT**

In 2002, Overnight’s income taxes expense *for the entire year* is estimated at \$6,625. Thus, an additional \$600 in income taxes expense must have accrued during *December* (\$6,625 – \$6,025). The adjusting entry to record this expense is shown below:

Dec. 31	Income Taxes Expense . . . . .	600	<i>Adjusting entry to record income taxes for December</i>
	Income Taxes Payable . . . . .	600	
	Estimated income taxes applicable to taxable income earned during December.		

This entry increases the balance in the Income Taxes Expense and Income Taxes Payable accounts to \$6,625.

**Income Taxes in Unprofitable Periods** What happens to income taxes expense when *losses* are incurred? In these situations, the company recognizes a “negative amount” of income taxes expense. The adjusting entry to record income taxes at the end of an *unprofitable* accounting period consists of a *debit* to Income Taxes Payable and a *credit* to Income Taxes Expense.

“Negative” income taxes expense means that the company may be able to recover from the government some of the income taxes recognized as expense in prior periods.<sup>8</sup> If the Income Taxes Payable account has a *debit* balance at year-end, it is reclassified as an *asset*, called “Income Tax Refund Receivable.” A credit balance in the Income Taxes Expense account is offset against the amount of the before-tax loss, as shown below:

*Income tax benefit can reduce a pretax loss*

<b>Partial Income Statement—for an <i>Unprofitable</i> Period</b>	
Income (loss) before income taxes . . . . .	\$(20,000)
Income tax benefit (recovery of previously recorded taxes) . . . . .	8,000
Net loss . . . . .	<u><u>\$(12,000)</u></u>

We have already seen that income taxes *expense* reduces the amount of before-tax *profits*. Note now that income tax *benefits*—in the form of tax refunds—can reduce the amount of a pretax *loss*. Thus, income taxes reduce the size of *both* profits and losses.

## ADJUSTING ENTRIES AND ACCOUNTING PRINCIPLES

### LO 3

Explain how the principles of *realization* and *matching* relate to adjusting entries.

Adjusting entries are *tools* by which accountants apply the **realization** and **matching** principles. Through these entries, revenues are recognized as they are *earned*, and expenses are recognized as resources are *used* or consumed in producing the related revenues.

In most cases, the realization principle indicates that revenues should be recognized *at the time goods are sold or services are rendered*. At this point, the business has essentially completed the earning process and the sales value of the goods or services can be measured objectively. At any time prior to the sale, the ultimate sales value of the goods or services sold can only be estimated. After the sale, the only step that remains is to collect from the customer, and this is usually a relatively certain event.

The matching principle underlies such accounting practices as depreciating plant assets, measuring the cost of goods sold, and amortizing the cost of unexpired insurance policies. All end-of-the-period adjusting entries involving recognition of expense are applications of the matching principle.

Costs are matched with revenues in one of two ways:

1. *Direct association of costs with specific revenue transactions.* The ideal method of matching revenues with expenses is to determine the amount of expense associated with the specific revenue transactions occurring during the period. However, this approach works only for those costs and expenses that can be directly associated with specific revenue transactions. Commissions paid to salespeople are an example of costs that can be *directly associated* with the revenues of a specific accounting period.
2. *Systematic allocation of costs over the useful life of the expenditure.* Many expenditures contribute to the earning of revenues for a number of accounting periods but cannot be directly associated with specific revenue transactions. Examples include the costs of insurance policies, depreciable assets, and intangible assets, such as patents. In these cases, accountants attempt to match revenues and expenses by *systematically*

<sup>8</sup> Tax refunds may be limited to tax payments in recent years. In this introductory discussion, we assume the company has paid sufficient taxes in prior years to permit a full recovery of any “negative tax expense” relating to the loss in the current period.



*allocating the cost to expense* over its useful life. Straight-line depreciation is an example of a systematic technique used to match revenues with the related costs and expenses.

## The Materiality Principle

Another generally accepted accounting principle also plays a major role in the making of adjusting entries—**materiality**. The term *materiality* refers to the *relative importance* of an item or an event. An item is considered material if knowledge of the item might reasonably *influence the decisions* of users of financial statements. Accountants must be sure that all material items are properly reported in financial statements.

However, the financial reporting process should be *cost-effective*—that is, the value of the information should exceed the cost of its preparation. By definition, the accounting treatment accorded to **immaterial** items is of *little or no consequence to decision makers*. Therefore, accountants do not waste time accounting for immaterial items; these items may be handled in the *easiest and most convenient manner*.

In summary, the materiality principle allows accountants to use estimated amounts and even to ignore other accounting principles if the results of these actions do not have an important impact on the financial statements. Materiality is one of the most important generally accepted accounting principles; you will encounter applications of this principle throughout the study of accounting.

**Materiality and Adjusting Entries** The principle of materiality enables accountants to shorten and simplify the process of making adjusting entries in several ways. For example:

1. Businesses purchase many assets that have a very low cost or that will be consumed quickly in business operations. Examples include wastebaskets, lightbulbs, and janitorial supplies. The materiality concept permits charging such purchases *directly to expense accounts*, rather than to asset accounts. This treatment conveniently eliminates the need for an adjusting entry at the end of the period to transfer a portion of these costs from an asset account to an expense account. This accounting shortcut is acceptable as long as the cost of the *unused* items on hand at the end of the period is immaterial.
2. Some expenses, such as telephone bills and utility bills, may be charged to expenses as the bills are *paid*, rather than as the services are used. Technically, this treatment violates the *matching principle*. However, accounting for utility bills on a cash basis is very convenient, as the monthly cost of utility service is not even known until the utility bill is received. Under this cash-basis approach, one month's utility bill is charged to an expense each month. Although the bill charged to expense is actually the *prior* month's bill, the resulting "error" in the financial statements is not likely to be material.
3. Adjusting entries to accrue unrecorded expenses or unrecorded revenues may be ignored if the dollar amounts are immaterial.
4. If the amount of error is not likely to be material, adjusting entries may be based on *estimates*. For example, on page 134 we illustrate an adjusting entry allocating part of the \$1,800 balance in the Supplies account to an expense account. The amount of supplies used during the period (\$600) was based on an *estimate* of the supplies still on hand (\$1,200). This \$1,200 estimate is an "educated guess"; no one actually counts all the shop supplies on hand and looks up their cost. The adjusting entry recording accrued salaries and wages payable also was based on an estimate, not a detailed calculation.

### LO 4

Explain the *materiality* principle.

**Materiality Is a Matter of Professional Judgment** Whether a specific item or event is material is a matter of *professional judgment*. In making these judgments, accountants consider several factors.

First, what constitutes a material amount varies with the size of the organization. For example, a \$1,000 expenditure may be material in relation to the financial statements of a small business, but not to the statements of a large corporation, such as *Shell Canada*.<sup>9</sup> There are no official rules as to what constitutes a material amount, but most accountants would consider amounts of less than 2 percent or 3 percent of net income to be immaterial, unless there were other factors to consider. One such other factor is the *cumulative effect* of numerous immaterial events. Each of a dozen items may be immaterial when considered by itself. When viewed together, however, the combined effect of all 12 items may be material.

Finally, materiality depends on the *nature* of the item as well as its dollar amount. Assume, for example, that several managers systematically have been stealing money from the company that they manage. Shareholders probably would consider this fact important even if the dollar amounts were small in relation to the company's total resources.

*Note to students:* In the assignment material accompanying this book, you are to consider all dollar amounts to be material, unless the problem specifically raises the question of materiality.

### Effects of the Adjusting Entries

We now have discussed nine separate adjusting entries that Overnight will make at December 31. These entries appear on the next page in the format of journal entries. (Overnight also recorded many transactions throughout the month of December. The company's December transactions are not illustrated here but were accounted for in the manner described in Chapter 3.)

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<sup>9</sup>This point is emphasized by the fact that Shell Canada rounds off the dollar amounts shown in its financial statements to the nearest \$1 million. This rounding off of financial statement amounts is, in itself, an application of the materiality concept.

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
2002			
Dec. 31	Supplies Expense . . . . .	600	
	Shop Supplies . . . . .		600
	Shop supplies used during December.		
31	Insurance Expense . . . . .	1,500	
	Unexpired Insurance . . . . .		1,500
	Insurance expense for December.		
31	Depreciation Expense: Building . . . . .	150	
	Accumulated Depreciation: Building . . . . .		150
	Monthly depreciation on building ( $\$36,000 \div 240$ mo.).		
31	Depreciation Expense: Tools and Equipment . . . . .	200	
	Accumulated Depreciation Tools and Equipment . . . . .		200
	Monthly depreciation on tools and equipment ( $\$12,000 \div 60$ mo.)		
31	Unearned Rent Revenue . . . . .	3,000	
	Rent Revenue Earned . . . . .		3,000
	Portion of rent received in advance from Harbour Cab that was earned in December ( $\$9,000 \div 3$ mo.).		
31	Salaries and Wages Expense . . . . .	1,950	
	Salaries and Wages Payable . . . . .		1,950
	To accrue wages owed to employees but unpaid as of month-end.		
31	Interest Expense . . . . .	30	
	Interest Payable . . . . .		30
	Interest expense accrued during December on note payable ( $\$4,000 \times .09 \times 1/12$ ).		
31	Accounts Receivable . . . . .	750	
	Repair Service Revenue . . . . .		750
	To recognize revenue from services rendered on Airport Shuttle maintenance contract during December.		
31	Income Taxes Expense . . . . .	600	
	Income Taxes Payable . . . . .		600
	Estimated accrued income taxes for December.		

*Adjusting entries are recorded only at the end of the period.*

After these adjustments are posted to the ledger, Overnight's ledger accounts will be up-to-date (except for the balance in the Retained Earnings account).<sup>10</sup> The company's **adjusted trial balance** at December 31, 2002, appears on page 148. (For emphasis, those accounts affected by the month-end adjusting entries are shown in red.)

<sup>10</sup> The balance in the Retained Earnings account will be brought up-to-date during the closing process, discussed on pages 153–157.

<b>OVERNIGHT AUTO SERVICE LIMITED</b>			
<b>Adjusted Trial Balance</b>			
<b>December 31, 2002</b>			
<i>Balance sheet accounts</i>	Cash . . . . .	\$11,270	
	Accounts receivable . . . . .	7,250	
	Shop supplies . . . . .	1,200	
	Unexpired insurance . . . . .	3,000	
	Land . . . . .	52,000	
	Building . . . . .	36,000	
	Accumulated depreciation: building . . . . .		\$1,650
	Tools and equipment . . . . .	12,000	
	Accumulated depreciation: tools and equipment . . . . .		2,200
	Notes payable . . . . .		4,000
	Accounts payable . . . . .		2,690
	Salaries and wages payable . . . . .		1,950
	Income taxes payable . . . . .		6,625
	Interest payable . . . . .		30
	Unearned rent revenue . . . . .		6,000
Capital stock . . . . .		80,000	
<i>Statement of retained earnings accounts</i>	Retained earnings ( <i>Note: still must be updated for transactions recorded in the accounts listed below. Closing entries serve this purpose.</i> ) . . . . .		0
	Dividends . . . . .	2,300	
<i>Income statement accounts</i>	Repair service revenue . . . . .		182,000
	Rent revenue earned . . . . .		3,000
	Advertising expense . . . . .	3,900	
	Salaries and wages expense . . . . .	108,820	
	Supplies expense . . . . .	7,500	
	Depreciation expense: building . . . . .	1,650	
	Depreciation expense: tools and equipment . . . . .	2,200	
	Utilities expense . . . . .	19,400	
	Insurance expense . . . . .	15,000	
	Interest expense . . . . .	30	
Income taxes expense . . . . .	6,625		
	<u>\$290,145</u>	<u>\$290,145</u>	

In the following section, we will see how Overnight's financial statements are prepared directly from the figures shown in its adjusted trial balance.

## PREPARING FINANCIAL STATEMENTS

### LO 5

Prepare an income statement, a statement of retained earnings, and a balance sheet.

Publicly owned companies—those with shares listed on a stock exchange—have obligations to release annual and quarterly information to their shareholders and to the public. These companies do not simply prepare financial statements—they publish *annual reports*.

An annual report *includes* comparative financial statements for several years and a wealth of other information about the company's financial position, business operations, and future prospects. (For illustrative purposes, the 2000 annual report of Canadian Tire Corporation, Limited appears in Appendix A.) Before an annual report is issued, the financial statements must be *audited* by a firm of public accountants. Publicly owned companies must file their audited financial statements and detailed supporting schedules with the provincial securities commission.

The activities surrounding the preparation of an annual report become very intense as the new year approaches. Once the fiscal year has ended, it often takes several *months* before the annual report is available for distribution. Thus, many accountants refer to the months of December through March as the “busy season.”<sup>11</sup> We cannot adequately discuss all the activities associated with the preparation of an annual report in a single chapter. Thus, here, we focus upon the *preparation of financial statements*.

The income statement, statement of retained earnings, and balance sheet can be prepared *directly from the amounts shown in the adjusted trial balance* on page 148. (For illustrative purposes, we have made marginal notes beside the adjusted trial balance indicating which accounts appear in which financial statements.) Overnight’s financial statements for the year ended December 31, 2002, are illustrated on the following page.

The income statement is prepared first because it determines the amount of net income to be reported in the statement of retained earnings. The statement of retained earnings is prepared second because it determines the amount of retained earnings to be reported on the balance sheet. Note that we have not included Overnight’s cash flow statement with the other three reports. An in-depth discussion of the cash flow statement is presented in Chapter 11.

### The Income Statement

Alternative titles for the income statement include *earnings statement*, *statement of operations*, and *profit and loss statement*. The income statement is used to summarize the *operating* results of a business by matching the revenues earned during a given period of time with the expenses incurred in generating those revenues.

The revenues and expenses shown in Overnight’s income statement are taken directly from the company’s adjusted trial balance. Overnight’s 2002 income statement shows that revenue exceeded expenses for the year, thus producing a net income of \$19,875. Bear in mind, however, that this measurement of net income is not absolutely accurate or precise due to the *assumptions and estimates* in the accounting process.

An income statement has certain limitations. For instance, the amounts shown for depreciation expense are based upon estimates of the useful lives of the company’s building and equipment. Also, the income statement includes only those events that have been evidenced by actual business transactions. Perhaps, during the year, Overnight’s advertising has caught the attention of many potential customers. A good “customer base” is certainly an important step towards profitable operations; however, the development of a customer base is not reflected in the income statement because its value cannot be measured *objectively* until actual transactions take place. Despite these limitations, the income statement is of vital importance to the users of a company’s financial statements.

### The Statement of Retained Earnings

*Retained earnings* is that portion of shareholders’ (owners’) equity created by earning net income and retaining the related resources in the business. The resources retained from being profitable may include, but are certainly not limited to, *cash*. The statement of retained earnings summarizes the increases and decreases in retained earnings resulting from business operations during the period. Increases in retained earnings result from earning net income; decreases result from net losses and from the declaration of dividends.

#### LO 6

Explain how the income statement and statement of retained earnings relate to the balance sheet.

<sup>11</sup> Some companies elect to end their fiscal year during a seasonal low point in business activity. However, most companies *do* end their fiscal year on December 31.

Amounts are taken directly from the adjusted trial balance

<b>OVERNIGHT AUTO SERVICE LIMITED</b>		
<b>Income Statement</b>		
<b>For the Year Ended December 31, 2002</b>		
<b>Revenues:</b>		
Repair service revenue		\$182,000
Rent revenue earned		3,000
Total revenues		<u>\$185,000</u>
<b>Expenses:</b>		
Advertising expense	\$3,900	
Salaries and wages expense	108,820	
Supplies expense	7,500	
Depreciation expense: building	1,650	
Depreciation expense: tools and equipment	2,200	
Utilities expense	19,400	
Insurance expense	15,000	
Interest expense	30	
		<u>158,500</u>
Income before income taxes		\$ 26,500
Income taxes expense		6,625
Net income		<u>\$ 19,875</u>

Net income also appears in the statement of retained earnings

<b>OVERNIGHT AUTO SERVICE LIMITED</b>	
<b>Statement of Retained Earnings</b>	
<b>For the Year Ended December 31, 2002</b>	
Retained earnings, Jan. 20, 2002	\$ 0
Add: Net income	19,875
Subtotal	<u>\$19,875</u>
Less: Dividends	2,300
Retained earnings, Dec. 31, 2002	<u>\$17,575</u>

The ending balance in the Retained Earnings account also appears on the balance sheet

<b>OVERNIGHT AUTO SERVICE LIMITED</b>		
<b>Balance Sheet</b>		
<b>December 31, 2002</b>		
<b>Assets</b>		
Cash		\$ 11,270
Accounts receivable		7,250
Shop supplies		1,200
Unexpired insurance		3,000
Land		52,000
Building	\$36,000	
Less: accumulated depreciation	<u>1,650</u>	34,350
Tools and equipment	\$12,000	
Less: accumulated depreciation	<u>2,200</u>	9,800
Total assets		<u>\$118,870</u>
<b>Liabilities &amp; Shareholders' Equity</b>		
<b>Liabilities:</b>		
Notes payable		\$ 4,000
Accounts payable		2,690
Salaries and wages payable		1,950
Income taxes payable		6,625
Interest payable		30
Unearned rent revenue		6,000
Total liabilities		<u>\$ 21,295</u>
<b>Shareholders' equity:</b>		
Capital Stock	80,000	
Retained earnings	<u>17,575</u>	97,575
Total liabilities and shareholders' equity		<u>\$118,870</u>

The format of this financial statement is based upon the following relationships:

$$\begin{array}{r} \text{Retained Earnings} \\ \text{at the beginning} \\ \text{of the period} \end{array} + \begin{array}{r} \text{Net} \\ \text{Income} \end{array} - \text{Dividends} = \begin{array}{r} \text{Retained Earnings} \\ \text{at the end} \\ \text{of the period} \end{array}$$

*Statement of retained earnings*

The amount of retained earnings at the *beginning* of the period is shown at the top of the statement. Next, the net income for the period is added (or net loss subtracted), and any dividends declared during the period are deducted. This short computation determines the amount of retained earnings at the *end* of the accounting period. The ending retained earnings (\$17,575 in our example) appears at the bottom of the statement and also in the company's year-end balance sheet.

