3

THE MATCHING CONCEPT AND THE ADJUSTING PROCESS

objectives

After studying this chapter, you should be able to:

1. Explain how the matching concept relates to the accrual basis of accounting.
2. Explain why adjustments are necessary and list the characteristics of adjusting entries.
3. Journalize entries for accounts requiring adjustment.
4. Summarize the adjustment process and prepare an adjusted trial balance.
5. Use vertical analysis to compare financial statement items with each other and with industry averages.

Assume that you rented an apartment last month and signed a nine-month lease. When you signed the lease agreement, you were required to pay the final month's rent of $500. This amount is not returnable to you.

You are now applying for a student loan at a local bank. The loan application requires a listing of all your assets. Should you list the $500 deposit as an asset?

The answer to this question is "yes." The deposit is an asset to you until you receive the use of the apartment in the ninth month.

A business faces similar accounting problems at the end of a period. A business must determine what assets, liabilities, and owner's equity should be reported on its balance sheet. It must also determine what revenues and expenses should be reported on its income statement.

As we illustrated in previous chapters, transactions are normally recorded as they take place. Periodically, financial statements are prepared, summarizing the effects of the transactions on the financial position and operations of the business.

At any one point in time, however, the accounting records may not reflect all transactions. For example, most businesses do not record the daily use of supplies. Likewise, revenue may have been earned from providing services to customers, yet the customers have not been billed by the time the accounting period ends. Thus, at the end of the period, the revenue and receivable accounts must be updated.

In this chapter, we describe and illustrate this updating process. We will focus on accounts that normally require updating and the journal entries that update them.

The Matching Concept

objective 1

Explain how the matching concept relates to the accrual basis of accounting.

When accountants prepare financial statements, they assume that the economic life of the business can be divided into time periods. Using this ***accounting period concept***, accountants must determine in which period the revenues and expenses of the business should be reported. To determine the appropriate period, accountants will use either (1) the cash basis of accounting or (2) the accrual basis of accounting.

REAL WORLD

A bank loan officer requires an individual, who normally keeps records on a cash basis, to list assets (automobiles, homes, investments, etc.) on an application for a loan or a line of credit. In addition, the application often asks for an estimate of the individual's liabilities, such as outstanding credit card amounts and automobile loan balances. In a sense, the loan application converts the individual's cash-basis accounting system to an estimated accrual basis. The loan officer uses this information to assess the individual's ability to repay the loan.

Under the ***cash basis***, revenues and expenses are reported in the income statement in the period in which cash is received or paid. For example, fees are recorded when cash is received from clients, and wages are recorded when cash is paid to employees. The net income (or net loss) is the difference between the cash receipts (revenues) and the cash payments (expenses).

REAL WORLD

American Airlines uses the accrual basis of accounting. Revenues are recognized when passengers take flights, not when the passenger makes the reservation or pays for the ticket.

Under the ***accrual basis***, revenues are reported in the income statement in the period in which they are earned. For example, revenue is reported when the services are provided to customers. Cash may or may not be received from customers during this period. The concept that supports this reporting of revenues is called the ***revenue recognition concept***.

Under the accrual basis, expenses are reported in the same period as the revenues to which they relate. For example, employee wages are reported as an expense in the period in which the employees provided services to customers, and not necessarily when the wages are paid.

The accounting concept that supports reporting revenues and related expenses in the same period is called the ***matching concept***, or **matching principle**. Under this concept, an income statement will report the resulting income or loss for the period.

The matching concept supports reporting revenues and related expenses in the same period.

Generally accepted accounting principles require the use of the accrual basis. However, small service businesses may use the cash basis because they have few receivables and payables. For example, attorneys, physicians, and real estate agents often use the cash basis. For them, the cash basis will yield financial statements similar to those prepared under the accrual basis.

For most large businesses, the cash basis will not provide accurate financial statements for user needs. For this reason, we will emphasize the accrual basis in this text. The accrual basis and its related matching concept require an analysis and updating of some accounts when financial statements are prepared. In the following paragraphs, we will describe and illustrate this process, called the ***adjusting process***.

Nature of the Adjusting Process

objective 2

Explain why adjustments are necessary and list the characteristics of adjusting entries.

At the end of an accounting period, many of the balances of accounts in the ledger can be reported, without change, in the financial statements. For example, the balance of the cash account is normally the amount reported on the balance sheet.

Some accounts in the ledger, however, require updating. For example, the balances listed for prepaid expenses are normally overstated because the use of these assets is not recorded on a day-to-day basis. The balance of the supplies account usually represents the cost of supplies at the beginning of the period plus the cost of supplies acquired during the period. To record the daily use of supplies would require many entries with small amounts. In addition, the total amount of supplies is small relative to other assets, and managers usually do not require day-to-day information about supplies.

All adjusting entries affect at least one income statement account and one balance sheet account.

The journal entries that bring the accounts up to date at the end of the accounting period are called ***adjusting entries***. All adjusting entries affect at least one income statement account and one balance sheet account. Thus, an adjusting entry will *always* involve a revenue or an expense account *and* an asset or a liability account.

Is there an easy way to know when an adjusting entry is needed? Yes, four basic items require adjusting entries. The first two items are ***deferrals***. Deferrals are created by recording a transaction in a way that *delays* or *defers* the recognition of an expense or a revenue, as described below.

- ***Deferred expenses***, or ***prepaid expenses***, are items that have been initially recorded as assets but are expected to become expenses over time or through the normal operations of the business. Supplies and prepaid insurance are two examples of prepaid expenses that may require adjustment at the end of an accounting period. Other examples include prepaid advertising and prepaid interest.
- ***Deferred revenues***, or ***unearned revenues***, are items that have been initially recorded as liabilities but are expected to become revenues over time or through the normal operations of the business. An example of deferred revenue is unearned rent. Other examples include tuition received in advance by a school, an annual retainer fee received by an attorney, premiums received in advance by an insurance company, and magazine subscriptions received in advance by a publisher.

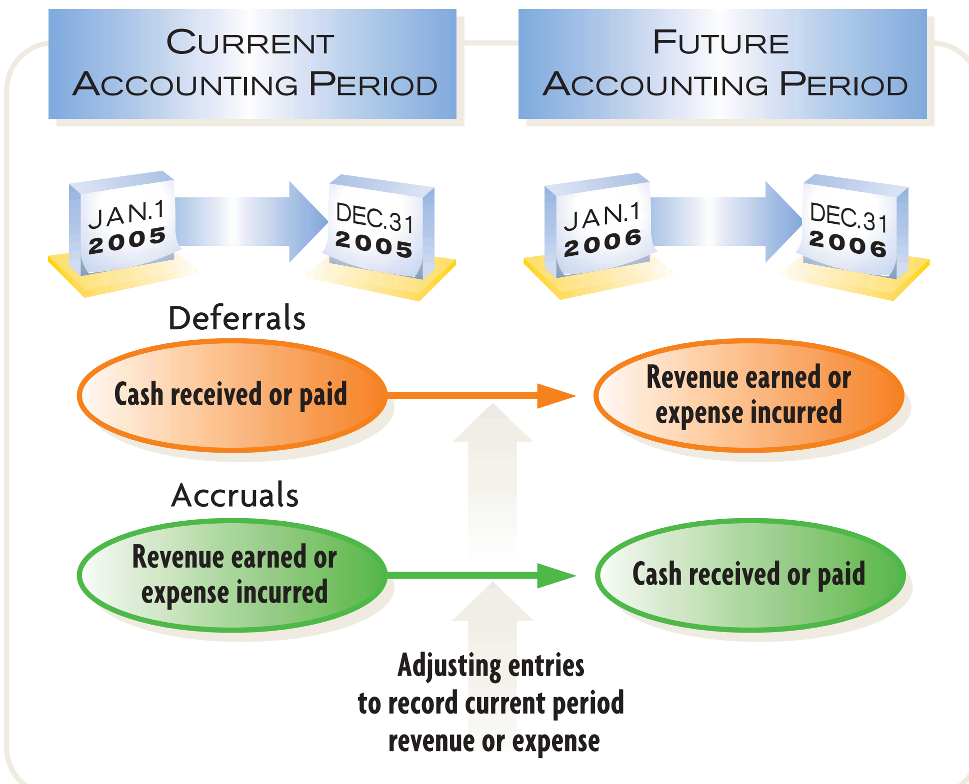
The second two items that require adjusting entries are accruals. ***Accruals*** are created by an unrecorded expense that has been incurred or an unrecorded revenue that has been earned, as described below.

- ***Accrued expenses***, or ***accrued liabilities***, are expenses that have been incurred *but have not been recorded* in the accounts. An example of an accrued expense is accrued wages owed to employees at the end of a period. Other examples include accrued interest on notes payable and accrued taxes.