Our illustration of the statement of retained earnings for Overnight is unusual in that retained earnings at the date of the company's formation (January 20, 2000) is \$0. This occurred only because 2002 was the *first year* of Overnight's business operations. The ending retained earnings (\$17,575) becomes the beginning retained earnings for the following year.

**A Word about Dividends** In Chapter 3, the declaration and payment of a cash dividend were treated as a single event recorded by one journal entry. A small corporation with only a few shareholders may choose to declare and pay a dividend on the same day. In large corporations, an interval of a month or more will separate the date of declaration from the later date of payment. A liability account, Dividends Payable, comes into existence when the dividend is declared and is discharged when the dividend is paid. Because Overnight reports no dividends payable in its adjusted trial balance, we may assume that it declared and had paid the entire \$2,300 at December 31, 2002.<sup>12</sup>

Finally, it is important to realize that dividends paid to shareholders are *not* reported in the income statement as an expense. In short, dividends represent a decision by a corporation to distribute a portion of its income to shareholders. Thus, the amount of the dividend is not included in the computation of income.

## The Balance Sheet

The balance sheet lists the amounts of the company's assets, liabilities, and shareholders' equity at the *end* of the accounting period. The balances of Overnight's asset and liability accounts are taken directly from the adjusted trial balance on page 148. The amount of retained earnings at the end of the period, \$17,575, was determined in the *statement of retained earnings*.

Balance sheets can be presented with asset accounts appearing on the left and liabilities and shareholders' equity accounts appearing on the right. They may also be presented in *report form*, with liabilities and shareholders' equity listed *below* (rather than to the right of) the asset section.

## RELATIONSHIP AMONG THE FINANCIAL STATEMENTS

A set of financial statements becomes easier to understand if we recognize that the income statement, statement of retained earnings, and balance sheet all are *related to one another*. These relationships are emphasized by the arrows in the right-hand margin of our illustration on page 150.

The balance sheet prepared at the end of the preceding period and the one prepared at the end of the current period both include the amount of retained earnings at the respective balance sheet dates. The statement of retained earnings summarizes the factors

<sup>12</sup> Details related to the declaration and payment of dividends are discussed in Chapter 10.

(net income and dividends) that have caused the amount of retained earnings to change between these two balance sheet dates. The income statement explains in greater detail the change in retained earnings resulting from the profitable (or unprofitable) operation of the business. Thus, the income statement and the retained earnings statement provide informative links between successive balance sheets.

### Drafting the Notes That Accompany Financial Statements

To the users of financial statements, **adequate disclosure** is perhaps the most important accounting principle. This principle simply means that financial statements should be accompanied by any information necessary for the statements to be *interpreted properly*.

Most disclosures appear within the several pages of **notes** that accompany the financial statements. Drafting these *notes* can be one of the most challenging tasks confronting accountants at the end of the period. The content of these notes often cannot be drawn directly from the accounting records. Rather, drafting these notes requires an *in-depth understanding* of the company and its operations, of accounting principles, and of how decision makers interpret and use accounting information.

Two items always disclosed in the notes to financial statements are the accounting policies (methods) in use and the due dates of major liabilities. Thus, Overnight's 2002 financial statements should include the notes shown below:

**Note 1: Depreciation policies**

Depreciation expense in the financial statements is computed by the straight-line method. Estimated useful lives are 20 years for the building and 5 years for tools and equipment.

**Note 2: Maturity dates of liabilities**

The Company's notes payable consist of a single obligation that matures on February 28 of the coming year. The maturity value of this note, including interest charges, will amount to \$4,090.

### What Types of Information Must Be Disclosed?

There is no comprehensive list of all the information that should be disclosed in financial statements. The adequacy of disclosure is based on a combination of official rules, tradition, and accountants' professional judgment.

As a general rule, a company should disclose any facts that an intelligent person would consider necessary for the statements to be *interpreted properly*. In addition to accounting methods in use and the due dates of major liabilities, businesses may need to disclose such matters as the following:

- Lawsuits pending against the business
- Scheduled plant closings
- Governmental investigations into the safety of the company's products or the legality of its pricing policies
- Significant events occurring *after* the balance sheet date but before the financial statements are actually issued
- Specific customers that account for a large portion of the company's business
- Unusual transactions or conflicts of interest between the company and its key officers

Let us stress again that *there is no comprehensive list of items that must be disclosed*. Throughout this course, we will identify and discuss many items that may require disclosure in financial statements.

In some cases, companies must even disclose information that could have a *damaging effect* on the business. For example, a manufacturer may need to disclose that it is being sued by customers who have been injured by its products. The fact that a disclo-

**LO 7**

Explain the principle of *adequate disclosure*.



sure might prove embarrassing—or even damaging to the business—is *not* a valid reason for not disclosing the information. The principle of adequate disclosure demands a *good faith effort* by management to keep the users of financial statements informed about the company's operations.

Companies are *not* required to disclose information that is immaterial or that does not have a direct *financial* impact on the business. For example, a company is not required by generally accepted accounting principles to disclose the resignation, firing, or death of a key executive. Of course, companies often *do* disclose such nonfinancial events on a voluntary basis.

Disclosures that accompany financial statements should be limited to *facts* and *reasonable estimates*. They should not include *optimistic speculation* that cannot be substantiated.

For a look at the types of disclosure made by publicly owned corporations, we refer our readers to the Canadian Tire's annual report, which appears in Appendix A.

## CLOSING THE TEMPORARY EQUITY ACCOUNTS

As previously stated, revenues increase retained earnings, and expenses and dividends decrease retained earnings. If the only financial statement that we needed were a balance sheet, these changes in retained earnings could be recorded directly in the Retained Earnings account. However, owners, managers, investors, and others need to know amounts of specific revenues and expenses, and the amount of net income earned in the period. Therefore, we maintain *separate ledger accounts* to measure each type of revenue and expense and the dividends distributed.

These revenue, expense, and dividends accounts are called *temporary*, or *nominal*, accounts because they accumulate the transactions of *only one accounting period*. At the end of this accounting period, the changes in retained earnings accumulated in these temporary accounts are transferred into the Retained Earnings accounts, through a temporary clearing account called "Income Summary." This process serves two purposes. First, it *updates the balance of the Retained Earnings account* for changes in retained earnings occurring during the accounting period. Second, it *returns the balances of the temporary accounts to zero* so that they are ready for measuring the revenues, expenses, and dividends of the next accounting period.

The Retained Earnings account and other balance sheet accounts are called *permanent*, or *real*, accounts because their balances continue to exist beyond the current accounting period. The process of transferring the balances of the temporary accounts into the Retained Earnings account is called *closing* the accounts. The journal entries made for the purpose of closing the temporary accounts are called **closing entries**.

Revenue and expense accounts are closed at the end of each accounting period by *transferring their balances* to an **Income Summary** account. When the credit balances of the revenue accounts and the debit balances of the expense accounts have been transferred into this account, the balance of the Income Summary account will be the *net income* or *net loss* for the period. If revenues (credit balances) exceed expenses (debit balances), the Income Summary account will have a credit balance representing net income. Conversely, if expenses exceed revenues, the Income Summary account will have a debit balance representing net loss. This is consistent with the rule that increases in shareholders' (owners') equity are recorded by credits and decreases are recorded by debits. The balance in the Income Summary account is then closed by transferring its balance to the Retained Earnings account.

### LO 8

Explain the purposes of *closing entries*; prepare these entries.

While adjusting entries are usually made on a monthly basis, it is common practice to close accounts only *once each year*. Thus, we will demonstrate the closing of the temporary accounts of Overnight Auto Service Limited at December 31, 2002, the end of its first year of operations.

On the following pages, Overnight's temporary accounts are illustrated in the T-account form. We have eliminated the detail of every transaction posted to each account throughout the year. Therefore, each account shows only its December 31, 2002, balance as reported in the adjusted trial balance on page 148.

### Closing Entries for Revenue Accounts

Revenue accounts have credit balances. Therefore, closing a revenue account means transferring its credit balance to the Income Summary account. This transfer is accomplished by a journal entry debiting the revenue account in an amount equal to its credit balance, with an offsetting credit to the Income Summary account. The debit portion of this closing entry returns the balance of the revenue account to zero; the credit portion transfers the former balance of the revenue account into the Income Summary account.

Overnight uses two revenue accounts: (1) Repair Service Revenue, which had a credit balance of \$182,000 at December 31, 2002, and (2) Rent Revenue Earned, which had a credit balance of \$3,000 at December 31, 2002. Two separate journal entries could be made to close these accounts, but the use of one *compound journal entry* is an easier, time-saving method of closing more than one account. A compound journal entry is an entry that includes debits or credits to more than one account. The compound closing entry for revenue accounts is as follows:

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
2002			
Dec. 31	Repair Service Revenue .....	182,000	
	Rent Revenue Earned .....	3,000	
	Income Summary .....		185,000
	To close the repair service revenue and rent revenue earned accounts.		

After this closing entry has been posted, the two revenue accounts each have *zero* balances, whereas Income Summary has a credit balance of \$185,000.

### Closing Entries for Expense Accounts

Expense accounts have debit balances. Closing an expense account means transferring its debit balance to the Income Summary account. The journal entry to close an expense account, therefore, consists of a credit to the expense account in an amount equal to its debit balance, with an offsetting debit to the Income Summary account.

There are nine expense accounts in Overnight's ledger (see the adjusted trial balance on page 148). Again, a compound journal entry is used to close each of these accounts. The required closing entry is shown on the following page:

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
2002			
Dec. 31	Income Summary .....	165,125	
	Advertising Expense .....		3,900
	Salaries and Wages Expense .....		108,820
	Supplies Expense .....		7,500
	Depreciation Expense: Building .....		1,650
	Depreciation Expense: Tools and Equipment .....		2,200
	Utilities Expense .....		19,400
	Insurance Expense .....		15,000
	Interest Expense .....		30
	Income Taxes Expense .....		6,625
	To close the expense accounts.		

After this closing entry has been posted, the Income Summary account has a credit balance of \$19,875 (\$185,000 credit posted – \$165,125 debit posted), and the nine expense accounts each have zero balances. This \$19,875 credit balance equals the net income reported in Overnight's income statement. Had the company's income statement reported a *net loss* for the year, the Income Summary account would have a *debit balance* equal to the amount of the net loss reported.

### Closing the Income Summary Account

The nine expense accounts have now been closed, and the total amount of \$165,125 formerly contained in these accounts appears in the debit column of the Income Summary account. The revenues of \$185,000 earned during 2002 appears in the credit column of the Income Summary account. Since the credit entry representing revenues of \$185,000 is larger than the debit entry representing total expenses of \$165,125, the Income Summary has a credit balance of \$19,875 (see the T account on the following page).

The net income of \$19,875 earned during the year causes an increase in Overnight's shareholders' equity. Thus, the \$19,875 credit balance of the Income Summary account is transferred to the Retained Earnings account by the following closing entry:

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
2002			
Dec. 31	Income Summary .....	19,875	
	Retained Earnings .....		19,875
	To transferring net income to the retained earnings account.		

After this closing entry has been posted, the Income Summary account has a zero balance, and the net income for the year ended December 31, 2002, appears as an increase (or credit entry) in the Retained Earnings account as shown below:

Income Summary		Retained Earnings	
\$165,125 (Expenses)	\$185,000 (Revenues)		Jan. 20 bal. 0
\$19,875			Dec. 31 \$19,875 (Income)

Income is transferred to Retained Earning as Income Summary is closed.

### Closing the Dividends Account

As explained earlier in the chapter, dividends paid to shareholders are *not* considered an expense of the business and, therefore, are *not* taken into account in determining net income for the period. Since dividends are not an expense, the Dividends account is *not* closed to the Income Summary account. Instead, it is closed directly to the Retained Earnings account, as shown by the following entry:

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
2002			
Dec. 31	Retained Earnings . . . . .	2,300	
	Dividends . . . . .		2,300
	To transfer dividends declared to the retained earnings account.		

After this closing entry has been posted, the Dividends account will have a zero balance, and the Retained Earnings account will have an ending credit balance of \$17,575, as illustrated below:

Dividends	Retained Earnings
2,300 (total declared)	Jan. 20 bal. 0
2,300	Dec. 31 19,875 (Income)
	Dec. 31 bal. <u>17,575</u>
Dividends are closed directly to Retained Earnings.	

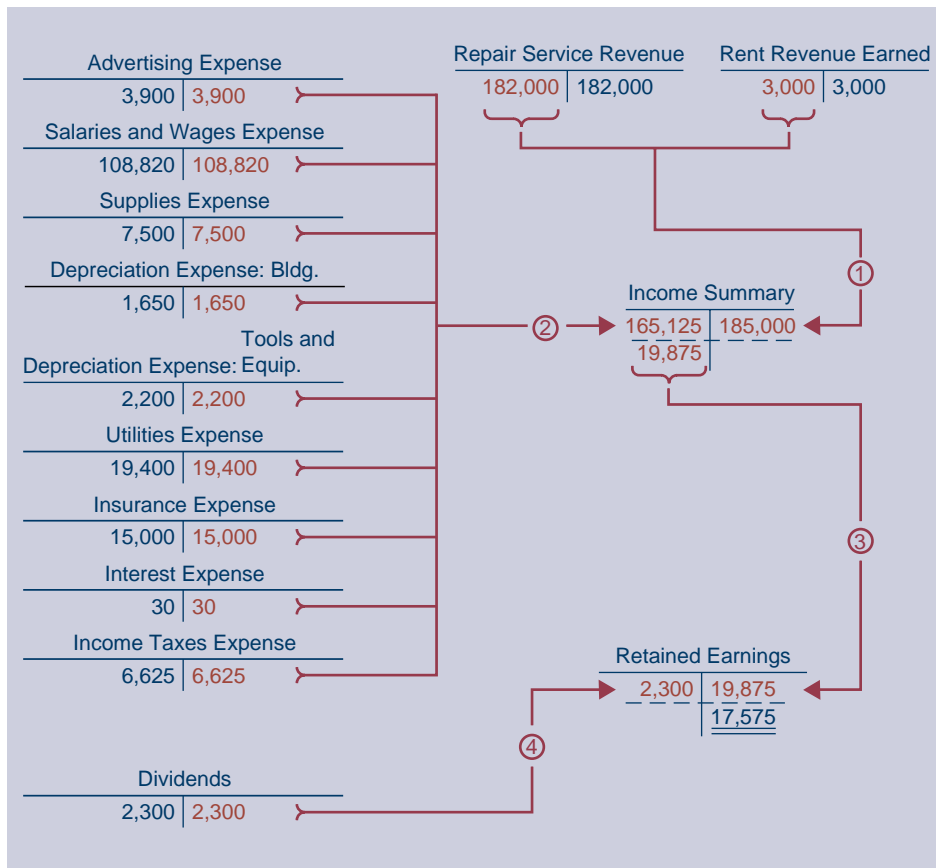
## SUMMARY OF THE CLOSING PROCESS

Let us now summarize the process of closing the accounts.

1. Close the various *revenue* accounts by transferring their balances into the Income Summary account.
2. Close the various *expense* accounts by transferring their balances into the Income Summary account.
3. Close the *Income Summary* account by transferring its balance into the Retained Earnings account.
4. Close the *Dividends* account by transferring its balance into the Retained Earnings account.

The closing of the accounts may be illustrated graphically by use of T accounts as follows:

Flowchart of the closing process



## AFTER-CLOSING TRIAL BALANCE

After the revenue and expense accounts have been closed, it is desirable to prepare an **after-closing trial balance**, which will consist solely of balance sheet accounts. There is always the possibility that an error in posting the closing entries may have upset the equality of debits and credits in the ledger. The after-closing trial balance, or *post-closing trial balance* as it is often called, is prepared from the ledger. It gives assurance that the accounts are in balance and ready for recording transactions in the new accounting period. The after-closing trial balance of Overnight Auto Service Limited can be seen on the following page:

In comparison with the adjusted trial balance (page 148), an after-closing trial balance contains only *balance sheet* accounts. Also, the Retained Earnings account no longer has a zero balance. Through the closing of the revenue, expense, and dividends accounts, the Retained Earnings account has been brought up-to-date.

### LO 9

Prepare an after-closing trial balance.

The balances in the temporary equity accounts have been closed into the Retained Earnings account

<b>OVERNIGHT AUTO SERVICE LIMITED</b>			
<b>After-Closing Trial Balance</b>			
<b>December 31, 2002</b>			
Cash		\$ 11,270	
Accounts receivable		7,250	
Shop supplies		1,200	
Unexpired insurance		3,000	
Land		52,000	
Building		36,000	
Accumulated depreciation: building			\$ 1,650
Tools and equipment		12,000	
Accumulated depreciation: tools and equipment			2,200
Notes payable			4,000
Accounts payable			2,690
Salaries and wages payable			1,950
Income taxes payable			6,625
Interest payable			30
Unearned rent revenue			6,000
Capital stock			80,000
Retained earnings, Dec. 31			17,575
		<u>\$122,720</u>	<u>\$122,720</u>

**LO 10**

Evaluate net income and solvency

### A Closer Look at Overnight: Was 2002 a Good Year? What about the Future?

We have stressed the importance of interpreting and using accounting information for business decisions. So, how should we interpret Overnight's first year net income of \$19,875?<sup>13</sup> Was it impressive? Is this amount about what should have been expected? Or was this level of net income disappointing? Also, how should we use this net income and other information to make decisions? Should we continue, or should we quit? Should we take new actions to improve the operations? And what should these actions be?

**Evaluating the Adequacy of Net Income (Profitability)** Since Overnight is a small corporation owned by Michael McBryan and his family, we should interpret its income or profitability from the viewpoint of its investors—the shareholders. We learned in Chapter 1 that investors are interested in both the return on their investments and the return of their investments. As the McBryan family controls the corporation and its dividend policy, the net income rather than the dividends should be used for measuring the return on investment. Moreover, the amount of investment should be the original investment plus the average amount of net income retained in the business. Accordingly, the return on investment is slightly over 22 percent, computed as:  $\$19,875 \div [(\$80,000 + \$97,575) \div 2]$ , that is, net income divided by the average shareholders' equity. The return on the investment should be measured in terms of risk, the risk of losing some or all of the amount invested.

A 22 percent return on investment in Overnight's *first* year of operation is quite impressive. Many businesses sustain losses in their early years. To earn a substantial return for its shareholders in the first year also indicates *excellent potential*. But what about the risk involved? The McBryan family could have lost its \$80,000 investment if the busi-

<sup>13</sup> It is presumed that the company has paid Michael McBryan and any of his family members who may be working for the company a fair amount in terms of salaries and wages. Thus, the net income reflects the realistic results of the operations.

ness did poorly. How can this risk be measured? One way to do it is to compare this 22 percent return to a “risk-free” investment, such as Canada Savings bonds. For example, if the McBryan family can invest the \$80,000 in Canada Savings bonds at 6 percent, then the difference of 16 percent ( $22\% - 6\%$ ) is the compensation for the risk taking. So, is 16 percent an adequate compensation for taking the risk of investing in such a business as Overnight? Only McBryan and his family can answer this question, by taking into consideration such factors as the family’s wealth, its entrepreneurial spirit, its risk-taking attitude, and other investment opportunities.

Evaluating the adequacy of the net income involves more than looking at the past—one has to assess its future prospects so as to decide whether to continue the investment. So, what are Overnight’s future prospects? There are a few things to consider. First, we noted earlier that new businesses generally lose money in their early years and that Overnight’s performance shows excellent potential. Second, Overnight had a \$3,000 new revenue in December by renting storage space to Harbour Cab Co. There are probably few additional expenses associated with this revenue. Thus, this agreement may increase Overnight’s income before income taxes by about \$30,000 in the coming year. In addition, Harbour Cab Co. is more likely to have all its maintenance and repair work done by Overnight. This assures a steady revenue stream from a regular customer. Third, the new maintenance agreement signed in December with Airport Shuttle Service for \$1,500 a month will provide additional net income. Also, it is more likely that Airport Shuttle would have Overnight do all the repair work. This would give Overnight another regular customer.

We have, so far, looked mainly at the revenue prospects; let us now take a look at the expense prospects. The three largest expenses were: salaries and wages, utilities, and insurance. Since Michael McBryan is an experienced auto mechanic and his salary is presumed to be reasonable, it may be assumed that Overnight’s salaries and wages expense is in line with current market level. But Overnight should carefully evaluate the utilities and insurance expenses for any specific potential savings. With respect to utilities expense (which averaged more than \$1,700 per month), Overnight should consider whether the lighting and heating systems are efficient, especially the lighting system which is on all night. In renewing the insurance policy, Overnight should seek competitive quotes from several companies to see if comparable coverage is available for substantially less than \$18,000 a year. Any savings from these two expenses will increase net income in the next and subsequent years.

Overall, the net income future prospects look bright and promising for Overnight. Its income for the next year will likely be increased by more than \$30,000, and assuming a 25 percent income tax rate, an increase of net income of more than \$22,500. This will more than double last year’s performance.

Of course, the operating results over the *next few years* (the trend) are likely to “tell the story.” If Overnight’s future net income remains at the second year level or greater, the business should be considered successful, as evidenced by the profitable trend. However, McBryan and his family must also consider whether the amount of net income is worth the risk involved.

**Evaluating Solvency** *Solvency* refers to a company’s ability to meet its cash obligations as they become due. Solvency, at least in the short term, may be independent of profitability. And in the short term, Overnight appears to have *potential* cash flow problems. In the next several months, Overnight must make cash expenditures for the following items:

Items requiring cash payment  
in near future

Note and interest payable	\$ 4,090
Accounts payable	2,690
Salaries and wages payable	1,950
Income taxes payable	6,625
Insurance policy renewal	18,000
Total expenditures coming due	<u>\$33,355</u>

These outlays exceed the company's liquid assets (cash and accounts receivable) reported in its December 31, 2002, balance sheet. However, the liquid assets reported in Overnight's balance sheet represent cash and accounts receivable at a *point in time* (December 31, 2002). Thus, while these liquid assets are currently insufficient to cover the cash expenditures becoming due, this may not be the case for long. On the basis of its past performance, Overnight is likely to generate revenues in excess of \$60,000 during the next several months. If a substantial amount of these revenues are received in cash, and expenses are kept under control, the company may actually become more solvent than it appears to be now.

### Preparing Financial Statements Covering Different Periods of Time

#### LO 11

Explain how *interim* financial statements are prepared in a business that closes its accounts only at year-end.

Many businesses prepare financial statements at the end of every quarter as well as at year-end. In addition, they may prepare financial statements covering other time periods, such as one month or the year-to-date.

When a business closes its accounts only at year-end, the revenue, expense, and dividends accounts have balances representing the activities of the *year-to-date*. Thus, at *June 30*, these account balances represent the activities recorded over the past six months. Year-to-date financial statements can be prepared directly from an adjusted trial balance. But how might this business prepare **interim financial statements** covering only the month of June? Or the quarter (three months) ended June 30?

The answer is by doing a little *subtraction*. As an example, assume that the adjusted balance in Overnight's Repair Service Revenue account at the ends of the following months was as shown below:

March 31 (end of the first quarter)	\$38,000
May 31	67,000
June 30	80,000

Revenue amounts are for the  
year-to-date

At each date, the account balance represents the revenue earned since January 1. Thus, the March 31 balance represents three months' revenue; the May 31 balance, five months' revenue; and the June 30 balance, the revenue earned over a period of six months.

To prepare an income statement for the *six months* ended June 30, we simply use the June 30 balance in the revenue account—\$80,000. But to prepare an income statement for the *month* ended June 30, we would have to subtract from the June 30 balance of this account its balance as of May 31. The remainder, \$13,000, represents the amount of revenue recorded in the account during June ( $\$80,000 - \$67,000 = \$13,000$ ).

To prepare an income statement for the *quarter* ended June 30, we would subtract from the June 30 balance in this revenue account its balance as of March 31. Thus, the revenues earned during the second quarter (April 1 through June 30) amounts to \$42,000 ( $\$80,000 - \$38,000 = \$42,000$ ).

This process of subtracting prior balances from the current balance is repeated for each revenue and expense account, as well as for the dividends account.



This sounds like a bigger job than it really is. There are only about 10 or 15 accounts involved, and in a computerized system, the entire process is done automatically. Even in a manual system, a person using a calculator can complete this process in a few minutes.

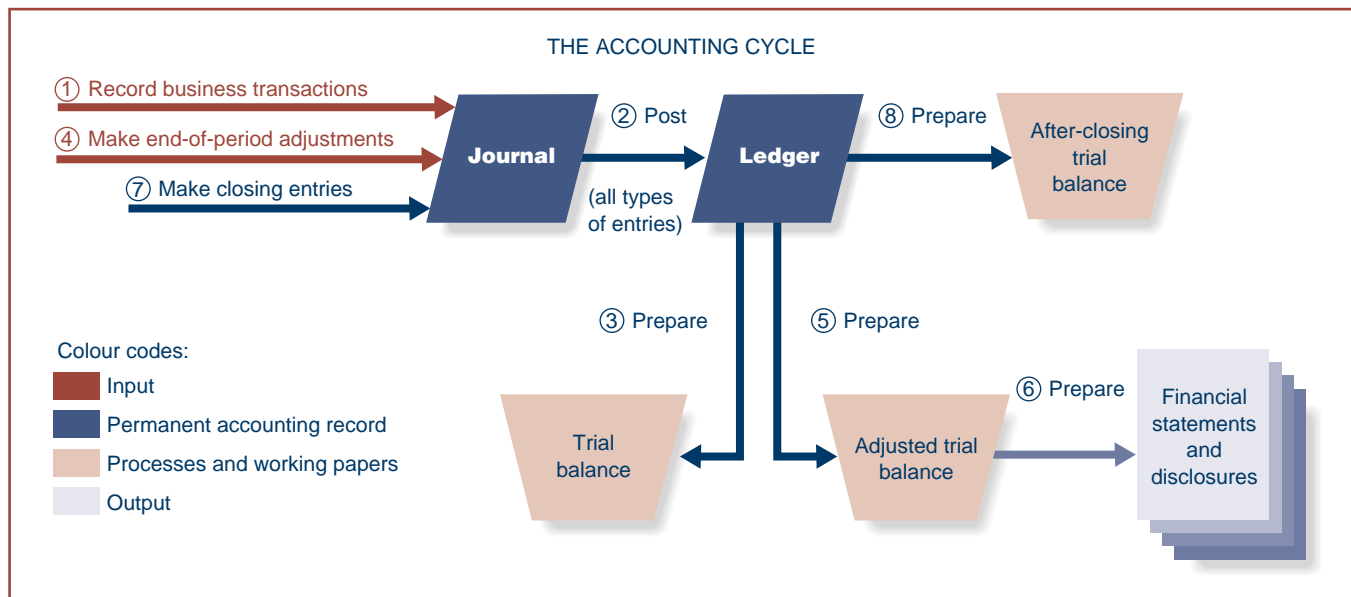
Computations like these are not required for the balance sheet accounts. A balance sheet always is based on the account balances *at the balance sheet date*. Therefore, a June 30 balance sheet looks exactly the same, *regardless* of the time period covered by the other financial statements.

## SUMMARY COMMENTS

In Chapter 3, we introduced the concept of the *accounting cycle*. Our coverage, however, stopped with the preparation of a trial balance. In Chapter 4, we have explained and illustrated the *complete accounting cycle*—from the initial recording of transactions to the preparation of an after-closing trial balance.

The steps comprising this cycle are listed below and also are illustrated in the form of a diagram on the next page:

1. *Journalize (record) transactions.* Enter all transactions in the journal, thus creating a chronological record of events.
2. *Post to ledger accounts.* Post debits and credits from the journal to the proper ledger accounts, thus creating a record classified by accounts.
3. *Prepare a trial balance.* Prove the equality of debits and credits in the ledger.
4. *Make end-of-period adjustments.* Make adjusting entries in the general journal and post to ledger accounts.
5. *Prepare an adjusted trial balance.* Prove again the equality of debits and credits in the ledger. (*Note:* These are the amounts used in the preparation of financial statements.)
6. *Prepare financial statements and appropriate disclosures.* An income statement shows the results of operation for the period. A statement of retained earnings shows changes in retained earnings during the period. A balance sheet shows the financial position of the business at the end of the period. Financial statements should be accompanied by *notes* disclosing facts necessary for the proper interpretation of those statements.
7. *Journalize and post the closing entries.* The closing entries “zero” the revenue, expense, and dividends accounts, making them ready for recording the events of the next accounting period. These entries also bring the balance in the Retained Earnings account up-to-date.
8. *Prepare an after-closing trial balance.* This step ensures that the ledger remains in balance after posting of the closing entries.



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### NET CONNECTION

Now, let us try to relate adjusting entries to the real world. Find Air Canada's annual financial statements at:

[www.aircanada.ca](http://www.aircanada.ca)

Using the four types of adjustments discussed in the chapter, determine the accounts on the balance sheet and income statement that probably have been affected by adjusting entries at year end. For example, determine whether there are depreciable assets or unearned revenues on the balance sheet, or depreciation and interest expenses in the income statement.

## SUPPLEMENTAL TOPIC

### The Worksheet

#### LO 12

Prepare a worksheet and explain its usefulness.

A **worksheet** illustrates in one place the relationships among the unadjusted trial balance, proposed adjusting entries, and the financial statements. A worksheet is prepared at the end of the period, but *before* the adjusting entries are formally recorded in the accounting records. It is not a formal step in the accounting cycle. Rather, it is a tool used by accountants to work out the details of the proposed end-of-period adjustments. It also provides them with a preview of how the financial statements will look.

A worksheet for Overnight Auto Service Limited at December 31, 2002, is illustrated on the following page.

**Isn't This Really a "Spreadsheet"?** Yes. The term *worksheet* is a holdover from the days when these schedules were prepared manually on large sheets of columnar paper. Today, most worksheets are prepared on a computer using spreadsheet software, such as *Lotus 1-2-3™* or *Excel™*, or with **general ledger software**, such as *Peachtree™* or *Dac-Easy™*.

Since the worksheet is simply a tool used by accountants, it often is not printed out in hard copy—it may exist only on a computer screen. But the concept remains the same;

<sup>™</sup> Registered trademarks of the respective manufacturers.

<b>OVERNIGHT AUTO SERVICE LIMITED</b>											
<b>Worksheet</b>											
<b>For the Year Ended December 31, 2002</b>											
	Trial Balance		Adjustments*		Adjusted Trial Balance		Income Statement		Balance Sheet		
	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	
<b>Balance sheet accounts:</b>											
Cash	11,270				11,270				11,270		
Accounts receivable	6,500		(h) 750		7,250				7,250		
Shop supplies	1,800			(a) 600	1,200				1,200		
Unexpired insurance	4,500			(b) 1,500	3,000				3,000		
Land	52,000				52,000				52,000		
Building	36,000				36,000				36,000		
Accumulated depreciation: building		1,500		(c) 150		1,650				1,650	
Tools and equipment	12,000				12,000				12,000		
Accumulated depreciation: tools and equipment		2,000		(d) 200		2,200				2,200	
Notes payable		4,000				4,000				4,000	
Accounts payable		2,690				2,690				2,690	
Income taxes payable		6,025		(i) 600		6,625				6,625	
Unearned rent revenue		9,000	(e) 3,000			6,000				6,000	
Capital stock		80,000				80,000				80,000	
Retained earnings		0				0				0	
Dividends	2,300				2,300				2,300		
Salaries and wages payable				(f) 1,950		1,950				1,950	
Interest payable				(g) 30		30				30	
<b>Income statement accounts:</b>											
Repair service revenue		181,250		(h) 750		182,000				182,000	
Advertising expense	3,900				3,900			3,900			
Salaries and wages expense	106,870		(f) 1,950		108,820			108,820			
Supplies expense	6,900		(a) 600		7,500			7,500			
Depreciation expense: building	1,500		(c) 150		1,650			1,650			
Depreciation expense: tools and equipment	2,000		(d) 200		2,200			2,200			
Utilities expense	19,400				19,400			19,400			
Insurance expense	13,500		(b) 1,500		15,000			15,000			
Income taxes expense	6,025		(i) 600		6,625			6,625			
Rent revenue earned				(e) 3,000		3,000		3,000			
Interest expense			(g) 30		30			30			
	286,465	286,465	8,780	8,780	290,145	290,145	165,125	185,000	125,020	105,145	
Net income							19,875			19,875	
Totals							185,000	185,000	125,020	125,020	

\*Adjustments:

(a) Shop supplies used in December.