- ***Accrued revenues***, or ***accrued assets***, are revenues that have been earned *but have not been recorded* in the accounts. An example of an accrued revenue is fees for services that an attorney has provided but hasn't billed to the client at the end of the period. Other examples include unbilled commissions by a travel agent, accrued interest on notes receivable, and accrued rent on property rented to others.

How do you tell the difference between deferrals and accruals? Determine when cash is received or paid, as shown in Exhibit 1. If cash is received (for revenue) or paid (for expense) in the *current* period, but the revenue or expense relates to a future period, the revenue or expense is a deferred item. If cash will not be received or paid until a *future* period, but the revenue or expense relates to the current period, the revenue or expense is an accrued item.

Exhibit 1 Deferrals and Accruals



Recording Adjusting Entries

objective 3

Journalize entries for accounts requiring adjustment.

The examples of adjusting entries in the following paragraphs are based on the ledger of NetSolutions as reported in the December 31, 2005 trial balance in Exhibit 2. The adjusting entries are shown in color in T accounts to separate them from other transactions. An expanded chart of accounts for NetSolutions is shown in Exhibit 3. The additional accounts that will be used in this chapter are shown in color.

•Exhibit 2 Unadjusted Trial Balance for NetSolutions

NetSolutions
Trial Balance
December 31, 2005

Cash	2,065 00	
Accounts Receivable	2,220 00	
Supplies	2,000 00	
Prepaid Insurance	2,400 00	
Land	20,000 00	
Office Equipment	1,800 00	
Accounts Payable		900 00
Unearned Rent		360 00
Chris Clark, Capital		25,000 00
Chris Clark, Drawing	4,000 00	
Fees Earned		16,340 00
Wages Expense	4,275 00	
Rent Expense	1,600 00	
Utilities Expense	985 00	
Supplies Expense	800 00	
Miscelleous Expense	455 00	
	42,600 00	42,600 00

•Exhibit 3 Expanded Chart of Accounts for NetSolutions

Balance Sheet Accounts		Income Statement Accounts	
	1. Assets		4. Revenue
11	Cash	41	Fees Earned
12	Accounts Receivable	42	Rent Revenue
14	Supplies		5. Expenses
15	Prepaid Insurance	51	Wages Expense
17	Land	52	Rent Expense
18	Office Equipment	53	Depreciation Expense
19	Accumulated Depreciation	54	Utilities Expense
	2. Liabilities	55	Supplies Expense
21	Accounts Payable	56	Insurance Expense
22	Wages Payable	59	Miscellaneous Expense
23	Unearned Rent		
	3. Owner's Equity		
31	Chris Clark, Capital		
32	Chris Clark, Drawing		

Deferred Expenses (Prepaid Expenses)

The concept of adjusting the accounting records was introduced in Chapters 1 and 2 in the illustration for NetSolutions. In that illustration, supplies were purchased on November 10 (transaction c). The supplies used during November were recorded on November 30 (transaction g).

The balance in NetSolutions' **supplies** account on December 31 is $2,000. Some of these supplies (computer diskettes, paper, envelopes, etc.) were used during December, and some are still on hand (not used). If either amount is known, the other can be determined. It is normally easier to determine the cost of the supplies on hand at the end of the month than it is to keep a daily record of those used. Assuming that on December 31 the amount of supplies on hand is $760, the amount to be transferred from the asset account to the expense account is $1,240, computed as follows:

Supplies available during December (balance of account)	$2,000
Supplies on hand, December 31	760
Supplies used (amount of adjustment)	$1,240

As we discussed in Chapter 2, increases in expense accounts are recorded as debits and decreases in asset accounts are recorded as credits. Hence, at the end of December, the supplies expense account should be debited for $1,240, and the supplies account should be credited for $1,240 to record the supplies used during December. The adjusting journal entry and T accounts for Supplies and Supplies Expense are as follows:

2	2005 Dec.	31	Supplies Expense	55	1 2 4 0 00		2
3			Supplies	14		1 2 4 0 00	3

Supplies

Bal.	2,000	Dec. 31	1,240
760			

Supplies Expense

Bal.	800		
Dec. 31	1,240		
	2,040		

The balance of a prepaid (deferred) expense is an asset that will become an expense in a future period.

After the adjustment has been recorded and posted, the supplies account has a debit balance of $760. This balance represents an asset that will become an expense in a future period.

The debit balance of $2,400 in NetSolutions' **prepaid insurance** account represents a December 1 prepayment of insurance for 24 months. At the end of December, the insurance expense account should be increased (debited), and the prepaid insurance account should be decreased (credited) by $100, the insurance for one month. The adjusting journal entry and T accounts for Prepaid Insurance and Insurance Expense are as follows:

5		31	Insurance Expense	56	1 0 0 00		5
6			Prepaid Insurance	15		1 0 0 00	6

Prepaid Insurance

Bal.	2,400	Dec. 31	100
2,300			

Insurance Expense

Dec. 31	100		

POINT OF INTEREST

The tuition you pay at the beginning of each term is an example of a deferred expense to you, as a student.

After the adjustment has been recorded and posted, the prepaid insurance account has a debit balance of $2,300. This balance represents an asset that will become an expense in future periods. The insurance expense account has a debit balance of $100, which is an expense of the current period.

What is the effect of omitting adjusting entries? If the preceding adjustments for supplies ($1,240) and insurance ($100) are not recorded, the financial statements prepared as of December 31 will be misstated. On the income statement, Supplies Expense and Insurance Expense will be understated by a total of $1,340, and net income will be overstated by $1,340. On the balance sheet, Supplies and Prepaid Insurance will be overstated by a total of $1,340. Since net income increases owner's equity, Chris Clark, Capital will also be overstated by $1,340 on the balance sheet. The effects of omitting these adjusting entries on the income statement and balance sheet are shown below.

		Amount of Misstatement	
Income Statement			
Revenues correctly stated		$ XXX	
Expenses understated by		(1,340)	
Net income overstated by	(1)	$1,340	
Balance Sheet			
Assets overstated by		$1,340	(2)
Liabilities correctly stated		$ XXX	
Owner's equity overstated by		1,340	
Total liabilities and owner's equity overstated by		$1,340	

Arrow (1) indicates the effect of the understated expenses on assets. Arrow (2) indicates the effect of the overstated net income on owner's equity.

Supplies of $1,250 were on hand at the beginning of the period, supplies of $3,800 were purchased during the period, and supplies of $1,000 were on hand at the end of the period. What is the supplies expense for the period?

$4,050 ($1,250 + $3,800 − $1,000)

Prepayments of expenses are sometimes made at the beginning of the period in which they will be *entirely consumed*. On December 1, for example, NetSolutions paid rent of $800 for the month. On December 1, the rent payment represents the asset prepaid rent. The prepaid rent expires daily, and at the end of December, the entire amount has become an expense (rent expense). In cases such as this, the initial payment is recorded as an expense rather than as an asset. Thus, if the payment is recorded as a debit to Rent Expense, no adjusting entry is needed at the end of the period.[1]

INTEGRITY IN BUSINESS

FREE ISSUE

Office supplies are often available to employees on a "free issue" basis. This means employees do not have to "sign" for the release of office supplies but merely obtain the necessary supplies from a local storage area as needed. Just because supplies are easily available, however, doesn't mean they can be taken for personal use. There are many instances when employees have been terminated for taking supplies home for personal use.

Deferred Revenue (Unearned Revenue)

According to NetSolutions' trial balance on December 31, the balance in the **unearned rent** account is $360. This balance represents the receipt of three months' rent on December 1 for December, January, and February. At the end of December, the unearned rent account should be decreased (debited) by $120, and the rent

[1]This alternative treatment of recording the cost of supplies, rent, and other prepayments of expenses is discussed in Appendix C.

revenue account should be increased (credited) by $120. The $120 represents the rental revenue for one month ($360/3). The adjusting journal entry and T accounts are shown below.

8		31	Unearned Rent	23	1 2 0 00		8
9			Rent Revenue	42		1 2 0 00	9

Unearned Rent				Rent Revenue			
Dec. 31	120	Bal.	360			Dec. 31	120
		240					

After the adjustment has been recorded and posted, the unearned rent account, which is a liability, has a credit balance of $240. This amount represents a deferral that will become revenue in a future period. The rent revenue account has a balance of $120, which is revenue of the current period.[2]

If the preceding adjustment of unearned rent and rent revenue is not recorded, the financial statements prepared on December 31 will be misstated. On the income statement, Rent Revenue and the net income will be understated by $120. On the balance sheet, Unearned Rent will be overstated by $120, and Chris Clark, Capital will be understated by $120. The effects of omitting this adjusting entry are shown below.

	Amount of Misstatement
Income Statement	
Revenues understated by	$(120)
Expenses correctly stated	XXX
Net income understated by	$(120)
Balance Sheet	
Assets correctly stated	$XXX
Liabilities overstated by	$ 120
Owner's equity understated by	(120)
Total liabilities and owner's equity correctly stated	$XXX

Sears, Roebuck and Co. sells extended warranty contracts with terms between 12 and 36 months. The receipts from sales of these contracts are reported as unearned revenue (deferred revenue) on Sears' balance sheet. Revenue is recorded as the contracts expire.

If NetSolutions' adjustment for unearned rent had incorrectly been made for $180 instead of $120, what would have been the effect on the financial statements?

Revenues would have been overstated by $60; net income would have been overstated by $60; liabilities would have been understated by $60; and owner's equity would have been overstated by $60.

Accrued Expenses (Accrued Liabilities)

Some types of services, such as insurance, are normally paid for *before* they are used. These prepayments are deferrals. Other types of services are paid for *after* the service has been performed. For example, wages expense accumulates or *accrues* hour by hour and day by day, but payment may be made only weekly, biweekly, or monthly. The amount of such an accrued but unpaid item at the end of the accounting period is both an expense and a liability. In the case of wages expense, if the last day of a pay period is not the last day of the accounting period, the accrued wages expense and the related liability must be recorded in the accounts by an adjusting entry. This adjusting entry is necessary so that expenses are properly matched to the period in which they were incurred.

At the end of December, accrued wages for NetSolutions were $250. This amount is an additional expense of December and is debited to the **wages expense** account. It is also a liability as of December 31 and is credited to Wages Payable. The adjusting journal entry and T accounts are as follows.

Callaway Golf Company, a manufacturer of such innovative golf clubs as the "Big Bertha" driver, reports accrued warranty expense on its balance sheet.

[2]An alternative treatment of recording revenues received in advance of their being earned is discussed in Appendix C.

11	31	Wages Expense	51	2 5 0 00		11
12		Wages Payable	22		2 5 0 00	12

Wages Expense

Bal.	4,275	
Dec. 31	250	
	4,525	

Wages Payable

	Dec. 31	250

FINANCIAL REPORTING AND DISCLOSURE

UNEARNED REVENUE

Microsoft Corporation develops, manufactures, licenses, and supports a wide range of computer software products, including Windows XP®, Windows NT®, Word®, Excel®, and the Xbox®. When Microsoft sells its products, it incurs an obligation to support its software with technical support and periodic updates. As a result, not all the revenue from selling software is earned on the date of sale. Instead, some of the revenue is unearned. That is, the portion of revenue related to support services, such as updates and technical support, is earned only as time passes and the support services are provided to customers. Thus, it is necessary to make an adjusting entry each year to transfer unearned revenue to revenue.

The excerpts below from Microsoft's 2002 financial statements describe its accounting for unearned revenue. Microsoft further indicated that, of the $7,743 million of unearned revenue at June 30, 2002, it expected to recognize $5,917 million during the next year and $1,826 million in future years.

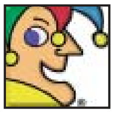
UNEARNED REVENUE

. . . Revenue attributable [to] technical support and Internet browser technologies . . . is recognized ratably . . . over the product's life cycle. The percentage of revenue recognized ratably . . . ranges from approximately 20% to 25% for Windows XP Home, approximately 10% to 15% for Windows XP Professional, and approximately 10% to 15% for desktop applications . . . Product life cycles are currently estimated at three years for Windows operating systems and 18 months for desktop applications. The unearned revenue as of June 30, 2002, was as follows:

	In Millions	
June 30	**2001**	**2002**
Unearned revenue	$5,614	$7,743

Unearned revenue by product was as follows:

	In Millions	
June 30	**2001**	**2002**
Desktop applications	$2,189	$3,489
Desktop platforms	2,586	3,198
Enterprise software and services	391	791
Desktop and enterprise software and services	5,166	7,478
Consumer software, services, and devices, and other	448	265
Unearned revenue	$5,614	$7,743



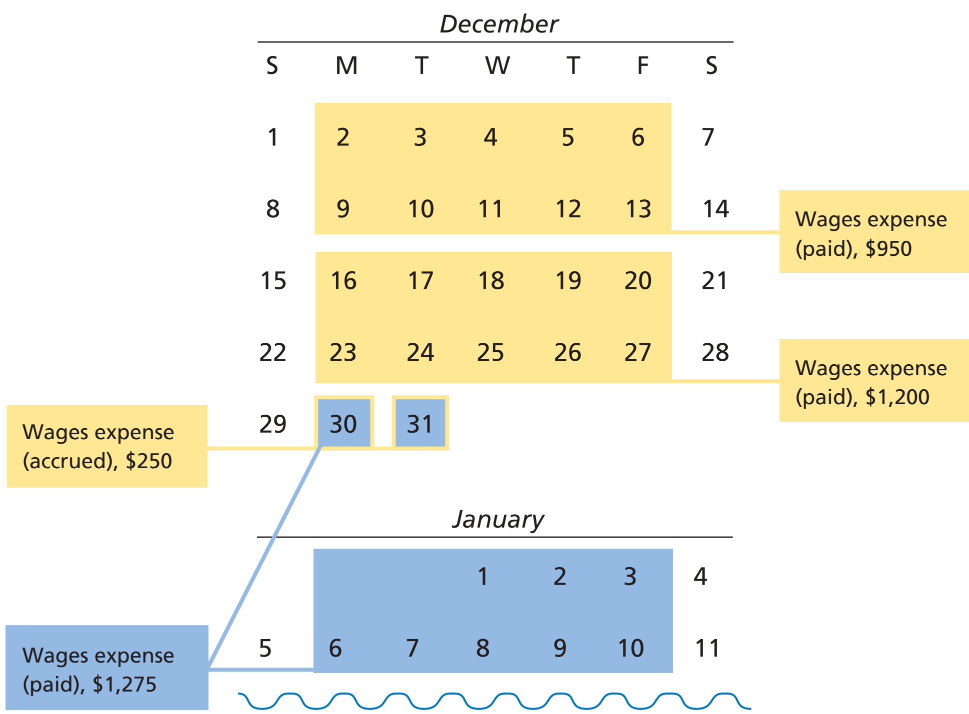
I'm 165 years old and came to life as a small family-run soap and candle company in Cincinnati. My celestial logo dates back to the 1850s. I recorded $1 million in annual sales in 1859 and take in around $40 billion annually now. I sell more than 250 items in 130 nations to more than five billion consumers. My Cheer-y and Joyous customers shout Olay! They've a Zest for my Bounty, which Cascades over their Head and Shoulders and Pampers them. It's no Secret that they Sure have a Gleam in their eyes and a Bounce in their step, Always. Who am I? (Go to page 123 for answer.)

After the adjustment has been recorded and posted, the debit balance of the wages expense account is $4,525, which is the wages expense for the two months, November and December. The credit balance of $250 in Wages Payable is the amount of the liability for wages owed as of December 31.

The accrual of the wages expense for NetSolutions is summarized in Exhibit 4. Note that NetSolutions paid wages of $950 on December 13 and $1,200 on December 27. These payments covered the biweekly pay periods that ended on those days. The wages of $250 incurred for Monday and Tuesday, December 30 and 31, are accrued at December 31. The wages paid on January 10 totaled $1,275, which included the $250 accrued wages of December 31.

•Exhibit 4 Accrued Wages

1. Wages are paid on the second and fourth Fridays for the two-week periods ending on those Fridays. The payments were $950 on December 13 and $1,200 on December 27.
2. The wages accrued for Monday and Tuesday, December 30 and 31, are $250.
3. Wages paid on Friday, January 10, total $1,275.



What would be the effect on the financial statements if the adjustment for wages ($250) is not recorded? On the income statement, Wages Expense will be understated by $250, and the net income will be overstated by $250. On the balance sheet, Wages Payable will be understated by $250, and Chris Clark, Capital will be overstated by $250. The effects of omitting this adjusting entry are shown as follows.

	Amount of Misstatement
Income Statement	
Revenues correctly stated	$XXX
Expenses understated by	(250)
Net income overstated by	$ 250
Balance Sheet	
Assets correctly stated	$XXX
Liabilities understated by	$(250)
Owner's equity overstated by	250
Total liabilities and owner's equity correctly stated	$XXX

Assume that weekly wages of $1,500 are paid on Fridays. If wages are incurred evenly throughout the week, what is the accrued wages payable if the accounting period ends on a Tuesday?

$600 ($1,500/5 × 2 days)

Radio Shack Corporation is engaged in consumer electronics retailing. Radio Shack accrues revenue (accrued receivables) for finance charges, late charges, and returned check fees related to its credit operations.