(b) Portion of insurance cost expiring in December.

(c) Depreciation on building for December.

(d) Depreciation of tools and equipment for December.

(e) Earned one-third of rent revenue collected in advance from Harbour Cab.

(f) Unpaid wages owed to hourly employees at December 31.

(g) Interest payable accrued during December.

(h) Repair service revenue earned in December but not yet billed.

(i) Income taxes expense for December.

the worksheet displays *in one place* the unadjusted account balances, proposed adjusting entries, and financial statements as they will appear if the proposed adjustments are made.

**What Is It Used For?** A worksheet serves several purposes. It allows accountants to *see the effects* of adjusting entries without actually entering these adjustments in the accounting records. This makes it relatively easy for them to correct errors or make changes in estimated amounts. It also enables accountants and management to preview the financial statements before the final drafts are developed. Once the worksheet is complete, it serves as the source for recording adjusting and closing entries in the accounting records and for preparing financial statements.

Another important use of the worksheet is in the preparation of *interim financial statements*. Interim statements are financial statements developed at various points *during* the fiscal year. Most companies close their accounts only once each year. Yet, they often need to develop quarterly or monthly financial statements. Through the use of a worksheet, they can develop these interim statements *without* having to formally adjust and close their accounts.

**The Mechanics: How It Is Done** Whether done manually or on a computer, the preparation of a worksheet involves five basic steps. First, we will describe these steps as if the worksheet were being prepared manually. Afterwards, we will explain how virtually all the mechanical steps can be performed automatically by a computer.

1. *Enter the ledger account balances in the Trial Balance columns.* The worksheet begins with an unadjusted trial balance—that is, a listing of the ledger account balances at the end of the period *prior* to making any adjusting entries. In our illustration, the unadjusted trial balance appears in *blue*.

Note our inclusion of the captions “Balance sheet accounts” and “Income statement accounts.” These captions are optional, but they help clarify the relationships between the ledger accounts and the financial statements. (*Hint:* A few lines should be left blank immediately below the last balance sheet account. It is often necessary to add a few more accounts during the adjusting process. Additional income statement accounts can be added on the lines above or below the trial balance totals.)

2. *Enter the adjustments in the Adjustments columns.* The next step is the most important: Enter the appropriate end-of-period adjustments in the Adjustments columns. In our illustration, these adjustments appear in *red*.

Note that each adjustment includes both debit and credit entries, which are linked together by the small key letters appearing to the left of the dollar amount. Thus, adjusting entry *a* consists of a \$600 debit to Supplies Expense and a \$600 credit to Shop Supplies. Because the individual adjusting entries include equal debit and credit amounts, the totals of the debit and credit Adjustments columns should be equal.

Sometimes the adjustments require adding accounts to the original trial balance. (The four ledger account titles printed in *red* were added during the adjusting process.)

3. *Prepare an adjusted trial balance.* Next, an adjusted trial balance is prepared. The balances in the original trial balance (*blue*) are adjusted for the debit or credit amounts in the Adjustments columns (*red*). This process of horizontal addition or subtraction is called *cross-footing*. The adjusted trial balance is totalled to determine that the accounts remain in balance.

At this point, the worksheet is almost complete. We have emphasized that financial statements are prepared *directly from the adjusted trial balance*. Thus, we have only to arrange these accounts into the format of financial statements. For this reason, we show the adjusted trial balance amounts in *blue*—both in the Adjusted Trial Balance columns and when these amounts are *extended* (carried forward) into the financial statement columns.

4. *Extend the adjusted trial balance amounts into the appropriate financial statement columns.* The balance sheet accounts—assets, liabilities, and shareholders’ equity—

are extended into the Balance Sheet columns; income statement amounts, into the Income Statement columns. (The “Balance Sheet” and “Income Statement” captions in the original trial balance should simplify this procedure. Note that each amount is extended to only one column. Also, the account retains the same debit or credit balance as shown in the adjusted trial balance.)

5. *Total the financial statement columns; determine and record net income or net loss.* The final step in preparing the worksheet consists of totalling the Income Statement and Balance Sheet columns and then bringing each set of columns into balance. These tasks are performed on the bottom three lines of the worksheet. In our illustration, the amounts involved in this final step are shown in the *blue* shaded areas.

When the Income Statement and Balance Sheet columns are first totalled, the debit and credit columns will not agree. But each set of columns should be out-of-balance by the *same amount*—and that amount should be the amount of net income or net loss for the period.

Let us briefly explain *why* both sets of columns initially are out-of-balance by this amount. First, consider the Income Statement columns. The Credit column contains the revenue accounts, and the Debit column the expense accounts. The difference, therefore, represents the net income (net loss) for the period.

Now consider the Balance Sheet columns. All the balance sheet amounts are shown at up-to-date amounts *except* for the Retained Earnings account, which still contains the balance from the *beginning* of the period. To bring the Retained Earnings account up-to-date, we must add net income and subtract any dividends. The dividends already appear in the Balance Sheet Debit column. So what is the only thing missing? The net income (or net loss) for the period.

To bring both sets of columns into balance, we enter the net income (or net loss) on the next line. The same amount will appear in both the Income Statement columns and the Balance Sheet columns. But in one set of columns it appears as a debit, and in the other, it appears as a credit.<sup>14</sup> After this amount is entered, each set of columns should balance.

**Computers Do the “Pencil-Pushing”** When a worksheet is prepared by the computer, accountants perform only *one* of the steps listed above—*entering the adjustments*. The computer automatically lists the ledger accounts in the form of a trial balance. After the accountant has entered the adjustments, it automatically computes the adjusted account balances and completes the worksheet. (Once the adjusted balances are determined, completing the worksheet involves nothing more than putting these amounts in the appropriate columns and determining the column totals.)

**What If...: A Special Application of Worksheet Software** We have discussed a relatively simple application of the worksheet concept—illustrating the effects of proposed *adjusting entries* on account balances. But the same concept can be applied to proposed *future transactions*. The effects of the proposed transactions simply are entered in the Adjustments columns. Thus, without disrupting the accounting records, accountants can prepare schedules showing how the company’s financial statements might be affected by such events as a merger with another company, a 15 percent increase in sales volume, or the closure of a plant.

There is a tendency to view worksheets as mechanical and old-fashioned. This is not at all the case. Today, the mechanical aspects are handled entirely by computers. The real purpose of a worksheet is to show quickly and efficiently how specific events or transactions will affect the financial statements. This is not bookkeeping—it is *planning*.

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<sup>14</sup> To bring the Income Statement columns into balance, net *income* is entered in the *Debit* column. This is because the Credit column (revenue) exceeds the Debit column (expenses). But on the balance sheet, net income is an element of shareholders’ equity, which is represented by a credit. In event of a net *loss*, this situation reverses.

# END-OF-CHAPTER REVIEW

## KEY TERMS INTRODUCED OR EMPHASIZED IN CHAPTER 4

**accrue** (p. 140) To grow or accumulate over time; for example, interest expense.

**Accumulated Depreciation** (p. 137) A contra-asset account shown as a deduction from the related asset account in the balance sheet. Depreciation taken throughout the useful life of an asset is accumulated in this account.

**adequate disclosure** (p. 152) The generally accepted accounting principle of providing with financial statements any information that users need to interpret those statements properly.

**adjusted trial balance** (p. 147) A schedule indicating the balances in ledger accounts *after* end-of-period adjusting entries have been posted. The amounts shown in the adjusted trial balance are carried directly into financial statements.

**adjusting entries** (p. 130) Entries made at the end of the accounting period for the purpose of recognizing revenues and expenses that are not properly measured as a result of journalizing transactions as they occur.

**after-closing trial balance** (p. 157) A trial balance prepared after all closing entries have been made. Consists only of accounts for assets, liabilities, and shareholders' equity.

**book value** (p. 137) The net amount at which an asset appears in financial statements. For depreciable assets, book value represents cost minus accumulated depreciation. Also called *carrying value*.

**amortization** (p. 136) See depreciation.

**closing entries** (p. 153) Journal entries made at the end of the period for the purpose of closing temporary accounts (revenue, expense, and dividend accounts) and transferring balances to the Retained Earnings account.

**contra-asset account** (p. 137) An account with a credit balance that is offset against or deducted from an asset account to produce the proper balance sheet amount for the asset (book value).

**depreciable assets** (p. 136) Physical objects with a limited life. The cost of these assets is gradually recognized as depreciation expense.

**depreciation (amortization)** (p. 136) The systematic allocation of the cost of an asset to expense during the periods of its useful life.

**general ledger software** (p. 162) Computer software used for recording transactions, maintaining journals and ledgers, and preparing financial statements. Also includes spreadsheet capabilities for showing the effects of proposed adjusting entries or transactions on the financial statements without actually recording these entries in the accounting records.

**immaterial** (p. 145) Something of little or no consequence. Immaterial items may be accounted for in the most convenient manner, without regard to other theoretical concepts.

**Income Summary** (p. 153) The summary account in the ledger to which revenue and expense accounts are closed at the end of the period. The balance (credit balance for a net income, debit balance for a net loss) is transferred to the Retained Earnings account.

**interim financial statements** (p. 160) Financial statements prepared for periods of less than one year (includes monthly and quarterly statements).

**matching (principle)** (p. 144) The accounting principle of offsetting revenues with the expenses incurred in producing those revenues. Requires recognition of expenses in the periods that the goods and services are used in the effort to produce revenues.

**materiality** (p. 145) The relative importance of an item or amount. Items significant enough to influence decisions are said to be *material*.

**notes (accompanying financial statements)** (p. 152) Supplemental disclosures that accompany financial statements. These notes provide users with various types of information considered necessary for the proper interpretation of the statements.

**prepaid expenses** (p. 134) Assets representing advance payment of the expenses of future accounting periods. As time passes, adjusting entries are made to transfer the related costs from the asset account to an expense account.

**realization (principle)** (p. 144) The accounting principle that governs the timing of revenue recognition. Basically, the principle indicates that revenues should be recognized in the period in which they are earned.

**straight-line method of depreciation** (p. 136) The widely used approach of recognizing an equal amount of depreciation expense in each period of a depreciable asset's useful life.

**unearned revenues** (p. 138) An obligation to deliver goods or render services in the future, stemming from the receipt of advance payment.

**useful life** (p. 136) The period of time that a depreciable asset is expected to be useful to the business. This is the period over which the cost of the asset is allocated to depreciation expense.

**worksheet** (p. 162) A multicolumn schedule showing the relationships among the current account balances (a trial balance), proposed or actual adjusting entries or transactions, and the financial statements that would result if these adjusting entries or transactions were recorded. Used both at the end of the accounting period as an aid to preparing financial statements and for planning purposes.

**DEMONSTRATION PROBLEM**

Internet Consulting Service Inc., adjusts its accounts every month, but closes them only at December 31. At December 31, 2002, the unadjusted balances in the ledger accounts were as follows. (Bear in mind, month-end adjusting entries for December have not yet been made.)

<b>INTERNET CONSULTING SERVICE INC.</b>			
<b>Trial Balance</b>			
<b>December 31, 2002</b>			
Cash		\$ 49,100	
Consulting fees receivable		23,400	
Prepaid rent		6,300	
Prepaid dues and subscriptions		300	
Supplies		600	
Equipment		36,000	
Accumulated depreciation: equipment			\$ 10,200
Notes payable			5,000
Income taxes payable			-0-
Unearned consulting fees			5,950
Capital stock			42,000
Retained earnings			32,700
Dividends	32,000		
Consulting fees earned			257,180
Salaries expense	148,820		
Telephone expense	2,550		
Rent expense	22,000		
Income taxes expense	19,000		
Dues and subscriptions expense	560		
Supplies expense	1,600		
Depreciation expense: equipment	6,600		
Miscellaneous expenses	4,200		
		<u>\$353,030</u>	<u>\$353,030</u>

**Other Data**

1. On December 1, the company signed a new rental agreement and paid three months' rent in advance at a rate of \$2,100 per month. This advance payment was debited to the Prepaid Rent account.
2. Dues and subscriptions expired during December amounted to \$50.
3. An estimate of supplies on hand was made at December 31; the estimated cost of the unused supplies was \$450.
4. The useful life of the equipment has been estimated at five years (60 months) from date of acquisition.
5. Accrued interest on notes payable amounted to \$100 at year-end.
6. Consulting services valued at \$2,850 were rendered during December to clients who had made payment in advance.
7. It is the custom of the firm to bill clients only when consulting work is completed or, in the case of prolonged engagements, at monthly intervals. At December 31, consulting services valued at \$11,000 had been rendered to clients but not yet billed. No advance payments had been received from these clients.

8. Salaries earned by employees but not paid as of December 31 amount to \$1,700.
9. Income taxes expense for the year is estimated at \$21,000. Of this amount, \$19,000 has been recognized as expense in prior months, paid to tax authorities. The company will pay the \$2,000 remainder of its income tax liability at the end of January.

### Instructions

- a. Prepare the necessary adjusting journal entries on December 31, 2002.
- b. Determine the amounts to be reported in the company's year-end income statement for each of the following accounts:
 

Consulting Fees Earned	Dues and Subscriptions Expense
Salaries Expense	Depreciation Expense: Equipment
Telephone Expense	Miscellaneous Expenses
Rent Expense	Interest Expense
Supplies Expense	Income Taxes Expense
- c. Determine the company's net income for the year ended December 31, 2002.

### Solution to Demonstration Problem

a.

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
Dec. 31 2002			
(1)	Rent Expense . . . . .	2,100	
	Prepaid Rent . . . . .		2,100
	Rent expense for December.		
(2)	Dues and Subscriptions Expense . . . . .	50	
	Prepaid Dues and Subscriptions . . . . .		50
	Dues and subscriptions expense for December.		
(3)	Supplies Expense . . . . .	150	
	Supplies . . . . .		150
	Supply expense for December (\$600 – \$450).		

(continued)



<b>GENERAL JOURNAL (continued)</b>			
Date	Account Titles and Explanation	Debit	Credit
Dec. 31 2002			
(4)	Depreciation Expense: Equipment . . . . . Accumulated Depreciation: Equipment . . . . . Depreciation expense for December (\$36,000 ÷ 60 mo.).	600	600
(5)	Interest Expense . . . . . Interest Payable . . . . . Interest accrued on notes payable in December.	100	100
(6)	Unearned Consulting Fees . . . . . Consulting Fees Earned . . . . . Consulting services performed for clients who paid in advance.	2,850	2,850
(7)	Consulting Fees Receivable . . . . . Consulting Fees Earned . . . . . Consulting services performed in December for which billings have not been made nor payments received.	11,000	11,000
(8)	Salaries Expense . . . . . Salaries Payable . . . . . Salaries accrued in December but not yet paid.	1,700	1,700
(9)	Income Taxes Expense . . . . . Income Taxes Payable . . . . . Estimated accrued income taxes for December.	2,000	2,000

b.

	Unadjusted Trial Balance Amount	+	Adjustment	=	Income Statement Amount
Consulting fees earned	\$257,180		(6) \$ 2,850		
			(7) \$11,000		<u>\$271,030</u>
Salaries expense	\$148,820		(8) \$ 1,700		<u>\$150,520</u>
Telephone expense	\$ 2,550		None		<u>\$ 2,550</u>
Rent expense	\$ 22,000		(1) \$ 2,100		<u>\$ 24,100</u>
Supplies expense	\$ 1,600		(3) \$ 150		<u>\$ 1,750</u>
Dues and subscriptions expense	\$ 560		(2) \$ 50		<u>\$ 610</u>
Depreciation expense: equipment	\$ 6,600		(4) \$ 600		<u>\$ 7,200</u>
Miscellaneous expenses	\$ 4,200		None		<u>\$ 4,200</u>
Interest expense	None		(5) \$ 100		<u>\$ 100</u>
Income taxes expense	\$ 19,000		(9) \$ 2,000		<u>\$ 21,000</u>

c. Using the figures computed in part b, net income for the year is computed as follows:

Consulting fees earned . . . . .		\$271,030
Salaries expense . . . . .	\$150,520	
Telephone expense . . . . .	2,550	
Rent expense . . . . .	24,100	
Supplies expense . . . . .	1,750	
Dues and subscriptions expense . . . . .	610	
Depreciation expense: equipment . . . . .	7,200	
Miscellaneous expenses . . . . .	4,200	
Interest expense . . . . .	100	
Income taxes expense . . . . .	21,000	(212,030)
Net Income . . . . .		<u>\$ 59,000</u>

## SELF-TEST QUESTIONS

The answers to these questions appear on page 194.