Accrued Revenues (Accrued Assets)

During an accounting period, some revenues are recorded only when cash is received. Thus, at the end of an accounting period, there may be items of revenue that have been earned *but have not been recorded*. In such cases, the amount of the revenue should be recorded by debiting an asset account and crediting a revenue account.

To illustrate, assume that NetSolutions signed an agreement with Dankner Co. on December 15. The agreement provides that NetSolutions will be on call to answer computer questions and render assistance to Dankner Co.'s employees. The services provided will be billed to Dankner Co. on the fifteenth of each month at a rate of $20 per hour. As of December 31, NetSolutions had provided 25 hours of assistance to Dankner Co. Although the revenue of $500 (25 hours × $20) will be billed and collected in January, NetSolutions earned the revenue in December. The adjusting journal entry and T accounts to record the claim against the customer (an account receivable) and the **fees earned** in December are shown below.

14		31	Accounts Receivable	12	500 00		14
15			Fees Earned	41		500 00	15

Accounts Receivable

Bal.	2,220
Dec. 31	500
	2,720

Fees Earned

Bal.	16,340
Dec. 31	500
	16,840

If the adjustment for the accrued asset ($500) is not recorded, Fees Earned and the net income will be understated by $500 on the income statement. On the balance sheet, Accounts Receivable and Chris Clark, Capital will be understated by $500. The effects of omitting this adjusting entry are shown below.

	Amount of Misstatement
Income Statement	
Revenues understated by	$(500)
Expenses correctly stated	XXX
Net income understated by	$(500)
Balance Sheet	
Assets understated by	$(500)
Liabilities correctly stated	$XXX
Owner's equity understated by	(500)
Total liabilities and owner's equity understated by	$(500)

Fixed Assets

Physical resources that are owned and used by a business and are permanent or have a long life are called ***fixed assets***, or **plant assets**. In a sense, fixed assets are a type of long-term deferred expense. However, because of their nature and long life, they are discussed separately from other deferred expenses, such as supplies and prepaid insurance.

NetSolutions' fixed assets include office equipment that is used much like supplies are used to generate revenue. Unlike supplies, however, there is no visible reduction in the quantity of the equipment. Instead, as time passes, the equipment loses its ability to provide useful services. This decrease in usefulness is called ***depreciation***.

All fixed assets, except land, lose their usefulness. Decreases in the usefulness of assets that are used in generating revenue are recorded as expenses. However, such decreases for fixed assets are difficult to measure. For this reason, a portion of the cost of a fixed asset is recorded as an expense each year of its useful life. This periodic expense is called ***depreciation expense***. Methods of computing depreciation expense are discussed and illustrated in a later chapter.

The adjusting entry to record depreciation is similar to the adjusting entry for supplies used. The account debited is a depreciation expense account. However, the asset account Office Equipment is not credited because both the original cost of a fixed asset and the amount of depreciation recorded since its purchase are normally reported on the balance sheet. The account credited is an ***accumulated depreciation*** account. Accumulated depreciation accounts are called ***contra accounts***, or **contra asset accounts** because they are deducted from the related asset accounts on the balance sheet.

REAL WORLD

Lowe's Companies, Inc. reported land, buildings, and store equipment at a cost of over \$12.8 billion and accumulated depreciation of over \$2.4 billion.

Normal titles for fixed asset accounts and their related contra asset accounts are as follows:

Fixed Asset	Contra Asset
Land	None—Land is not depreciated.
Buildings	Accumulated Depreciation—Buildings
Store Equipment	Accumulated Depreciation—Store Equipment
Office Equipment	Accumulated Depreciation—Office Equipment

The adjusting entry to record depreciation for December for NetSolutions is illustrated in the following journal entry and T accounts. The estimated amount of depreciation for the month is assumed to be \$50.

17		31	Depreciation Expense	53	50 00		17
18			Accumulated Depreciation—				18
19			Office Equipment	19		50 00	19

Office Equipment

Bal.	1,800		

Accumulated Depreciation

		Dec. 31	50

Depreciation Expense

Dec. 31	50		

The \$50 increase in the accumulated depreciation account is subtracted from the \$1,800 cost recorded in the related fixed asset account. The difference between the two balances is the \$1,750 cost that has not yet been depreciated. This amount (\$1,750) is called the ***book value of the asset*** (or **net book value**), which may be presented on the balance sheet in the following manner:

Office equipment	$1,800	
Less accumulated depreciation	50	$1,750

If equipment cost $5,000 and the related accumulated depreciation is $3,000, what is the book value?

$2,000 ($5,000 − $3,000)

You should note that the market value of a fixed asset usually differs from its book value. This is because depreciation is an *allocation* method, not a *valuation* method. That is, depreciation allocates the cost of a fixed asset to expense over its estimated life. Depreciation does not attempt to measure changes in market values, which may vary significantly from year to year.

If the previous adjustment for depreciation ($50) is not recorded, Depreciation Expense on the income statement will be understated by $50, and the net income will be overstated by $50. On the balance sheet, the book value of Office Equipment and Chris Clark, Capital will be overstated by $50. The effects of omitting the adjustment for depreciation are shown below.

	Amount of Misstatement
Income Statement	
Revenues correctly stated	$XX
Expenses understated by	(50)
Net income overstated by	$ 50
Balance Sheet	
Assets overstated by	$ 50
Liabilities correctly stated	$XX
Owner's equity overstated by	50
Total liabilities and owner's equity overstated by	$ 50

Summary of Adjustment Process

objective 4

Summarize the adjustment process and prepare an adjusted trial balance.

We have described and illustrated the basic types of adjusting entries in the preceding section. A summary of these basic adjustments, including the type of adjustment, the adjusting entry, and the effect of omitting an adjustment on the financial statements, is shown in Exhibit 5.

The adjusting entries for NetSolutions that we illustrated in this chapter are shown in Exhibit 6. The adjusting entries are dated as of the last day of the period. However, because some time may be needed for collecting the adjustment information, the entries are usually recorded at a later date. Each entry may be supported by an explanation, but a caption above the first adjusting entry is acceptable.

Which of the accounts—Fees Earned, Miscellaneous Expense, Cash, Wages Expense, Supplies, Accounts Receivable, Drawing, Equipment, Accumulated Depreciation—would normally require an adjusting entry?

Fees Earned; Wages Expense; Supplies; Accounts Receivable; Accumulated Depreciation.

These adjusting entries have been posted to the ledger for NetSolutions, and are shown in color in Exhibit 7 on pages 115–116. You should note that in the posting process the Post. Ref. column of the journal indicates the account number to which the entry was posted. The corresponding Post. Ref. column of the account indicates the journal page from which the entry was posted.

POINT OF INTEREST

One way for an accountant to check whether all adjustments have been made is to compare the current period's adjustments with those of the prior period.

After all the adjusting entries have been posted, another trial balance, called the ***adjusted trial balance***, is prepared. The purpose of the adjusted trial balance is to verify the equality of the total debit balances and total credit balances before we prepare the financial statements. If the adjusted trial balance does not balance, an error has occurred. However, as we discussed in Chapter 2, errors may have occurred even though the adjusted trial balance totals agree. For example, the adjusted trial balance totals would agree if an adjusting entry has been omitted.

•Exhibit 5 Summary of Basic Adjustments

Type of Adjustment	Adjusting Entry	Effect of Omitting Adjusting Entry on the Balance Sheet and Income Statement
Deferred expense	Dr. Expense	Expenses Understated and Net Income Overstated
	Cr. Asset	Assets Overstated and Owner's Equity Overstated
Deferred revenue	Dr. Liability	Liabilities Overstated and Owner's Equity Understated
	Cr. Revenue	Revenues Understated and Net Income Understated
Accrued expense	Dr. Expense	Expenses Understated and Net Income Overstated
	Cr. Liability	Liabilities Understated and Owner's Equity Overstated
Accrued revenue	Dr. Asset	Assets Understated and Owner's Equity Understated
	Cr. Revenue	Revenues Understated and Net Income Understated
Fixed assets	Dr. Expense	Expenses Understated and Net Income Overstated
	Cr. Contra Asset	Assets Overstated and Owner's Equity Overstated

•Exhibit 6 Adjusting Entries—NetSolutions

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	Date		Description	Post. Ref.	Debit	Credit	
1			Adjusting Entries				1
2	2005 Dec.	31	Supplies Expense	55	1 2 4 0 00		2
3			Supplies	14		1 2 4 0 00	3
4							4
5		31	Insurance Expense	56	1 0 0 00		5
6			Prepaid Insurance	15		1 0 0 00	6
7							7
8		31	Unearned Rent	23	1 2 0 00		8
9			Rent Revenue	42		1 2 0 00	9
10							10
11		31	Wages Expense	51	2 5 0 00		11
12			Wages Payable	22		2 5 0 00	12
13							13
14		31	Accounts Receivable	12	5 0 0 00		14
15			Fees Earned	41		5 0 0 00	15
16							16
17		31	Depreciation Expense	53	5 0 00		17
18			Accumulated Depreciation—				18
19			Office Equipment	19		5 0 00	19