- The purpose of adjusting entries is to:
  - Adjust the Retained Earnings account for the revenues, expenses, and dividends recorded during the accounting period.
  - Adjust daily the balances in the asset, liability, revenue, and expense accounts for the effects of business transactions.
  - Apply the realization principle and the matching principle to transactions affecting two or more accounting periods.
  - Prepare revenue and expense accounts for recording the transactions of the next accounting period.
- Before month-end adjustments are made, the January 31 trial balance of Rover Excursions contains revenues of \$27,900 and expenses of \$17,340. Adjustments are necessary for the following items:
  - Portion of prepaid rent applicable to January, \$2,700
  - Depreciation for January, \$1,440
  - Portion of fees collected in advance earned in January, \$3,300
  - Fees earned in January, not yet billed to customers, \$1,950
 Net income in Rover Excursions' January income statement is:
  - \$10,560
  - \$17,070
  - \$7,770
  - Some other amount
- The public accounting firm auditing Mason Street Recording Studios found that retained earnings was understated and liabilities were overstated. Which of the following errors could have been the cause?
  - Making the adjustment entry for depreciation expense twice.
  - Failure to record interest accrued on a note payable.
  - Failure to make the adjusting entry to record revenues which had been earned but not yet billed to clients.
  - Failure to record the earned portion of fees received in advance.
- Assume Fisher Corporation usually earns taxable income, but sustains a *loss* in the current period. The entry to record income taxes expense in the current period will most likely: (Indicate all correct answers.)
  - Increase the amount of that loss.
  - Include a credit to the Income Taxes Expense account.
  - Be an adjusting entry, rather than an entry to record a transaction completed during the period.

- d. Include a credit to Income Taxes Payable.
5. The concept of *materiality*: (Indicate all correct answers.)
- Requires that financial statements be accurate to the nearest dollar, but need not show cents.
  - Is based upon what users of financial statements are thought to consider important.
  - Permits accountants to ignore generally accepted accounting principles in certain situations.
  - Permits accountants to use the easiest and most convenient means of accounting for events that are *immaterial*.
6. For a publicly owned company, indicate which of the following accounting activities are likely to occur at or shortly after year-end. (More than one answer may be correct.)
- Preparing annual report
  - Adjusting and closing the accounts
  - Drafting disclosures that accompany the financial statements
  - An audit of the financial statements by a firm of public accountants
7. Indicate those items for which generally accepted accounting principles *require* disclosure in notes accompanying the financial statements. (More than one answer may be correct.)
- A large lawsuit was filed against the company two days *after* the balance sheet date.
  - The depreciation method in use, given that several different methods are acceptable under generally accepted accounting principles.
  - Whether small but long-lived items—such as electric pencil sharpeners and handheld calculators—are charged to asset accounts or to expense accounts.
  - As of year-end, the chief executive officer had been hospitalized because of chest pains.
8. Ski West adjusts its accounts at the end of each month but closes them only at the end of the calendar year (December 31). The ending balances in the Equipment Rental Revenue account and the Cash account in February and March appear below.

	Feb. 28	Mar. 31
Cash .....	\$14,200	\$26,500
Equipment rental revenue .....	12,100	18,400

Ski West prepares financial statements showing separately the operating results of each month. In the financial statements prepared for the *month* ended March 31, Equipment Rental Revenue and Cash should appear as follows:

- Equipment Rental Revenue, \$18,400; Cash, \$26,500
  - Equipment Rental Revenue, \$18,400; Cash, \$12,300
  - Equipment Rental Revenue, \$6,300; Cash, \$26,500
  - Equipment Rental Revenue, \$6,300; Cash, \$12,300
9. Which of the following accounts is *not* closed to the Income Summary account at the end of the accounting period? (More than one answer may be correct.)
- Rent Expense
  - Accumulated Depreciation
  - Unearned Revenue
  - Supplies Expense

## ASSIGNMENT MATERIAL

### DISCUSSION QUESTIONS

- What is the purpose of making adjusting entries?
- List and explain the four types of adjusting entries covered in this chapter.

3. Do all transactions involving revenues or expenses require adjusting entries at the end of the accounting period? If not, what is the distinguishing characteristic of those transactions that do require adjusting entries?
4. Do adjusting entries affect income statement accounts, balance sheet accounts, or both? Explain.
5. Why does the recording of adjusting entries require a better understanding of the concepts of accrual accounting than does the recording of routine revenue and expense transactions occurring throughout the period?
6. Why does the purchase of a one-year insurance policy four months ago give rise to insurance expense in the current month?
7. If services have been rendered to customers during the current accounting period but no revenue has been recorded and no bill has been sent to the customers, why is an adjusting entry needed? What types of accounts should be debited and credited by this entry?
8. What is meant by the term *unearned revenue*? Where should an unearned revenue account appear in the financial statements? As the work is done, what happens to the balance of an unearned revenue account?
9. The weekly payroll for employees of Ryan Corporation, who work a five-day week, amounts to \$20,000. All employees are paid up-to-date at the close of business each Friday. If December 31 falls on Thursday, what year-end adjusting entry is needed?
10. At year-end the adjusting entry to reduce the Unexpired Insurance account by the amount of insurance premium applicable to the current period was accidentally omitted. Which items in the income statement will be in error? Will these items be overstated or understated? Which items in the balance sheet will be in error? Will they be overstated or understated?
11. Briefly explain the concept of *materiality*. If an item is not material, how is the item treated for financial reporting purposes?
12. Assets are defined as economic resources owned by a business and expected to benefit future business operations. By this definition, the gasoline in the tank of a business automobile, unused printer cartridges, and even ballpoint pens are actually assets. Why, then, are purchases of such items routinely charged directly to expense?
13. Explain the accounting principle of *adequate disclosure*.
14. Briefly describe the content of the *notes* that accompany financial statements.
15. How does depreciation expense differ from other operating expenses?
16. What is meant by the *straight-line* method of determining depreciation expense? Is the amount of depreciation expense determined under this method an estimate or an exact amount? Explain.
17. Does a well-prepared income statement provide an exact measurement of net income for the period, or does it represent merely an approximation of net income? Explain.
18. Explain the relationships among the three financial statements discussed in this chapter, that is, the income statement, the statement of retained earnings, and the balance sheet.
19. Explain the need for closing entries and describe the process by which temporary or nominal accounts are closed at year-end.
20. Which of the following accounts are closed at the end of the accounting period?

Cash	Capital Stock	Dividends
Consulting Fees Earned	Retained Earnings	Depreciation Expense
Income Summary	Accumulated Depreciation	Telephone Expense
Accounts Payable	Accounts Receivable	
21. Briefly explain how the adequacy of net income can be evaluated.
22. Briefly explain how solvency of a company can be evaluated.
- \*23. Explain several purposes that may be served by preparing a worksheet (or using computer software that achieves the goals of a worksheet).

\* *Supplemental Topic*, "The Worksheet."

## EXERCISES

Listed below are nine technical accounting terms used in this chapter:

Unrecorded revenue	Adjusting entries	Accrued expenses
Adequate disclosure	Closing entries	Book value
Unearned revenue	Materiality	Prepaid expenses

Each of the following statements may (or may not) describe one of these technical terms. For each statement, indicate the accounting term described, or answer “None” if the statement does not correctly describe any of the terms.

- The net amount at which an asset is carried in the accounting records as distinguished from its market value.
- An accounting concept that may justify departure from other accounting principles for purposes of convenience and economy.
- The accounting principle intended to assist users in *interpreting* financial statements.
- Revenues earned during the current accounting period but not yet recorded or billed, which require an adjusting entry at the end of the period.
- Entries made at the end of the period to achieve the goals of accrual accounting by recording revenues when they are earned and by recording expenses when the related goods and services are used.
- A type of account credited when customers pay in advance for services to be rendered in the future.
- A balance sheet category used for reporting advance payments of such items as insurance, rent, and office supplies.
- Entries made during the accounting period to correct errors in the original recording of complex transactions.

Security Service Limited adjusts its accounts at the end of the month. On November 30, adjusting entries are prepared to record:

- Depreciation expense for November.
- Interest expense that has accrued during November.
- Revenues earned during November that have not yet been billed to customers.
- Salaries, payable to company employees, that have accrued since the last payday in November.
- The portion of the company’s prepaid insurance that has expired during November.
- Earning a portion of the amount collected in advance from a customer, Harbour Restaurant.

Indicate the effect of each of these adjusting entries on the major elements of the company’s income statement and balance sheet—that is, on revenues, expenses, net income, assets, liabilities, and shareholders’ equity. Organize your answer in tabular form, using the column headings shown below and the symbols **I** for increase, **D** for decrease, and **NE** for no effect. The answer for adjusting entry **a** is provided as an example.

Adjusting Entry	Income Statement			Balance Sheet		
	Revenues	– Expenses	= Net Income	Assets	= Liabilities +	Shareholders’ Equity
a	NE	I	D	D	NE	D

The Golden Goals, a professional soccer team, prepare financial statements on a monthly basis. The soccer season begins in May, but in April the team engaged in the following transactions:

- Paid \$1,200,000 to the municipal stadium as advance rent for use of the facilities for the five-month period from May 1 through September 30. This payment was initially recorded as Prepaid Rent.

### EXERCISE 4.1

Accounting Terminology

**LO 1-9**

### EXERCISE 4.2

Effects of Adjusting Entries

**LO 1-2**

### EXERCISE 4.3

Preparing Adjusting Entries to Convert an Asset to an Expense and to Convert a Liability to a Revenue

**LO 1-3**

- b. Collected \$4,500,000 cash from the sale of season tickets for the team's home games. The entire amount was initially recorded as Unearned Ticket Revenue. During the month of May, the Golden Goals played several home games at which \$148,800 of the season tickets sold in April were used by fans.

Prepare the two adjusting entries required on May 31.

#### EXERCISE 4.4

Preparing Adjusting Entries to Accrue Revenues and Expenses

##### LO 3

The geological consulting firm of Gilbert, Marsh, & Kester prepares adjusting entries on a monthly basis. Among the items requiring adjustment on December 31, 2003, are the following:

1. The company has outstanding a \$50,000, 9 percent, 2-year note payable issued on July 1, 2002. Payment of the \$50,000 note, *plus* all accrued interest for the two-year loan period, is due in full on June 30, 2004.
2. The firm is providing consulting services to the St. John's Oil Corporation at an agreed-upon rate of \$1,000 per day. At December 31, 10 days of unbilled consulting services have been provided.
  - a. Prepare the two adjusting entries required on December 31 to record the accrued interest expense and the accrued consulting revenue earned.
  - b. Assume that the \$50,000 note payable plus all accrued interest are paid in full on June 30, 2004. What portion of the total interest expense associated with this note will be reported in the firm's 2004 income statement?
  - c. Assume that on January 30, 2004, Gilbert, Marsh, & Kester receive \$25,000 from the St. John's Oil in full payment of the consulting services provided in December and January. What portion of this amount constitutes revenue earned in *January*?

#### EXERCISE 4.5

Distinction between Adjusting and Closing Processes

##### LO 1, 2, 8

When Torretti Company began business on August 1, it purchased a one-year fire insurance policy and debited the entire cost of \$7,200 to Unexpired Insurance. Torretti *adjusts* its accounts at the end of each month and *closes* its books at the end of the year.

- a. Give the *adjusting entry* required at December 31 with respect to this insurance policy.
- b. Give the *closing entry* required at December 31 with respect to insurance expense. Assume that this policy is the only insurance policy Torretti had during the year.
- c. Compare the dollar amount appearing in the December 31 adjusting entry (part a) with that in the closing entry (part b). Are the dollars amounts the same? Why or why not? Explain.

#### EXERCISE 4.6

Preparing Various Adjusting Entries

##### LO 1, 2, 6

Sweeney & Associates, a large marketing firm, adjusts its amounts at the end of each month. The following information is available:

1. A bank loan had been obtained on December 1. Accrued interest on the loan at December 31 amounts to \$1,200. No interest expense has yet been recorded.
2. Depreciation of the firm's office building is based on an estimated life of 25 years. The building was purchased in 1998 for \$330,000.
3. Accrued, but unbilled, revenues during December amount to \$64,000.
4. On March 1, the firm paid \$1,800 to renew a 12-month insurance policy. The entire amount was recorded as Unexpired Insurance.
5. The firm received \$14,000 from the King Biscuit Company in advance of developing a six-month marketing campaign. The entire amount was initially recorded as Unearned Revenue. At December 31, \$3,500 had actually been *earned* by the firm.
6. The company's policy is to pay its employees every Friday. Since December 31 fell on a Tuesday, there was an accrued liability for salaries amounting to \$2,400.
  - a. Record the necessary adjusting journal entries on December 31, 2002.
  - b. By how much did Sweeney & Associates' income (before income taxes) increase or decrease as a result of the adjusting entries performed in part a?

#### EXERCISE 4.7

Notes Payable and Interest

##### LO 1, 2

Ventura Company adjusts its accounts *monthly* and closes its accounts on December 31. On October 31, 2003, Ventura Company signed a note payable and borrowed \$120,000 from a bank for a period of six months at an annual interest rate of 9 percent.

- a. How much is the total interest expense over the life of the note? How much is the monthly interest expense? (Assume equal amounts of interest expense each month.)

- b. In the company's annual balance sheet at December 31, 2003, what is the amount of the liability to the bank?
- c. Prepare the journal entry to record issuance of the note payable on October 31, 2003.
- d. Prepare the adjusting entry to accrue interest on the note at December 31, 2003.
- e. Assume the company prepared a balance sheet at March 31, 2004. State the amount of the liability to the bank at this date.

Among the ledger accounts used by Glenwood Speedway are the following: Prepaid Rent, Rent Expense, Unearned Admissions Revenue, Admissions Revenue, Prepaid Printing, Printing Expense, Concessions Receivable, and Concessions Revenue. For each of the following items, provide the journal entry (if one is needed) to record the initial transaction and provide the adjusting entry, if any, required on May 31, the end of the fiscal year.

- a. On May 1, borrowed \$300,000 cash from National Bank by issuing a 12 percent note payable due in three months.
- b. On May 1, paid rent for six months beginning May 1 at \$30,000 per month.
- c. On May 2, sold season tickets for a total of \$910,000 cash. The season includes 70 racing days: 20 in May, 25 in June, and 25 in July.
- d. On May 4, an agreement was reached with Snack-Bars Inc., allowing that company to sell refreshments at the track in return for 10 percent of the gross receipts from refreshment sales.
- e. On May 6, schedules for the 20 racing days in May and the first 10 racing days in June were printed and paid for at a cost of \$12,000.
- f. On May 31, Snack-Bars Inc., reported that the gross receipts from refreshment sales in May had been \$165,000 and that the 10 percent owed to Glenwood Speedway would be remitted on June 10.

**Something to Consider** Assume that the May 1 payment of \$180,000 rent was properly recorded as Prepaid Rent but that the May 31 adjusting entry for this item was inadvertently omitted. What is the effect of this omission on Glenwood's financial statements at May 31? (Specifically consider the financial statement elements revenues, expenses [including income taxes], net income, assets, liabilities, and shareholders' equity at May 31; indicate whether each would be overstated, understated, or not affected by the omission.)

Materiality is a generally accepted accounting principle.

- a. Briefly explain materiality.
- b. Is \$2,500 a "material" dollar amount? Explain.
- c. Describe two ways in which the concept of materiality may save accountants time and effort in making adjusting entries.

For each of the situations described below, indicate the generally accepted accounting principle that is being *violated*. Choose from the following principles:

Matching	Materiality
Cost	Realization
Objectivity	Adequate disclosure

If you do not believe that the practice violates any of these principles, answer "None" and explain.

- a. The financial statements include no mention of a large lawsuit filed against the company because the suit has not been settled as of year-end.
- b. The bookkeeper of a large metropolitan auto dealership depreciates the \$7.20 cost of metal wastebaskets over a period of 10 years.
- c. A small commuter airline recognizes no depreciation expense on its aircraft because the planes are maintained in "as good as new" condition.
- d. Palm Beach Hotel recognizes room rental revenue on the date that a reservation is received. For the winter season, many guests make reservations as much as a year in advance.

#### EXERCISE 4.8

Relationship of Adjusting Entries to Business Transactions

**LO 1, 2, 3, 5, 6**

#### EXERCISE 4.9

Materiality

**LO 4**

#### EXERCISE 4.10

Accounting Principles

**LO 1, 2, 3, 4, 7**

**EXERCISE 4.11**

Interim Results

**LO 5, 6, 11**

Ski Powder Resort ends its fiscal year on April 30. The business adjusts its accounts monthly but *closes them only at year-end* (April 30). The resort's busy season is from December 1 through March 31.