•Exhibit 7 Ledger with Adjusting Entries—NetSolutions

ACCOUNT *Cash* **ACCOUNT NO.** *11*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Nov. 1		1	25,000		25,000	
5		1		20,000	5,000	
18		1	7,500		12,500	
30		1		3,650	8,850	
30		1		950	7,900	
30		2		2,000	5,900	
Dec. 1		2		2,400	3,500	
1		2		800	2,700	
1		2	360		3,060	
6		2		180	2,880	
11		2		400	2,480	
13		3		950	1,530	
16		3	3,100		4,630	
20		3		900	3,730	
21		3	650		4,380	
23		3		1,450	2,930	
27		3		1,200	1,730	
31		3		310	1,420	
31		4		225	1,195	
31		4	2,870		4,065	
31		4		2,000	2,065	

ACCOUNT *Accounts Receivable* **ACCOUNT NO.** *12*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Dec. 16		3	1,750		1,750	
21		3		650	1,100	
31		4	1,120		2,220	
31	**Adjusting**	**5**	**500**		**2,720**	

ACCOUNT *Supplies* **ACCOUNT NO.** *14*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Nov. 10		1	1,350		1,350	
30		1		800	550	
Dec. 23		3	1,450		2,000	
31	**Adjusting**	**5**		**1,240**	**760**	

ACCOUNT *Prepaid Insurance* **ACCOUNT NO.** *15*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Dec. 1		2	2,400		2,400	
31	**Adjusting**	**5**		**100**	**2,300**	

ACCOUNT *Land* **ACCOUNT NO.** *17*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Nov. 5		1	20,000		20,000	

ACCOUNT *Office Equipment* **ACCOUNT NO.** *18*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Dec. 4		2	1,800		1,800	

ACCOUNT *Accumulated Depreciation* **ACCOUNT NO.** *19*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Dec. 31	**Adjusting**	**5**		**50**		**50**

ACCOUNT *Accounts Payable* **ACCOUNT NO.** *21*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Nov. 10		1		1,350		1,350
30		1	950			400
Dec. 4		2		1,800		2,200
11		2	400			1,800
20		3	900			900

ACCOUNT *Wages Payable* **ACCOUNT NO.** *22*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Dec. 31	**Adjusting**	**5**		**250**		**250**

ACCOUNT *Unearned Rent* **ACCOUNT NO.** *23*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Dec. 1		2		360		360
31	**Adjusting**	**5**	**120**			**240**

ACCOUNT *Chris Clark, Capital* **ACCOUNT NO.** *31*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Nov. 1		1		25,000		25,000

ACCOUNT *Chris Clark, Drawing* **ACCOUNT NO.** *32*

Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2005 Nov. 30		2	2,000		2,000	
Dec. 31		4	2,000		4,000	

Exhibit 7 (concluded)

ACCOUNT *Fees Earned* ACCOUNT NO. *41*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Nov. 18		1		7,500		7,500
Dec. 16		3		3,100		10,600
16		3		1,750		12,350
31		4		2,870		15,220
31		4		1,120		16,340
31	Adjusting	5		500		16,840

ACCOUNT *Rent Revenue* ACCOUNT NO. *42*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Dec. 31	Adjusting	5		120		120

ACCOUNT *Wages Expense* ACCOUNT NO. *51*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Nov. 30		1	2,125		2,125	
Dec. 13		3	950		3,075	
27		3	1,200		4,275	
31	Adjusting	5	250		4,525	

ACCOUNT *Rent Expense* ACCOUNT NO. *52*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Nov. 30		1	800		800	
Dec. 1		2	800		1,600	

ACCOUNT *Depreciation Expense* ACCOUNT NO. *53*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Dec. 31	Adjusting	5	50		50	

ACCOUNT *Utilities Expense* ACCOUNT NO. *54*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Nov. 30		1	450		450	
Dec. 31		3	310		760	
31		4	225		985	

ACCOUNT *Supplies Expense* ACCOUNT NO. *55*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Nov. 30		1	800		800	
Dec. 31	Adjusting	5	1,240		2,040	

ACCOUNT *Insurance Expense* ACCOUNT NO. *56*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Dec. 31	Adjusting	5	100		100	

ACCOUNT *Miscellaneous Expense* ACCOUNT NO. *59*

Date	Item	Post. Ref.	Debit	Credit	Balance Debit	Balance Credit
2005 Nov. 30		1	275		275	
Dec. 6		2	180		455	

To highlight the effect of the adjustments on the accounts, Exhibit 8 shows the unadjusted trial balance, the accounts affected by the adjustments, and the adjusted trial balance. In Chapter 4, we discuss how financial statements, including a classified balance sheet, can be prepared from an adjusted trial balance. We also discuss the use of a work sheet as an aid to summarize the data for preparing adjusting entries and financial statements.

•Exhibit 8 Trial Balances

	NetSolutions Unadjusted Trial Balance December 31, 2005				Effect of Adjusting Entry		NetSolutions Adjusted Trial Balance December 31, 2005			
1	Cash	2,065		1		1	Cash	2,065		1
2	Accounts Receivable	2,220		2	+ 500	2	Accounts Receivable	2,720		2
3	Supplies	2,000		3	−1,240	3	Supplies	760		3
4	Prepaid Insurance	2,400		4	− 100	4	Prepaid Insurance	2,300		4
5	Land	20,000		5		5	Land	20,000		5
6	Office Equipment	1,800		6		6	Office Equipment	1,800		6
7	Accumulated Depreciation			7	+ 50	7	Accumulated Depreciation		50	7
8	Accounts Payable		900	8		8	Accounts Payable		900	8
9	Wages Payable			9	+ 250	9	Wages Payable		250	9
10	Unearned Rent		360	10	− 120	10	Unearned Rent		240	10
11	Chris Clark, Capital		25,000	11		11	Chris Clark, Capital		25,000	11
12	Chris Clark, Drawing	4,000		12		12	Chris Clark, Drawing	4,000		12
13	Fees Earned		16,340	13	+ 500	13	Fees Earned		16,840	13
14	Rent Revenue			14	+ 120	14	Rent Revenue		120	14
15	Wages Expense	4,275		15	+ 250	15	Wages Expense	4,525		15
16	Rent Expense	1,600		16		16	Rent Expense	1,600		16
17	Depreciation Expense			17	+ 50	17	Depreciation Expense	50		17
18	Utilities Expense	985		18		18	Utilities Expense	985		18
19	Supplies Expense	800		19	+1,240	19	Supplies Expense	2,040		19
20	Insurance Expense			20	+ 100	20	Insurance Expense	100		20
21	Miscellaneous Expense	455		21		21	Miscellaneous Expense	455		21
22		42,600	42,600	22		22		43,400	43,400	22

Financial Analysis and Interpretation

objective 5

Use vertical analysis to compare financial statement items with each other and with industry averages.

Comparing each item in a current statement with a total amount within that same statement can be useful in highlighting significant relationships within a financial statement. ***Vertical analysis*** is the term used to describe such comparisons.

In vertical analysis of a balance sheet, each asset item is stated as a percent of the total assets. Each liability and owner's equity item is stated as a percent of the total liabilities and owner's equity. In vertical analysis of an income statement, each item is stated as a percent of revenues or fees earned.

Vertical analysis may also be prepared for several periods to highlight changes in relationships over time. Vertical analysis of two years of income statements for J. Holmes, Attorney-at-Law, is shown in Exhibit 9. This exhibit indicates both favorable and unfavorable trends affecting the income statement of J. Holmes, Attorney-at-Law. The increase in wages expense of 2% (32% − 30%) is an unfavorable trend, as is the increase in utilities expense of 0.7% (6.7% − 6.0%). A favorable trend is the decrease in supplies expense of 0.6% (2.0% − 1.4%). Rent expense and miscellaneous expense as a percent of fees earned were constant. The net result of these trends was that net income decreased as a percent of fees earned from 52.8% to 50.7%.

The analysis of the various percentages shown for J. Holmes, Attorney-at-Law, can be enhanced by comparisons with industry averages published by trade associations and financial information services. Any major differences between industry averages should be investigated.

Exhibit 9 Vertical Analysis of Income Statements

J. Holmes, Attorney-at-Law
Income Statements
For the Years Ended December 31, 2005 and 2006

	2006		2005	
	Amount	**Percent**	**Amount**	**Percent**
Fees earned	$187,500	100.0%	$150,000	100.0%
Operating expenses:				
Wages expense	$ 60,000	32.0%	$ 45,000	30.0%*
Rent expense	15,000	8.0%	12,000	8.0%
Utilities expense	12,500	6.7%	9,000	6.0%
Supplies expense	2,700	1.4%	3,000	2.0%
Miscellaneous expense	2,300	1.2%	1,800	1.2%
Total operating expenses	$ 92,500	49.3%	$ 70,800	47.2%
Net income	$ 95,000	50.7%	$ 79,200	52.8%

*$45,000 ÷ $150,000

SPOTLIGHT ON STRATEGY

NOT CUTTING CORNERS

Have you ever ordered a hamburger from **Wendy's** and noticed that the meat patty is square? The square meat patty reflects a business strategy instilled in Wendy's by its founder, Dave Thomas. Mr. Thomas's strategy was to offer high-quality products at a fair price in a friendly atmosphere, without "cutting corners"; hence, the square meat patty. In the highly competitive fast-food industry, Dave Thomas's strategy enabled Wendy's to grow to be the third largest fast-food restaurant in the world, with annual sales of over $7 billion.

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

Key Points

1 Explain how the matching concept relates to the accrual basis of accounting.

The accrual basis of accounting requires the use of an adjusting process at the end of the accounting period to match revenues and expenses properly. Revenues are reported in the period in which they are earned, and expenses are matched with the revenues they generate.

2 Explain why adjustments are necessary and list the characteristics of adjusting entries.

At the end of an accounting period, some of the amounts listed on the trial balance are not necessarily current balances. For example, amounts listed for prepaid expenses are normally overstated because the use of these assets has not been recorded on a daily basis. A delay in recognizing an expense already paid or a revenue already received is called a deferral.

Some revenues and expenses related to a period may not be recorded at the end of the period, since these items are normally recorded only when cash has been received or paid. A revenue or expense that has not been paid or recorded is called an accrual.

The entries required at the end of an accounting period to bring accounts up to date and to ensure the proper matching of revenues and expenses are called adjusting entries. Adjusting entries require a debit or a credit to a revenue or an expense account and an offsetting debit or credit to an asset or a liability account.

Adjusting entries affect amounts reported in the income statement and the balance sheet. Thus, if an adjusting entry is not recorded, these financial statements will be incorrect (misstated).

3 Journalize entries for accounts requiring adjustment.

Adjusting entries illustrated in this chapter include deferred (prepaid) expenses, deferred (unearned) revenues, accrued expenses (accrued liabilities), and accrued revenues (accrued assets). In addition, the adjusting entry necessary to record depreciation on fixed assets was illustrated.

4 Summarize the adjustment process and prepare an adjusted trial balance.

A summary of adjustments, including the type of adjustment, the adjusting entry, and the effect of omitting an adjustment on the financial statements, is shown in Exhibit 5. After all the adjusting entries have been posted, the equality of the total debit balances and total credit balances is verified by an adjusted trial balance.

5 Use vertical analysis to compare financial statement items with each other and with industry averages.

Comparing each item in a current statement with a total amount within the same statement is called vertical analysis. In vertical analysis of a balance sheet, each asset item is stated as a percent of the total assets. Each liability and owner's equity item is stated as a percent of the total liabilities and owner's equity. In vertical analysis of an income statement, each item is stated as a percent of revenues or fees earned.

Key Terms

accounting period concept (102)
accrual basis (102)
accruals (103)
accrued assets (104)
accrued expenses (103)
accrued liabilities (103)
accrued revenues (104)
accumulated depreciation (112)
adjusted trial balance (113)
adjusting entries (103)
adjusting process (103)
book value of the asset (112)
cash basis (102)
contra account (112)
deferrals (103)
deferred expenses (103)
deferred revenues (103)
depreciation (112)
depreciation expense (112)
fixed assets (112)
matching concept (102)
prepaid expenses (103)
revenue recognition concept (102)
unearned revenues (103)
vertical analysis (116)

Illustrative Problem

Three years ago, T. Roderick organized Harbor Realty. At July 31, 2006, the end of the current year, the unadjusted trial balance of Harbor Realty appears as shown at the top of the following page. The data needed to determine year-end adjustments are as follows:

a. Supplies on hand at July 31, 2006, 380.
b. Insurance premiums expired during the year, $315.
c. Depreciation of equipment during the year, $4,950.
d. Wages accrued but not paid at July 31, 2006, $440.
e. Accrued fees earned but not recorded at July 31, 2006, $1,000.
f. Unearned fees on July 31, 2006, $750.

Instructions

1. Prepare the necessary adjusting journal entries.
2. Determine the balance of the accounts affected by the adjusting entries and prepare an adjusted trial balance.

Harbor Realty
Trial Balance
July 31, 2006

Cash	3,425 00	
Accounts Receivable	7,000 00	
Supplies	1,270 00	
Prepaid Insurance	620 00	
Office Equipment	51,650 00	
Accumulated Depreciation		9,700 00
Accounts Payable		925 00
Wages Payable		0 00
Unearned Fees		1,250 00
T. Roderick, Capital		29,000 00
T. Roderick, Drawing	5,200 00	
Fees Earned		59,125 00
Wages Expense	22,415 00	
Depreciation Expense	0 00	
Rent Expense	4,200 00	
Utilities Expense	2,715 00	
Supplies Expense	0 00	
Insurance Expense	0 00	
Miscellaneous Expense	1,505 00	
	100,000 00	100,000 00

Solution

1.

JOURNAL

Date		Description	Post. Ref.	Debit	Credit
2006 July	31	Supplies Expense		890 00	
		Supplies			890 00
	31	Insurance Expense		315 00	
		Prepaid Insurance			315 00
	31	Depreciation Expense		4,950 00	
		Accumulated Depreciation			4,950 00
	31	Wages Expense		440 00	
		Wages Payable			440 00
	31	Accounts Receivable		1,000 00	
		Fees Earned			1,000 00
	31	Unearned Fees		500 00	
		Fees Earned			500 00

2.

Harbor Realty
Adjusted Trial Balance
July 31, 2006

Cash	3 4 2 5 00	
Accounts Receivable	8 0 0 0 00	
Supplies	3 8 0 00	
Prepaid Insurance	3 0 5 00	
Office Equipment	51 6 5 0 00	
Accumulated Depreciation		14 6 5 0 00
Accounts Payable		9 2 5 00
Wages Payable		4 4 0 00
Unearned Fees		7 5 0 00
T. Roderick, Capital		29 0 0 0 00
T. Roderick, Drawing	5 2 0 0 00	
Fees Earned		60 6 2 5 00
Wages Expense	22 8 5 5 00	
Depreciation Expense	4 9 5 0 00	
Rent Expense	4 2 0 0 00	
Utilities Expense	2 7 1 5 00	
Supplies Expense	8 9 0 00	
Insurance Expense	3 1 5 00	
Miscellaneous Expense	1 5 0 5 00	
	106 3 9 0 00	106 3 9 0 00

Self-Examination Questions (Answers at End of Chapter)

1. Which of the following items represents a deferral?
   A. Prepaid insurance
   B. Wages payable
   C. Fees earned
   D. Accumulated depreciation

2. If the supplies account, before adjustment on May 31, indicated a balance of $2,250, and supplies on hand at May 31 totaled $950, the adjusting entry would be:
   A. debit Supplies, $950; credit Supplies Expense, $950.
   B. debit Supplies, $1,300; credit Supplies Expense, $1,300.
   C. debit Supplies Expense, $950; credit Supplies, $950.
   D. debit Supplies Expense, $1,300; credit Supplies, $1,300.

3. The balance in the unearned rent account for Jones Co. as of December 31 is $1,200. If Jones Co. failed to record the adjusting entry for $600 of rent earned during December, the effect on the balance sheet and income statement for December is:
   A. assets understated $600; net income overstated $600.
   B. liabilities understated $600; net income understated $600.
   C. liabilities overstated $600; net income understated $600.
   D. liabilities overstated $600; net income overstated $600.

4. If the estimated amount of depreciation on equipment for a period is $2,000, the adjusting entry to record depreciation would be:
   A. debit Depreciation Expense, $2,000; credit Equipment, $2,000.
   B. debit Equipment, $2,000; credit Depreciation Expense, $2,000.
   C. debit Depreciation Expense, $2,000; credit Accumulated Depreciation, $2,000.
   D. debit Accumulated Depreciation, $2,000; credit Depreciation Expense, $2,000.

5. If the equipment account has a balance of $22,500 and its accumulated depreciation account has a balance of $14,000, the book value of the equipment is:
   A. $36,500.
   B. $22,500.
   C. $14,000.
   D. $8,500.