Adrian Price, the resort's chief financial officer, keeps a close watch on Lift Ticket Revenue and Cash. The balances of these accounts at the ends of each of the last five months are as follows:

	Lift Ticket Revenue	Cash
November 30	\$ 30,000	\$ 9,000
December 31	200,000	59,000
January 31	640,000	94,000
February 28	850,000	116,000
March 31	990,000	138,000

On February 28, Price prepares an income statement and balance sheet for the resort. Indicate what amounts will be shown in these statements for (1) Lift Ticket Revenue, and (2) Cash, assuming they are prepared for:

- The *month* ended February 28.
- The entire "busy season to date"—that is, December 1 through March 31.
- In terms of Lift Ticket Revenue and increases in Cash, which has been the resort's best month? (Indicate the dollar amounts.)

**EXERCISE 4.12**

Preparing Closing Entries

**LO 6, 8**

Gerdes Psychological Services Inc. closes its temporary or nominal accounts once each year on December 31. The company recently issued the following income statement as part of its annual report:

<b>GERDES PSYCHOLOGICAL SERVICES INC.</b>		
<b>Income Statement</b>		
<b>For the Year Ended December 31, 2003</b>		
Revenue:		
Counseling revenue		\$225,000
Expenses:		
Advertising expense	\$ 1,800	
Salaries expense	94,000	
Office supplies expense	1,200	
Utilities expense	850	
Malpractice insurance expense	6,000	
Office rent expense	24,000	
Continuing education expense	2,650	
Depreciation expense: fixtures	4,500	
Miscellaneous expense	6,000	
Income taxes expense	29,400	170,400
Net income		<u>\$ 54,600</u>

The firm's statement of retained earnings indicates that a \$6,000 cash dividend was declared and paid during 2003.

- Prepare the necessary closing entries on December 31, 2003.
- If the firm's Retained Earnings account had a \$92,000 balance on January 1, 2003, at what amount should Retained Earnings be reported in the firm's balance sheet dated December 31, 2003?



Indicate the effect of the following errors on each of the financial statement elements described in the column headings below. Use the following symbols: **O** = overstated, **U** = understated, and **NE** = no effect.

**EXERCISE 4.13**

Understanding the Effects of Various Transactions

**LO 2, 3, 5, 6**

Error	Total Revenues	Total Expenses	Net Income	Total Assets	Total Liabilities	Shareholders' Equity
a. Recorded a dividend as an expense reported in the income statement.						
b. Recorded the payment of an account payable as a debit to accounts payable and a credit to an expense account.						
c. Failed to record depreciation expense.						
d. Recorded the sale of capital stock as a debit to cash and a credit to retained earnings.						
e. Recorded the receipt of a customer deposit as a debit to cash and a credit to fees earned.						
f. Failed to record expired portion of an insurance policy.						
g. Failed to record accrued interest earned on an outstanding note receivable.						

Shown below are the selected accounts from the Trial Balance and Adjusted Trial Balance columns for the worksheet prepared for Snail Valley Limited for the month ended January 31, 2003.

**\*EXERCISE 4.14**

What Were the Adjustments?

**LO 2, 12**

	Trial Balance		Adjusted Trial Balance	
	Dr	Cr	Dr	Cr
Balance sheet accounts:				
Cash . . . . .	\$ 5,980		\$ 5,980	
Accounts receivable . . . . .	3,000		3,850	
Office supplies . . . . .	600		240	
Office equipment . . . . .	6,600		6,600	
Accumulated depreciation: office equipment . . . . .		\$ 2,420		\$ 2,530
Accounts payable . . . . .		1,660		1,660
Salaries payable . . . . .				550
Unearned consulting revenue . . . . .		400		190
Capital stock . . . . .		11,000		11,000
Retained earnings . . . . .	1,000	1,300	1,000	1,300
Income statement accounts:				
Consulting revenue . . . . .		6,900		7,960
Salaries expense . . . . .	6,000		6,550	
Rent expense . . . . .	1,500		1,500	
Office supplies expense . . . . .			360	
Depreciation expense: office equipment . . . . .			110	

\* Supplemental Topic, "The Worksheet."

By comparing the two trial balances shown above, it is possible to determine which accounts have been adjusted. You are to prepare the adjusting journal entries that must have been made to cause these changes in account balances. Include an explanation as part of each adjusting entry.

## PROBLEMS

### PROBLEM 4.1

Preparing Adjusting Entries

**LO 1, 2, 3**

Tiger Country Club adjusts its accounts *monthly* and closes its accounts annually. Club members pay their annual dues in advance by January 4. The entire amount is initially credited to Unearned Membership Dues. At the end of each month, an appropriate portion of this amount is credited to Membership Dues Earned. Guests of the club normally pay green fees before being allowed on the course. The amounts collected are credited to Green Fee Revenue at the time of receipt. Certain guests, however, are billed for green fees at the end of the month. The following information is available as a source for preparing adjusting entries at December 31:

1. Salaries earned by golf course employees that have not yet been recorded or paid amount to \$9,600.
2. The Lion University golf team used Tiger Country Club for a tournament played on December 30 of the current year. At December 31, the \$1,800 owed by the team for green fees had not yet been recorded or billed.
3. Membership dues earned in December, for collections received in January, amount to \$106,000.
4. Depreciation of the country club's golf carts is based on an estimated life of 15 years. The carts had originally been purchased for \$180,000. The straight-line method is used. (Note: The clubhouse building was constructed in 1925 and is fully depreciated.)
5. A 12-month bank loan in the amount of \$45,000 had been obtained by the country club on November 1. Interest is computed at an annual rate of 8 percent. The entire \$45,000, plus all the interest accrued over the 12-month life of the loan, is due in full on October 31 of the upcoming year. The necessary adjusting entry was made on November 30 to record the first month of accrued interest expense. However, no adjustment has been made to record interest expense accrued in December.
6. A one-year property insurance policy had been purchased on March 1. The entire premium of \$7,800 was initially recorded as Unexpired Insurance.
7. In December, Tiger Country Club entered into an agreement to host the annual tournament of the Golden Seniors Golf Association. The country club expects to generate green fees of \$4,500 from this event.
8. Unrecorded Income Taxes Expense accrued in December amounts to \$19,000. This amount will not be paid until January 31.

### Instructions

- a. For each of the above numbered paragraphs, prepare the necessary adjusting entry (including an explanation). If no adjusting entry is required, explain why.
- b. Four types of adjusting entries are described on pages 130–132. Using these descriptions, identify the type of each adjusting entry prepared in part a above.
- c. Although Tiger's clubhouse building is fully depreciated, it is in excellent physical condition. Explain how this can be.

### PROBLEM 4.2

Preparing Adjusting Entries

**LO 1, 2, 3**

Silver Spur Ranch, a dude ranch and resort, adjusts its accounts *monthly* and closes its accounts annually on December 31. Most guests of the ranch pay at the time they check out, and the amounts collected are credited to Rental Revenue. The following information is available as a source for preparing adjusting entries at December 31.

1. Among the assets owned by Silver Spur is an investment in government bonds in the face amount of \$175,000. Accrued interest receivable on the bonds at December 31 was computed to be \$875. None of this interest has yet been received.
2. A 12-month bank loan in the amount of \$90,000 had been obtained on November 1. Interest is to be computed at an annual rate of 10 percent and is payable when the loan becomes due.

3. Depreciation on a minivan owned by the ranch was based on a four-year life. The vehicle had been purchased new on September 1 of the current year at a cost of \$25,200. Silver Spur uses the straight-line method of depreciation.
4. Management of the ranch signed an agreement on December 28 to lease a truck from Ace Motors for a period of 6 months beginning January 1 at a rate of 50 cents per kilometre, with a clause providing a minimum monthly charge of \$600.
5. Salaries earned by employees but not yet recorded or paid amounted to \$9,900 at the end of the year.
6. As of December 31, Silver Spur has earned \$12,500 rental revenue from current guests who will not be billed until they are ready to check out.
7. A portion of land owned by Silver Spur had been leased on August 1 of the current year to a service station operator at a yearly rental rate of \$18,000. Six months' rent was collected in advance at the date of the lease and credited to Unearned Rental Revenue.
8. A bus to carry guests to and from the town and the airport had been rented early on December 10 at a daily rate of \$60. No rental payment has been made, although Silver Spur has had use of this bus for 22 days in December.

### Instructions

- a. For each of the above numbered paragraphs, draft a separate adjusting journal entry (including explanation) if the information indicates that an adjusting entry is needed.
- b. What is the amount of interest expense recognized *during the year* on the \$90,000 bank loan obtained on November 1?
- c. Compute the *book value* of the minivan described in item 3 (above) as of December 31.

Enchanted Forest, a large campground in British Columbia, adjusts its accounts *monthly* and closes its accounts annually on December 31. Most guests of the campground pay at the time they check out, and the amounts collected are credited to Camper Revenue. The following information is available as a source for preparing the adjusting entries at December 31:

1. Enchanted Forest invests some of its excess cash in term deposits with its bank. Accrued interest revenue on these deposits at December 31 is \$400. None of the interest has yet been received.
2. A six-month bank loan in the amount of \$12,000 had been obtained on September 1. Interest is to be computed at an annual rate of 8.5 percent and is payable when the loan becomes due.
3. Depreciation on buildings owned by the campground is based on a 25-year life. The original cost of the buildings was \$600,000. The Accumulated Depreciation: Buildings account has a credit balance of \$310,000 at December 31, prior to the adjusting entry process. The straight-line method of depreciation is used.
4. Management signed an agreement to let Boy Scout Troop 638 of Victoria use the campground in June of next year. The agreement specifies that the Boy Scouts will pay a daily rate of \$15 per campsite, with a clause providing a minimum total charge of \$1,475.
5. Salaries earned by campground employees that have not yet been paid amount to \$1,250.
6. As of December 31, Enchanted Forest has earned \$2,400 of revenue from current campers who will not be billed until they check out.
7. Several lakefront campsites are currently being leased on a long-term basis by a group of senior citizens. Six months' rent of \$5,400 was collected in advance and credited to Unearned Camper Revenue on October 1 of the current year.
8. A bus to carry campers to and from the town and the airport had been rented the first week of December at a daily rate of \$40. At December 31, no rental payment has been made, although the campground has had use of the bus for 25 days.
9. Unrecorded Income Taxes Expense accrued in December amounts to \$8,400. This amount will not be paid until January 31.

### Instructions

- a. For each of the above numbered paragraphs, prepare the necessary adjusting entry (including an explanation). If no adjusting entry is required, explain why.

### PROBLEM 4.3

Preparing and Analyzing the Effects of Adjusting Entries

**LO 1, 2, 6**

- b. Four types of adjusting entries are described on pages 130–132. Using these descriptions, identify the type of each adjusting entry prepared in part a above.
- c. Indicate the effects that each of the adjustments in part a will have on the following six *total amounts* in the campground’s financial statements for the month of *December*. Organize your answer in tabular form, using the column headings shown below. Use the letters **I** for increase, **D** for decrease, and **NE** for no effect. Adjusting entry 1 is provided as an example.

Adjustment	Income Statement			Balance Sheet		
	Revenues	Expenses	Net Income	Assets	Liabilities	Shareholders' Equity
1	I	NE	I	I	NE	I

- d. What is the amount of interest expense recognized for the *entire current year* on the \$12,000 bank loan obtained September 1?
- e. Compute the *book value* of the campground’s buildings to be reported in the current year’s December 31 balance sheet.

**PROBLEM 4.4**

Preparing Adjusting Entries from a Trial Balance

**LO 1, 2, 3, 10**

Nick Charles is a shareholder and a manager of a private investigation business called Nick Charles Investigations Inc. Some clients are required to pay in advance for the company’s services, while others are billed after the services have been rendered. Advance payments are credited to an account entitled Unearned Retainer Fees, which represents unearned revenues. The business adjusts its accounts each month and closes its accounts at the end of the year. At March 31, the end of the first quarter, the trial balance appeared as follows:

<b>NICK CHARLES INVESTIGATORS INC.</b>	
<b>Trial Balance</b>	
<b>March 31, 2003</b>	
Cash	\$ 16,750
Accounts receivable	37,800
Unexpired insurance	1,600
Prepaid rent	5,400
Office supplies	1,050
Office equipment	35,100
Accumulated depreciation: office equipment	\$ 11,700
Accounts payable	4,200
Unearned retainer fees	14,000
Capital stock	75,000
Dividends	2,500
Fees earned	55,320
Depreciation expense	1,170
Rent expense	3,000
Office supplies expense	450
Insurance expense	800
Telephone expense	1,200
Travel expense	3,400
Salaries expense	49,500
Income taxes expenses	500
	<u>\$160,220</u>
	<u>\$160,220</u>

**Other Data**

1. The useful life of the office equipment was estimated at five years.
2. Fees of \$8,400 were earned during the month by performing services for clients who had paid in advance.
3. Salaries not yet recorded or paid amounted to \$1,665 at the end of March.
4. On March 1, the business moved into a new office and paid the first three months' rent in advance.
5. Investigative services rendered during the month but not yet collected or billed to clients amounted to \$3,900.
6. Office supplies on hand March 31 amounted to \$700.
7. On January 1, \$2,400 was paid as the premium for six months' liability insurance.
8. Estimated income taxes expense for March amounted to \$300.

**Instructions**

- a. Prepare the adjusting entries required at March 31. (Use the straight-line method for depreciation.)
- b. Determine the amount of net income to be reported in the company's income statement for the quarter ended March 31, 2003.
- c. Assume that the net income of the remaining three quarters is similar to the first quarter (as determined in **b**), assess the adequacy of net income. The company declares and pays monthly dividends in an amount equals to its monthly net income.
- d. Assess the company's solvency at March 31, 2003.

Selected accounts with their normal balances from the December 31 trial balance and adjusted trial balance of Tuff Engineering are as follows:

	Trial Balance	Adjusted Trial Balance
Cash	\$ 8,200	\$ 8,200
Prepaid rent	2,100	—0—
Office supplies	780	180
Equipment	30,000	30,000
Notes payable	90,000	90,000
Salaries payable	—0—	970
Unearned fees	4,800	2,300
Dividends	26,500	26,500
Engineering fees earned	176,500	179,600
Salaries expense	115,700	116,670
Telephone expense	3,200	3,200
Rent expense	10,000	12,100
Office supplies expense	—0—	600
Depreciation expense: equipment	—0—	1,000
Interest expense	—0—	800

**Instructions**

Prepare all the adjusting entries (with explanations) that you can derive from the two trial balances.

Sea Cat Inc. operates a large catamaran that takes tourists at several island resorts on diving and sailing excursions. The company adjusts its accounts at the end of each month. Selected account balances appearing on the June 30 *adjusted* trial balance are as follows:

**PROBLEM 4.5**

Adjusting Entries

**LO 2, 3, 5****PROBLEM 4.6**Analysis of Adjusted Data;  
Preparing Adjusting Entries**LO 1, 2, 3, 6**



Prepaid rent . . . . .	\$ 6,000	
Unexpired insurance . . . . .	1,400	
Catamaran . . . . .	46,200	
Accumulated depreciation: catamaran . . . . .		\$9,240
Unearned passenger revenue . . . . .		825

### Other Data

- The catamaran is being depreciated over a 10-year estimated useful life, with no residual value.
- The unearned passenger revenue represents tickets good for future rides sold to a resort hotel for \$15 per ticket on June 1. During June, 145 of the tickets were used.
- Six months' rent had been prepaid on June 1.
- The unexpired insurance is a 12-month fire insurance policy purchased on March 1.

### Instructions

- Determine the following:
  - The age of the catamaran in months.
  - How many \$15 tickets for future rides were sold to the resort hotel on June 1.
  - The monthly rent Expense.
  - The original cost of the 12-month fire insurance policy.
- Prepare the adjusting entries that were made on June 30.

### PROBLEM 4.7

Preparing Adjusting Entries  
from a Trial Balance

**LO 1, 2, 3, 6**

The Campus Theatre adjusts its accounts *monthly* and closes them at year-end on December 31. At *August 31* the trial balance and other information shown below were available for adjusting the accounts:

<b>CAMPUS THEATRE</b>		
<b>Trial Balance</b>		
<b>August 31, 2003</b>		
Cash . . . . .	\$ 20,000	
Prepaid film rental . . . . .	31,200	
Land . . . . .	128,000	
Building . . . . .	168,000	
Accumulated depreciation: building . . . . .		\$ 14,000
Fixtures and equipment . . . . .	36,000	
Accumulated depreciation: fixtures and equipment . . . . .		12,000
Notes payable . . . . .		180,000
Accounts payable . . . . .		4,670
Unearned admissions revenue (YMCA) . . . . .		1,000
Capital stock . . . . .		40,000
Retained earnings . . . . .		51,080
Dividends . . . . .	15,000	
Admissions revenue . . . . .		305,200
Concessions revenue . . . . .		14,350
Salaries expense . . . . .	68,500	
Film rental expense . . . . .	94,500	
Utilities expense . . . . .	9,500	
Depreciation expense: building . . . . .	4,900	
Depreciation expense: fixtures and equipment . . . . .	4,200	
Interest expense . . . . .	10,500	
Income taxes expense . . . . .	32,000	
	\$622,300	\$622,300

**Other Data**

1. Film rental expense for the month is \$15,200. However, the film rental expense for several months has been paid in advance.
2. The building is being depreciated over a period of 20 years.
3. The fixtures and equipment are being depreciated over a period of 5 years.
4. On the first of each month, the theatre pays the interest which accrued in the prior month on its note payable. At August 31, accrued interest payable on this note amounts to \$1,500.
5. The theatre allows the local YMCA to bring children attending summer camp to the movies on any weekday afternoon for a fixed fee of \$500 per month. On June 28, the YMCA made a \$1,500 advance payment covering the months of July, August, and September.
6. The theatre receives a percentage of the revenue earned by Tastie Corporation, the concessionaire operating the snack bar. For snack bar sales in August, Tastie owes Campus Theatre \$2,250, payable on September 10. No entry has yet been made to record this concessions revenue.
7. Salaries owed to employees, but not recorded or paid as of August 31, amount to \$1,700. No entry has yet been made to record this liability and expense.
8. Income taxes expense for August is estimated at \$4,200. This amount will be paid at the end of September.
9. Utilities expense is recorded as monthly bills are received. No adjusting entries for utilities expense are made at month-end.

**Instructions**

- a. For each of the numbered paragraphs, prepare the necessary adjusting entry (including an explanation).
- b. Refer to the balances shown in the *unadjusted* trial balance at August 31. How many *months* of expense are included in each of the following account balances? (Remember, Campus Theatre adjusts its accounts *monthly* and closes them *annually*.)
  1. Utilities Expense
  2. Depreciation Expense
  3. Accumulated Depreciation: Building

Ken Hensley Enterprises Inc. is a small recording studio but is planning to expand its operations. Rock bands use the studio to mix high-quality demo recordings distributed to talent agents. New clients are required to pay for studio services in advance. Bands with established credit are billed for studio services at the end of each month. Adjusting entries are performed on a *monthly* basis and closing entries are prepared *annually* on December 31. An *unadjusted* trial balance dated December 31, 2003, is shown on the following page:

**PROBLEM 4.8**

Preparing Adjusting Entries, Financial Statements, and Closing Entries from a Trial Balance

**LO 1, 2, 3, 5, 6, 8**

<b>KEN HENSLEY ENTERPRISES INC.</b>			
<b>Unadjusted Trial Balance</b>			
<b>December 31, 2003</b>			
Cash		\$ 94,850	
Accounts receivable		31,400	
Studio supplies		7,600	
Unexpired insurance		500	
Prepaid studio rent		4,000	
Recording equipment		90,000	
Accumulated depreciation: recording equipment			\$ 52,500
Notes payable			16,000
Interest payable			840
Unearned studio revenue			9,600
Capital stock			90,000
Retained earnings			41,200
Studio revenue earned			127,000
Salaries expense		59,300	
Supplies expense		1,200	
Insurance expense		1,000	
Depreciation expense: recording equipment		16,500	
Studio rent expense		21,000	
Interest expense		840	
Utilities expense		2,350	
Income taxes expense		6,600	
		<u>\$337,140</u>	<u>\$337,140</u>

### Other Data

- Records show that \$4,400 in studio revenue had not yet been billed or recorded as of December 31.
- Studio supplies on hand at December 31 amount to \$6,900.
- On August 1, 2003, the studio purchased a six-month insurance policy for \$1,500. The entire premium was initially debited to Unexpired Insurance.
- The studio is located in a rented building. On November 1, 2003, the studio paid \$6,000 rent in advance for November, December, and January. The entire amount was debited to Prepaid Studio Rent.
- The useful life of the studio's recording equipment is estimated to be five years (or 60 months). The straight-line method of depreciation is used.
- On May 1, 2003, the studio borrowed \$16,000 by signing a 12-month, 9 percent note payable to First Federal Bank. The entire \$16,000 plus 12 months' interest is due in full on April 30, 2004.
- Records show that \$3,600 of cash receipts originally recorded as Unearned Studio Revenue had been earned as of December 31.
- Salaries earned by recording technicians that remain unpaid at December 31 amount to \$1,640.
- The studio's accountant estimates that income taxes expense for the *entire year* ended December 31, 2003, is \$7,200. (Note that \$6,600 of this amount has already been recorded.)

### Instructions

- For each of the above numbered paragraphs, prepare the necessary adjusting entry (including an explanation). If no adjusting entry is required, explain why.
- Prepare the studio's income statement, balance sheet, and statement of retained earnings for the year ended December 31, 2003. (Note: No dividends were declared or paid in 2003.)
- Prepare the necessary year-end closing entries.



- d. Using the financial statements prepared in part c, briefly evaluate the studio's profitability (adequacy of net income) and solvency.
- e. Was the studio's monthly rent for the last two months of 2003 more or less than during the first 10 months of the year? Explain your answer.

New Millenium Theatre Incorporated has been in operation for a few years. Its adjusted trial balance at December 31, 2003, is as follows:

<b>NEW MILLENNIUM THEATRE INCORPORATED</b>			
<b>Adjusted Trial Balance</b>			
<b>December 31, 2003</b>			
Cash		\$ 19,000	
Accounts receivable		2,250	
Prepaid film rental		17,000	
Land		110,000	
Building		168,000	
Accumulated depreciation: building			\$ 14,700
Equipment and fixtures		54,000	
Accumulated depreciation: equipment and fixtures			12,600
Notes payable			160,000
Accounts payable			4,600
Interest payable			1,500
Salaries and wages payable			1,700
Income taxes payable			1,200
Unearned admissions revenue			500
Capital stock			130,000
Retained earnings			24,150
Dividends	15,000		
Admissions revenue			335,700
Concessions revenue			16,600
Salaries and wages expense	130,200		
Film rental expense	129,700		
Utilities expense	23,400		
Deprecation expense: building	5,600		
Deprecation expense: equipment and fixtures	4,800		
Interest expense	12,000		
Income taxes expense	12,300		
		<u>\$703,250</u>	<u>\$703,250</u>

### Instructions

- a. Prepare the income statement and the statement of retained earnings for the year ended December 31, 2003, and the balance sheet at December 31, 2003.
- b. Evaluate the adequacy of net income for the year.
- c. Evaluate the company's solvency.

Siu Zhang, a major shareholder of Oralco Enterprise Limited, wants you to help her close the company's books because the part-time bookkeeper has suddenly left the company. She manages to obtain the following information from the bookkeeper's drawers (the accounts are in alphabetical order).

### PROBLEM 4.9

Preparing and Interpreting  
Financial Statements

**LO 5, 10**

### PROBLEM 4.10

Closing Entries

**LO 8**

	December 31 (Year-end)	
	Trial Balance	Adjusted Trial Balance
Accounts payable	\$ 2,300	\$ 2,600
Accounts receivable	7,800	8,800
Accumulated depreciation: equipment	3,000	5,000
Cash	1,900	1,900
Depreciation expense: equipment	—0—	2,000
Equipment	30,000	30,000
Interest expense	—0—	720
Interest payable	—0—	720
Management fees earned	208,000	232,900
Office supplies expense	300	900
Prepaid rent	5,000	2,500
Rent expense	27,500	30,000
Salaries expense	126,200	129,500
Dividends	38,000	38,000
Telephone expense	2,800	3,180
Unearned management fees	26,900	3,000
Income taxes expense	15,400	16,800

### Instructions

Prepare the closing entries (with explanations) on the basis of the above information.

### PROBLEM 4.11

Preparing Closing Entries

#### LO 5, 8

During the absence of the regular accountant of Vanderpool Consulting, a new employee, Doug Webb, prepared the closing entries from the ledger accounts for the year 2004. Webb has very little understanding of accounting, and the closing entries he prepared were not satisfactory in several respects. The entries by Webb were:

Entry 1	
Professional Fees Earned	273,600
Accumulated Depreciation: Building	25,600
Accounts Payable	86,400
Salaries Payable	9,200
Income Summary	394,800
To close accounts with credit balances.	

Entry 2	
Income Summary	197,800
Salaries Expense	96,400
Dividends	36,000
Advertising Expense	12,800
Depreciation Expense: Building	6,400
Insurance Expense	9,200
Income Taxes Expense	37,000
To close accounts with debit balances.	

Entry 3	
Capital Stock	234,000
Income Summary	234,000
To close the capital account.	

**Instructions**

- a. For each entry, identify any errors that Webb made.
- b. Prepare four correct closing entries.
- c. Using the information presented above (and considering your answers to parts a and b), compute net income or net loss of Vanderpool Consulting for the year 2004. Show computation.

Guardian Insurance Agency adjusts its accounts monthly but closes them only at the end of the calendar year. Below are the adjusted balances of the revenue and expense accounts at September 30 of the current year and at the ends of two earlier months:

	Sept. 30	Aug. 31	June 30
Commissions earned . . . . .	\$144,000	\$128,000	\$90,000
Advertising expense . . . . .	28,000	23,000	15,000
Salaries expense . . . . .	36,000	32,000	24,000
Rent expense . . . . .	22,500	20,000	15,000
Depreciation expense . . . . .	2,700	2,400	1,800

**PROBLEM 4.12**

Interim Financial Statements

**LO 5, 11**



**Instructions**

- a. Prepare a three-column income statement, showing net income for three separate time periods, all of which end on September 30. Use the format illustrated below. Show supporting computations for the amounts of revenue reported in the first two columns.

<b>GUARDIAN INSURANCE AGENCY</b>			
<b>Income Statement</b>			
<b>For the Following Time Periods in 2003</b>			
	Month Ended Sept. 30	Quarter Ended Sept. 30	9 Months Ended Sept. 30
Revenue:			
Commissions earned . . . . .	\$ _____	\$ _____	\$ _____
Expenses:			

- b. Briefly explain how you determined the dollar amounts for each of the three time periods. Would you apply the same process to the balances in Guardian’s balance sheet accounts? Explain.
- c. Assume that Guardian adjusts *and closes* its accounts at the end of *each month*. Briefly explain how you then would determine the revenue and expenses that would appear in each of the three columns of the income statement prepared in part a.

Refer to the demonstration problem on pages 167–169. Prepare a 10-column worksheet for Internet Consulting Service Inc., dated December 31, 2002. At the bottom of your worksheet, prepare a brief explanation keyed to each adjusting entry.

**\*PROBLEM 4.13**

Preparation of a Worksheet

**LO 2, 12**

Refer to Problem 4.7 on pages 182–183. Prepare a 10-column worksheet for The Campus Theatre dated August 31, 2003. At the bottom of your worksheet, prepare a brief explanation keyed to each adjusting entry.

**\*PROBLEM 4.14**

Preparation of a Worksheet

**LO 2, 12**



\* *Supplemental Topic*, “The Worksheet.”

**REAL WORLD APPLICATIONS**

**RWA 4.1**

Early Tickets

**LO 1, 2, 6**

When airlines, such as Air Canada, American Airlines, and Northwest Airlines, sell tickets for future flights, they debit cash and credit an account, such as “Advance Ticket Sales.” With respect to this Advance Ticket Sales account:

- a. What does the balance of this account represent, and where should it appear in the financial statements?
- b. Explain the activity that *normally* reduces the balance of this account. Can you think of any *other* transaction that would reduce this account?

**RWA 4.2**

Accounting Principles—An Application

**LO 1, 2, 3**

*Air Canada* credits the proceeds from advance passenger and cargo sales to an account entitled Advance Ticket Sales. The company’s recent annual reports show the following trend in the balance of this account over a three-year period:

	2000	1999	1998
Advance ticket sales (in millions) . . . . .	\$498	\$349	\$364

The first note accompanying the financial statements, entitled “*Significant Accounting Policies*,” includes the following disclosure:

Airline passenger and cargo sales are recognized as operating revenues when the transportation is provided. The value of unused transportation is included in current liabilities.

**Instructions**

- a. Why does Air Canada recognize this sales revenue when transportation is provided, rather than when proceeds are received?
- b. Should Air Canada recognize flight expenses, such as aircraft fuel and flight crew’s salaries, in the period that flights occur or the period in which tickets are sold? Explain.
- c. What does the balance in the Advance Ticket Sales account represent?
- d. How does Air Canada normally discharge this liability?
- e. Explain the most probable reason for the increase or decrease in the amount of this liability from year to year.
- f. Solely on the basis of the trend in the amount of this liability, would you expect the annual amounts of passenger and cargo revenues earned by the airlines to be increasing or decreasing over this three-year period? Explain.

**RWA 4.3**

Adjusting Entries

**LO 1, 2**

The purpose of this problem is to help you understand the need for adjusting entries in a specific business situation. You are to prepare examples of “typical” adjusting entries that might be made at the end of an accounting period by a company that owns and operates a large hotel. You are to decide upon the types of assets, liabilities, revenues, and expenses that might be involved in these entries. Prepare two examples of *each of the four basic types of adjusting entries*. Thus, you will prepare a total of eight adjusting entries.

You need not include dollar amounts—simply enter “xxx” in the debit and credit columns. However, your written explanations of each entry should describe specific facts that make the adjustment necessary. For example, one adjusting entry that a hotel might make to convert a liability to revenue is shown below:

(1) Unearned Banquet Revenue . . . . .	xxx	
Banquet Revenue . . . . .		xxx
To recognize revenue earned this period from catering the Canadian Football League awards banquet in the hotel. The League had paid for this banquet in an earlier accounting period.		

This problem is an alternative to RWA 4.3. You are to follow the same instructions as in RWA 4.3, but use a large *law firm* as the business entity. Also, you are to prepare only *one* example of each of the four basic types of adjusting entries.

*Avis Rent-a-Car* purchases a large number of cars each year for its rental fleet. The cost of any individual automobile is immaterial to Avis, which is a very large corporation. Would it be acceptable for Avis to charge the purchase of automobiles for its rental fleet directly to expense, rather than to an asset account? Explain.

The annual report of Canadian Tire, appears in Appendix A at the end of this book.

- Review the notes accompanying the consolidated financial statements. Identify the topic headings of the notes.
- Does the company use straight-line depreciation or the declining-balance method of depreciation? How can you tell?
- Examine the consolidated balance sheet and identify specific accounts that may have required adjusting entries at the end of the year.
- Using information from the consolidated financial statements, briefly evaluate the company's profitability and solvency.

**RWA 4.4**

Adjusting Entries: An Alternative to RWA 4-3

**LO 1, 2****RWA 4.5**

Materiality

**LO 4****RWA 4.6**

Examining an Annual Report

**LO 1, 2, 7, 10**

## ANALYTICAL AND DECISION PROBLEMS AND CASES

Gisele Little, a recent university graduate, decided to start a formal wear and costume rental business. Thus, on August 1, Gisele withdrew \$2,000 from her savings account and deposited it in a bank account in the name of her incorporated business, Little's Place. To obtain more capital to finance the acquisition of the needed tuxedos, gowns, and costumes, as well as furniture and fixtures, Gisele borrowed \$8,000 from her mother and deposited the cash in the bank account of the business. The \$2,000 was in exchange for shares of capital stock, and the \$8,000 was a loan to the company.

August 1 was a very busy day for Gisele. She rented a store from Handnoral Property Management. Handnoral would give Gisele a better deal if she paid rent in advance every three months. Gisele accepted the offer and paid \$2,700 to Handnoral. On the same day, she purchased furniture and fixtures for \$6,000, paying \$1,000 cash and signing a one-year note payable for the balance at an annual interest rate of 6 percent, payable at maturity. The furniture and fixtures were estimated to have a useful life of five years. To obtain a volume discount, Gisele purchased two months of office supplies on account for \$300. Also, Gisele purchased tuxedos, gowns, and costumes from Designer Fashions Limited for \$8,400, paying \$3,000 cash and agreeing to pay the balance in 60 days. The management of Designer Fashions told Gisele that these items would have a useful life of seven years.

To attract business, Gisele advertised extensively in local newspapers and weekly magazines. On August 3, she paid \$1,800 for the advertisements to ensure that there would be adequate and equal promotion for two months.

Apparently, the advertisements paid off. Revenues for the first two weeks of operation were \$2,600, all paid in cash. In addition, on August 16, the Theatre Players Group paid \$2,500 to rent some costumes for a month for the performances in a local casino. The costumes will be returned on September 16.

On Monday, August 28, Gisele hired a part-time employee to help with the increasing volume of business for \$250 for a five-day work week. The first week's salary was payable on Friday, September 1.

The business continued to grow. The last two weeks' revenues were \$5,200, of which \$1,200 was in cash, \$3,000 on account, and \$1,000 yet to be billed. Feeling that the first month had been a success, Gisele declared and paid a cash dividend of \$1,500. To ensure that she would have sufficient cash to make payments in September, Gisele called the utilities company to find out when she would be paying utilities for August. Gisele was happy to find out that she owed only \$230 and it would not be due until early September.

**A&D 4.1**

What to Adjust?

**LO 1, 2, 3****Instructions**

Prepare the necessary adjusting entries at August 31.