Class Discussion Questions

1. How are revenues and expenses reported on the income statement under (a) the cash basis of accounting and (b) the accrual basis of accounting?
2. Fees for services provided are billed to a customer during 2005. The customer remits the amount owed in 2006. During which year would the revenues be reported on the income statement under (a) the cash basis? (b) the accrual basis?
3. Employees performed services in 2005, but the wages were not paid until 2006. During which year would the wages expense be reported on the income statement under (a) the cash basis? (b) the accrual basis?
4. Is the matching concept related to (a) the cash basis of accounting or (b) the accrual basis of accounting?
5. Is the balance listed for cash on the trial balance, before the accounts have been adjusted, the amount that should normally be reported on the balance sheet? Explain.
6. Is the balance listed for supplies on the trial balance, before the accounts have been adjusted, the amount that should normally be reported on the balance sheet? Explain.
7. Why are adjusting entries needed at the end of an accounting period?
8. What is the difference between *adjusting entries* and *correcting entries*?
9. Identify the five different categories of adjusting entries frequently required at the end of an accounting period.
10. If the effect of the credit portion of an adjusting entry is to increase the balance of a liability account, which of the following statements describes the effect of the debit portion of the entry?
    a. Increases the balance of a revenue account.
    b. Increases the balance of an expense account.
    c. Increases the balance of an asset account.
11. If the effect of the debit portion of an adjusting entry is to increase the balance of an asset account, which of the following statements describes the effect of the credit portion of the entry?
    a. Increases the balance of a revenue account.
    b. Increases the balance of an expense account.
    c. Increases the balance of a liability account.
12. Does every adjusting entry have an effect on determining the amount of net income for a period? Explain.
13. What is the nature of the balance in the prepaid insurance account at the end of the accounting period (a) before adjustment? (b) after adjustment?
14. On August 1 of the current year, a business paid the August rent on the building that it occupies. (a) Do the rights acquired at August 1 represent an asset or an expense? (b) What is the justification for debiting Rent Expense at the time of payment?
15. (a) Explain the purpose of the two accounts: Depreciation Expense and Accumulated Depreciation. (b) What is the normal balance of each account? (c) Is it customary for the balances of the two accounts to be equal in amount? (d) In what financial statements, if any, will each account appear?

Answer: Procter & Gamble

Exercises

EXERCISE 3-1
Classify accruals and deferrals
Objectives 2, 3

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

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

EXERCISE 3-2
Classify adjusting entries
Objectives 2, 3

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

AE—Accrued Expense
AR—Accrued Revenue
DR—Deferred Revenue
DE—Deferred Expense

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

Account	Answer
Aaron Piper, Drawing	Does not normally require adjustment.
Accounts Receivable	Normally requires adjustment (AR).
Accumulated Depreciation	
Cash	
Interest Payable	
Interest Receivable	
Land	
Office Equipment	
Prepaid Rent	
Supplies Expense	
Unearned Fees	
Wages Expense	

EXERCISE 3-3
Adjusting entry for supplies
Objective 3

The balance in the supplies account, before adjustment at the end of the year, is $1,175. Journalize the adjusting entry required if the amount of supplies on hand at the end of the year is $374.

EXERCISE 3-4
Determine supplies purchased
Objective 3

The supplies and supplies expense accounts at December 31, after adjusting entries have been posted at the end of the first year of operations, are shown in the following T accounts:

Supplies			Supplies Expense		
Bal.	118		Bal.	949	

Determine the amount of supplies purchased during the year.

EXERCISE 3-5
Effect of omitting adjusting entry
Objective 3

At December 31, the end of the first month of operations, the usual adjusting entry transferring prepaid insurance expired to an expense account is omitted. Which items will be incorrectly stated, because of the error, on (a) the income statement for December and (b) the balance sheet as of December 31? Also indicate whether the items in error will be overstated or understated.

EXERCISE 3-6
Adjusting entries for prepaid insurance
Objective 3

The balance in the prepaid insurance account, before adjustment at the end of the year, is $2,475. Journalize the adjusting entry required under each of the following *alternatives* for determining the amount of the adjustment: (a) the amount of insurance expired during the year is $1,215; (b) the amount of unexpired insurance applicable to future periods is $1,260.

EXERCISE 3-7
Adjusting entries for prepaid insurance
Objective 3

The prepaid insurance account had a balance of $5,600 at the beginning of the year. The account was debited for $1,800 for premiums on policies purchased during the year. Journalize the adjusting entry required at the end of the year for each of the following situations: (a) the amount of unexpired insurance applicable to future periods is $3,680; (b) the amount of insurance expired during the year is $3,720.

EXERCISE 3-8
Adjusting entries for unearned fees
Objective 3
✓*Amount of entry: $9,570*

The balance in the unearned fees account, before adjustment at the end of the year, is $21,880. Journalize the adjusting entry required if the amount of unearned fees at the end of the year is $12,310.

EXERCISE 3-9
Effect of omitting adjusting entry
Objective 3

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

EXERCISE 3-10
Adjusting entries for accrued salaries
Objective 3
✓*a. Amount of entry: $9,360*

Xenon Realty Co. pays weekly salaries of $15,600 on Friday for a five-day week ending on that day. Journalize the necessary adjusting entry at the end of the accounting period, assuming that the period ends (a) on Wednesday, (b) on Thursday.

EXERCISE 3-11
Determine wages paid
Objective 3

The wages payable and wages expense accounts at August 31, after adjusting entries have been posted at the end of the first month of operations, are shown in the following T accounts:

Wages Payable			Wages Expense		
	Bal.	3,150	Bal.	63,000	

Determine the amount of wages paid during the month.

EXERCISE 3-12
Effect of omitting adjusting entry
Objective 3

Accrued salaries of $1,590 owed to employees for December 30 and 31 are not considered in preparing the financial statements for the year ended December 31. Indicate which items will be erroneously stated, because of the error, on (a) the income statement for the year and (b) the balance sheet as of December 31. Also indicate whether the items in error will be overstated or understated.

EXERCISE 3-13
Effect of omitting adjusting entry
Objective 3

Assume that the error in Exercise 3-12 was not corrected and that the $1,590 of accrued salaries was included in the first salary payment in January. Indicate which items will be erroneously stated, because of failure to correct the initial error, on (a) the income statement for the month of January and (b) the balance sheet as of January 31.

EXERCISE 3-14
Adjusting entries for prepaid and accrued taxes
Objective 3
✓b. $9,695

Titanium Financial Services was organized on April 1 of the current year. On April 2, Titanium prepaid $1,260 to the city for taxes (license fees) for the *next* 12 months and debited the prepaid taxes account. Titanium is also required to pay in January an annual tax (on property) for the *previous* calendar year. The estimated amount of the property tax for the current year (April 1 to December 31) is $8,750. (a) Journalize the two adjusting entries required to bring the accounts affected by the two taxes up to date as of December 31, the end of the current year. (b) What is the amount of tax expense for the current year?

EXERCISE 3-15
Effects of errors on financial statements
Objective 3

For a recent period, **Circuit City Stores** reported accrued expenses and other current liabilities of $128,776,000. For the same period, Circuit City reported earnings of $67,040,000 before income taxes. If accrued expenses and other current liabilities had not been recorded, what would have been the earnings (loss) before income taxes?

EXERCISE 3-16
Effects of errors on financial statements
Objective 3

The balance sheet for **The Campbell Soup Co.** as of July 31, 2002, includes accrued liabilities of $503,000,000. The income before taxes for The Campbell Soup Co. for the year ended July 28, 2002, was $798,000,000. (a) If the accruals had not been recorded at July 28, 2002, by how much would income before taxes have been misstated for the fiscal year ended July 28, 2002? (b) What is the percentage of the misstatement in (a) to the reported income of $798,000,000?

EXERCISE 3-17
Effects of errors on financial statements
Objective 3
✓1. a. Revenue understated, $6,900

The accountant for Glacier Medical Co., a medical services consulting firm, mistakenly omitted adjusting entries for (a) unearned revenue earned during the year ($6,900) and (b) accrued wages ($3,740). Indicate the effect of each error, considered individually, on the income statement for the current year ended December 31. Also indicate the effect of each error on the December 31 balance sheet. Set up a table similar to the following, and record your answers by inserting the dollar amount in the appropriate spaces. Insert a zero if the error does not affect the item.