**A&D 4.2**

Should This Be Adjusted?

**LO 1, 2, 3**

Property Management Professionals provides building management services to owners of office buildings and shopping centres. The company adjusts and closes its accounts at the *end of the calendar year*. The manner in which the company has recorded several transactions occurring during 2002 is described below:

- a. On September 1, received advance payment from a shopping centre for property management services to be performed over the three-month period beginning September 1. The entire amount received was credited directly to a *revenue* account.
- b. On December 1, received advance payment from the same customer described in part **a** for services to be rendered over the three-month period beginning December 1. This time, the entire amount received was credited to an *unearned revenue* account.
- c. Rendered management services for many customers in December. Normal procedure is to record revenues on the date the customer is billed, which is early in the month after the services have been rendered.
- d. On December 15, made full payment for a one-year insurance policy that goes into effect on January 1, 2003. The cost of the policy was debited to Unexpired Insurance.
- e. Numerous purchases of equipment were debited to asset accounts, rather than to expense accounts.
- f. Payroll expense is recorded when employees are paid. Payday for the last two weeks of December falls on January 2, 2003.

**Instructions**

For each item above, explain whether an adjusting entry is needed at *December 31, 2002*, and state the reasons for your answer. If you recommend an adjusting entry, explain the effects this entry would have upon assets, liabilities, shareholders' equity, revenues, and expenses in the 2002 financial statements.

**A&D 4.3**

Nature of Depreciation;  
Relationship of Depreciation  
Expense to Cash Outlays

**LO 2**

The Dark Room Limited is a business that develops film within one hour, using a large and expensive developing machine. The business operates in rented quarters in a large shopping centre. Sharon Douglas, the shareholder of The Dark Room, plans to retire and has offered the business for sale. A typical monthly income statement for The Dark Room appears below:

Revenues:			
Fees earned			\$8,900
Operating expenses (including income taxes):			
Wages		\$2,100	
Rent		1,250	
Supplies		720	
Depreciation: developing machine		1,510	
Income taxes		760	6,340
Net income			<u>\$2,560</u>

Revenues are received in cash at the time that film is developed. The wages, rent, supplies, and income taxes expenses are all paid in cash on a monthly basis. Douglas explains that the developing machine, which is 12 months old and is fully paid for, is being depreciated over a period of five years. She is using this estimated useful life because she believes that faster and more efficient machines will probably be available at that time. However, if the business does not purchase a new machine, the existing machine should last for 10 years or more.

Dave Berg, a friend of yours, is negotiating with Douglas to buy The Dark Room. Berg does not have enough money to pay the entire purchase price in cash. However, Douglas has offered to accept a note payable from Berg for a substantial portion of the purchase price. The note would call for 18 monthly payments in the amount of \$2,500, which would pay off the remainder of the purchase price as well as the interest charges on the note. Douglas points out that these monthly payments can be made "out of the monthly earnings of the business."

Berg comes to you for advice. He feels that the sales price asked by Douglas is very reasonable and that the seller-financing makes this an excellent opportunity. However, he is worried

about turning over \$2,500 of the business's earnings to Douglas each month. Berg states, "This arrangement will only leave me with about \$60 each month for dividends. I want to be paid about \$1,200 as monthly dividends." Also, Berg is concerned about the depreciation expense. He does not understand when or to whom the depreciation expense must be paid, or how long this expense will continue.

### Instructions

- Explain to Berg the nature of depreciation expense, including when this expense is paid and what effect, if any, it has upon monthly cash expenditures.
- Advise Berg as to how much cash the business will generate each month. Will this amount enable Berg to pay \$2,500 per month to the seller and the \$1,200 monthly dividends?
- Caution Berg about the need to replace the developing machine. Briefly discuss when this expenditure might occur and how much control, if any, Berg has over the timing and dollar amount of this expenditure.

Materiality is one of the most basic generally accepted accounting principles.

Answer the following:

- Why is the materiality of a transaction or an event a matter of professional judgment?
- What criteria should accountants consider in determining whether a transaction or an event is "material"?
- Does the concept of materiality mean that financial statements are not precise, down to the last dollar? Does this concept make financial statements less useful to most users?

Listed below are five independent cases that may—or may not—require disclosure in the notes that accompany financial statements.

- Mandella Construction uses the "percentage-of-completion" method to recognize revenues on long-term construction contracts. This is one of two acceptable methods of accounting for such projects. Over the life of the project, both methods produce the same results; but the annual results may differ substantially.
- One of the most popular artists at Spectacular Comics is leaving the company and going to work for a competitor.
- Shortly after the balance sheet date, but before the financial statements are issued, one of Coast Foods' two processing plants was damaged by a tornado. The plant will be out of service for at least three months.
- The management of Soft Systems believes that the company has developed systems software that will make *Windows* virtually obsolete. If they are correct, the company's profits could increase by 10-fold or more.
- College Property Management (CPM) withheld a \$500 security deposit from students who, in violation of their lease, kept a dog in their apartment. The students have sued CPM for this amount in a small claims court.

### Instructions

For each case, explain what, if any, disclosure is required under generally accepted accounting principles. Explain your reasoning.

Adam Peitou is interested in buying Foxie's, an aerobic dance studio. He has come to you for help in interpreting the company's financial statements and to seek your advice about purchasing the business.

Foxie's has been in operation for one year. The business is a corporation owned by Sandy Beech and her family. Foxie's rents the building in which it operates, as well as all of its exercise equipment. As the business is small, Beech has maintained the accounting records on a cash basis. She has prepared the following income statement and balance sheet from these cash basis records at December 31, the year-end date:

#### A&D 4.4

Materiality

**LO 4**

#### A&D 4.5

Adequate Disclosure

**LO 4, 7**

#### A&D 4.6

A Sure Thing?

**LO 1, 2, 3, 5**

<b>Income Statement</b>		
Revenues:		
Membership fees .....	\$150,000	
Membership dues .....	<u>30,000</u>	\$180,000
Expenses:		
Rent .....	\$ 18,000	
Wages .....	52,000	
Advertising .....	20,000	
Miscellaneous .....	<u>15,000</u>	<u>105,000</u>
Net income .....		<u>\$ 75,000</u>
<b>Balance Sheet</b>		
<b>Assets</b>		
Cash .....		<u>\$ 25,000</u>
<b>Liabilities &amp; Shareholders' Equity</b>		
Capital Stock .....		<u>\$ 25,000</u>

Beech is offering to sell Foxie's for the balance of the capital stock account—\$25,000. Peitou is very enthusiastic and states, "How can I go wrong? I'll be paying \$25,000 to buy \$25,000 cash, and I'll be getting a very profitable business that generates large amounts of cash in the deal."

In a meeting with you and Peitou, Beech makes the following statement: "This business has been very good to me and my family. In the first year of operations, we have been able to pay a cash dividend of \$50,000, and yet the business is still quite solvent—it has lots of cash and no debts."

You ask Beech to explain the difference between membership fees and membership dues. She responds, "Foxie's is an exclusive club. We cater only to members. This year, we sold 500 five-year memberships. Each membership requires the customer to pay \$300 cash in advance and to pay dues of \$10 per month for five years. I credited the advance payments to the Membership Fees account and credited the \$10 monthly payments to Membership Dues. Thus, all the revenues are hard cash—no 'paper profits' like you see in so many businesses."

You then enquire as to when these five-year memberships were sold. Beech responds, "On the average, these memberships are only six months old. No members have dropped out, so Foxie's should continue receiving dues from these people for another four and one-half years, thus assuring future profitability. Another beneficial factor is that the company hasn't sold any new memberships in the last several months. Therefore, I think that the company could discontinue its advertising and further increase future profitability. Since further advertising may not produce any new members, the \$3,000 television commercial for early next year, for which I have paid, is really worthless and I have included it in the \$20,000 advertising expense of this year."

### Instructions

- Prepare a revised income statement and balance sheet based on generally accepted accounting principles.
- Assume that none of the 500 members drop out of Foxie's during the next year and that the business sells no new memberships. What would be the amount of the company's expected cash receipts? Assuming that advertising expense is discontinued but that other expenses remain the same, what would be the expected amount of cash payments for the coming year?
- Use the information in your analysis in parts **a** and **b** to draft a letter to Peitou advising him on the wisdom of purchasing Foxie's for \$25,000.



An unexpected virus attacked the microcomputer system of Comfort Management Services Limited. As a result, the company is left with the partially completed work sheet below and asks for your assistance.

**A&D 4.7**

Completing a Work Sheet

**LO 12**

**Instructions**

Complete the work sheet.

<b>COMFORT MANAGEMENT SERVICES LIMITED</b>								
<b>Work Sheet</b>								
<b>For the Month Ended June 30, 2003</b>								
	Trial Balance		Adjustments		Income Statement		Balance Sheet	
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
Balance sheet accounts:								
Cash	15,485						10,012	
Management fees receivable				800			15,785	
Prepaid rent							800	
Unexpired insurance	1,080						450	
Office supplies	9,600							300
Office equipment								8,000
Accumulated depreciation: office equipment								1,700
Notes payable								
Accounts payable		890						
Unearned management fees		3,700						
Capital stock		20,000						
Retained earnings		3,715					2,250	
Dividends								290
Salaries payable				290				60
Interest payable								
Income statement accounts:								
Management fees earned				300		25,580		
Rent expense					1,600			
Salaries expense					1,260			
Telephone expense	1,260				2,600			
Income taxes expense	2,600							
Insurance expense						380		
Office supplies expense								
Depreciation expense: office equipment								
Interest expense								
Net income							7,240	
					25,580			

## INTERNET ASSIGNMENT

### INTERNET 4.1

Annual Report Disclosures

Visit the home page of the Shell Canada Limited at:

[www.shell.ca](http://www.shell.ca)

#### LO 7

From Shell's home page, access the company's most recent annual report. Locate the notes to the financial statements and identify the kinds of information disclosed in these notes.

## OUR COMMENTS ON THE "YOUR TURN" CASES

**You as a Car Owner (p. 137)** Yes, in most cases you will receive a full refund equal to the unexpired portion of your policy. You are entitled to a refund because you will not consume four full months of coverage that remain on your policy at the time of cancellation. Thus, you should receive a cheque for \$400 (or \$100 per month for April, May, June, and July).

**You as Overnight Service Department Manager (p. 144)** It is true that by accruing an entire month's revenues from Airport Shuttle Services, Overnight's reported income for December would have increased by \$750 (the difference between recognizing the entire month's revenues of \$1,500 and the \$750 already recorded). However, to record revenues for services not yet performed is in conflict with generally accepted accounting principles (GAAP). Furthermore, the practice of overstating revenues to increase one's bonus is also unethical.

The timing of revenue recognition is often a complex issue faced by business managers, auditors, tax authorities, and the securities commissions.

## ANSWERS TO SELF-TEST QUESTIONS

1. c      2. d \$11,670 ( $\$27,900 - \$17,340 - \$2,700 - \$1,440 + \$3,300 + \$1,950$ )      3. d  
 4. b, c      5. b, c, d      6. a, b, c, d      7. a, b      8. c      9. b, c

\* Supplemental Topic, "The Worksheet."

# COMPREHENSIVE PROBLEM 1

## Tony's Rentals

### A COMPREHENSIVE ACCOUNTING CYCLE PROBLEM

On September 1, 2002, Anthony and Christine Ferrara formed a corporation called Tony's Rentals Inc. for the purpose of operating an equipment rental yard. The new corporation was able to begin operations immediately by purchasing the assets and taking over the location of Rent-It, an equipment rental company that was going out of business. Tony's Rentals Inc. uses the following accounts and their corresponding account numbers:

Cash . . . . .	1	Income Taxes Payable . . . . .	29
Accounts Receivable . . . . .	4	Capital Stock . . . . .	30
Prepaid Rent . . . . .	6	Retained Earnings . . . . .	35
Unexpired Insurance . . . . .	7	Dividends . . . . .	38
Office Supplies . . . . .	8	Income Summary . . . . .	40
Rental Equipment . . . . .	10	Rental Fees Earned . . . . .	50
Accumulated Depreciation:		Salaries Expense . . . . .	60
Rental Equipment . . . . .	12	Maintenance Expense . . . . .	61
Notes Payable . . . . .	20	Utilities Expense . . . . .	62
Accounts Payable . . . . .	22	Rent Expense . . . . .	63
Interest Payable . . . . .	25	Office Supplies Expense . . . . .	64
Salaries Payable . . . . .	26	Depreciation Expense . . . . .	65
Dividends Payable . . . . .	27	Interest Expense . . . . .	66
Unearned Rental Fees . . . . .	28	Income Taxes Expense . . . . .	67

The corporation closes its accounts and prepares financial statements at the end of each month. During September, the corporation entered into the following transactions:

- Sept. 1** Issued to Anthony and Christine Ferrara 20,000 shares of capital stock in exchange for a total of \$80,000 cash.
- Sept. 1** Purchased for \$180,000 all the equipment formerly owned by Rent-It. Paid \$70,000 cash and issued a one-year note payable for \$110,000, plus interest at the annual rate of 9 percent.
- Sept. 1** Paid \$9,000 to Shapiro Realty as three months' advance rent on the rental yard and office formerly occupied by Rent-It.
- Sept. 4** Purchased office supplies on account from Modern Office Limited, \$1,630. Payment is due in 30 days. (These supplies are expected to last for several months)
- Sept. 8** Received \$10,000 cash as advance payment on equipment rental from Bloor Construction Company.
- Sept. 12** Paid salaries for the first two weeks in September, \$3,600.
- Sept. 15** Excluding the Bloor advance, equipment rental fees earned during the first 15 days of September amounted to \$8,100, of which \$6,800 was received in cash.
- Sept. 17** Purchased on account from Earth Movers Inc., \$340 in parts needed immediately to repair a rental tractor. Payment is due in 10 days.
- Sept. 23** Collected \$210 of the accounts receivable recorded on September 15.
- Sept. 25** Rented a backhoe to Mission Landscaping at a price of \$100 per day, to be paid when the backhoe is returned. Mission Landscaping expects to keep the backhoe for about two or three weeks.
- Sept. 26** Paid biweekly salaries, \$3,600.
- Sept. 27** Paid the account payable to Earth Movers Inc., \$340.
- Sept. 28** Declared a dividend of 10 cents per share, payable on October 15.

- Sept. 29** Tony's Rentals was named, along with Mission Landscaping and Collier Construction, as a co-defendant in a \$25,000 lawsuit filed on behalf of Kevin Davenport. Mission Landscaping had left the rented backhoe in a fenced construction site owned by Collier Construction. After working hours on September 26, Davenport had climbed the fence to play on parked construction equipment. While playing on the backhoe, he fell and broke his arm. The extent of the company's legal and financial responsibility for this accident, if any, cannot be determined at this time.
- Sept. 29** Purchased a 12-month public-liability insurance policy for \$2,700. This policy protects the company against liability for injuries and property damage caused by its equipment. However, the policy goes into effect on October 1, and affords no coverage for the injuries sustained by Kevin Davenport on September 26.
- Sept. 30** Received a bill from Universal Utilities for the month of September, \$270. Payment is due in 30 days.
- Sept. 30** Equipment rental fees earned during second half of September and received in cash amounted to \$8,450.

### Data for Adjusting Entries

- a. The advance payment of rent on September 1 covered a period of three months.
- b. Interest accrued on the note payable to Rent-It amounted to \$825 at September 30.
- c. The rental equipment is being depreciated by the straight-line method over a period of 10 years.
- d. Office supplies on hand at September 30 are estimated at \$1,100.
- e. During September, the company earned \$4,840 of the rental fees paid in advance by Bloor Construction on September 8.
- f. As of September 30, Tony's Rentals has earned five days' rent on the backhoe rented to Mission Landscaping on September 25.
- g. Salaries earned by employees since the last payroll date (September 26) amounted to \$2,030 at month-end.
- h. It is estimated that Tony's Rentals is liable for \$1,800 of income taxes.

### Instructions

- a. Journalize the above transactions.
- b. Post to ledger accounts.
- c. Prepare a 10-column worksheet for the month ended September 30, 2002.
- d. Prepare an income statement and a statement of retained earnings for the month of September and a balance sheet (in report form) as of September 30.
- e. Prepare required disclosures to accompany the September 30 financial statements of Tony's Rentals Inc. Your solution should include a separate note addressing each of the following areas: (1) depreciation policy, (2) maturity dates of major liabilities, and (3) potential liability due to pending litigation.
- f. Prepare adjusting and closing entries and post to ledger accounts.
- g. Prepare an after-closing trial balance as of September 30.
- h. During September, this company's cash balance has fallen from \$80,000 to less than \$20,000. Does it appear headed for insolvency in the near future? Explain your reasoning.
- i. Would it be ethical for Christine Ferrara to maintain the accounting records for this company, or must they be maintained by someone who is *independent* of the organization?

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\* *Supplemental Topic*, "The Worksheet."