	Error (a)		Error (b)	
	Overstated	**Understated**	**Overstated**	**Understated**
1. Revenue for the year would be	$	$	$	$
2. Expenses for the year would be	$	$	$	$
3. Net income for the year would be	$	$	$	$

(continued)

	Error (a)		Error (b)	
	Over-stated	Under-stated	Over-stated	Under-stated
4. Assets at December 31 would be	$	$	$	$
5. Liabilities at December 31 would be	$	$	$	$
6. Owner's equity at December 31 would be	$	$	$	$

EXERCISE 3-18
Effects of errors on financial statements
Objective 3

If the net income for the current year had been $172,680 in Exercise 3-17, what would be the correct net income if the proper adjusting entries had been made?

EXERCISE 3-19
Adjusting entry for accrued fees
Objective 3

At the end of the current year, $11,500 of fees have been earned but have not been billed to clients.

a. Journalize the adjusting entry to record the accrued fees.
b. If the cash basis rather than the accrual basis had been used, would an adjusting entry have been necessary? Explain.

EXERCISE 3-20
Adjusting entries for unearned and accrued fees
Objective 3

The balance in the unearned fees account, before adjustment at the end of the year, is $27,600. Of these fees, $8,100 have been earned. In addition, $6,450 of fees have been earned but have not been billed. Journalize the adjusting entries (a) to adjust the unearned fees account and (b) to record the accrued fees.

EXERCISE 3-21
Effect on financial statements of omitting adjusting entry
Objective 3

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

EXERCISE 3-22
Adjustment for depreciation
Objective 3

The estimated amount of depreciation on equipment for the current year is $5,200. Journalize the adjusting entry to record the depreciation.

EXERCISE 3-23
Determine fixed asset's book value
Objective 3

The balance in the equipment account is $318,500, and the balance in the accumulated depreciation—equipment account is $113,900.

a. What is the book value of the equipment?
b. Does the balance in the accumulated depreciation account mean that the equipment's loss of value is $113,900? Explain.

EXERCISE 3-24
Book value of fixed assets
Objective 3

Microsoft Corporation reported *Property, Plant, and Equipment* of $5,891 million and *Accumulated Depreciation* of $3,623 million at June 30, 2002.

a. What was the book value of the fixed assets at June 30, 2002?
b. Would the book value of Microsoft Corporation's fixed assets normally approximate their fair market values?

EXERCISE 3-25
Adjusting entries for depreciation; effect of error
Objective 3

On December 31, a business estimates depreciation on equipment used during the first year of operations to be $7,500. (a) Journalize the adjusting entry required as of December 31. (b) If the adjusting entry in (a) were omitted, which items would be erroneously stated on (1) the income statement for the year and (2) the balance sheet as of December 31?

EXERCISE 3-26
Adjusting entries from trial balances
Objectives 3, 4

The unadjusted and adjusted trial balances for Aleutian Services Co. on December 31, 2006, are shown below.

Aleutian Services Co.
Trial Balance
December 31, 2006

	Unadjusted		Adjusted	
Cash	16		16	
Accounts Receivable	38		42	
Supplies	12		9	
Prepaid Insurance	20		12	
Land	26		26	
Equipment	40		40	
Accumulated Depreciation—Equipment		8		13
Accounts Payable		26		26
Wages Payable		0		1
Brian Stuart, Capital		92		92
Brian Stuart, Drawing	8		8	
Fees Earned		74		78
Wages Expense	24		25	
Rent Expense	8		8	
Insurance Expense	0		8	
Utilities Expense	4		4	
Depreciation Expense	0		5	
Supplies Expense	0		3	
Miscellaneous Expense	4		4	
Totals	200	200	210	210

Journalize the five entries that adjusted the accounts at December 31, 2006. None of the accounts were affected by more than one adjusting entry.

EXERCISE 3-27
Adjusting entries from trial balances
Objectives 3, 4

✓Corrected trial balance totals, $168,450

The accountant for Minaret Laundry prepared the following unadjusted and adjusted trial balances. Assume that all balances in the unadjusted trial balance and the amounts of the adjustments are correct. Identify the errors in the accountant's adjusting entries.

Minaret Laundry
Trial Balance
May 31, 2006

	Unadjusted		Adjusted	
Cash	2,500		2,500	
Accounts Receivable	7,500		9,500	
Laundry Supplies	1,750		2,850	
Prepaid Insurance*	2,825		1,125	
Laundry Equipment	85,600		80,000	
Accumulated Depreciation		55,700		55,700
Accounts Payable		4,950		4,950
Wages Payable				850
Troy Jobe, Capital		32,450		32,450
Troy Jobe, Drawing	10,000		10,000	
Laundry Revenue		66,900		66,900
Wages Expense	24,500		24,500	
Rent Expense	15,575		15,575	
Utilities Expense	8,500		8,500	
Depreciation Expense			5,600	
Laundry Supplies Expense			1,100	
Insurance Expense			700	
Miscellaneous Expense	1,250		1,250	
	160,000	160,000	163,200	160,850

*$1,700 of insurance expired during the year.

EXERCISE 3-28
Vertical analysis of income statement
Objective 5

REAL WORLD

The financial statements for **The Home Depot** are presented in Appendix F at the end of the text.

a. Determine for Home Depot:
   1. The amount of the change (in millions) and percent of change in net earnings (net income) for the year ended February 2, 2003.
   2. The percentage relationship between net earnings (net income) and net sales (net earnings divided by net sales) for the years ended February 2, 2003 and February 3, 2002.

b. What conclusions can you draw from your analysis?

EXERCISE 3-29
Vertical analysis of income statement
Objective 5

REAL WORLD

The following income statement data (in thousands) for **Dell Computer Corporation** and **Gateway Inc.** were taken from their recent annual reports:

	Dell	Gateway
Net sales	$35,404,000	$ 4,171,325
Cost of goods sold (expense)	(29,055,000)	(3,605,120)
Operating expenses	(3,505,000)	(1,077,447)
Operating income (loss)	$ 2,844,000	$ (511,242)

a. Prepare a vertical analysis of the income statement for Dell.
b. Prepare a vertical analysis of the income statement for Gateway.
c. Based upon (1) and (2), how does Dell compare to Gateway?

Problems Series A

PROBLEM 3-1A
Adjusting entries
Objective 3

On August 31, 2006, the following data were accumulated to assist the accountant in preparing the adjusting entries for Osage Realty:

a. Fees accrued but unbilled at August 31 are $7,100.
b. The supplies account balance on August 31 is $3,010. The supplies on hand at August 31 are $1,150.
c. Wages accrued but not paid at August 31 are $1,380.
d. The unearned rent account balance at August 31 is $4,950, representing the receipt of an advance payment on August 1 of three months' rent from tenants.
e. Depreciation of office equipment is $1,120.

Instructions

1. Journalize the adjusting entries required at August 31, 2006.
2. Briefly explain the difference between adjusting entries and entries that would be made to correct errors.

PROBLEM 3-2A
Adjusting entries
Objective 3

Selected account balances before adjustment for Flanders Realty at March 31, 2006, the end of the current year, are as follows:

	Debits	Credits		Debits	Credits
Accounts Receivable	$28,250		Unearned Fees		$ 4,800
Supplies	1,770		Fees Earned		170,850
Prepaid Rent	15,500		Wages Expense	$69,750	
Equipment	80,500		Rent Expense	—	
Accumulated Depreciation		$16,900	Depreciation Expense	—	
Wages Payable		—	Supplies Expense	—	

Data needed for year-end adjustments are as follows:

a. Supplies on hand at March 31, $350.
b. Depreciation of equipment during year, $1,450.
c. Rent expired during year, $9,500.
d. Wages accrued but not paid at March 31, $1,050.
e. Unearned fees at March 31, $1,200.
f. Unbilled fees at March 31, $7,100.

Instructions

Journalize the six adjusting entries required at March 31, based upon the data presented.

PROBLEM 3-3A
Adjusting entries
Objective 3

P.A.S.S.

Wild Trout Co., an outfitter store for fishing treks, prepared the following trial balance at the end of its first year of operations:

Wild Trout Co.
Trial Balance
November 30, 2006

Cash	1,610	
Accounts Receivable	11,900	
Supplies	1,820	
Equipment	27,860	
Accounts Payable		1,050
Unearned Fees		2,800
Angie Sanders, Capital		37,800
Angie Sanders, Drawing	1,400	
Fees Earned		51,450
Wages Expense	28,210	
Rent Expense	13,790	
Utilities Expense	5,250	
Miscellaneous Expense	1,260	
	93,100	93,100

For preparing the adjusting entries, the following data were assembled:

a. Supplies on hand on November 30 were $315.
b. Fees earned but unbilled on November 30 were $1,750.
c. Depreciation of equipment was estimated to be $1,600 for the year.
d. Unpaid wages accrued on November 30 were $380.
e. The balance in unearned fees represented the November 1 receipt in advance for services to be provided. Only $700 of the services were provided between November 1 and November 30.

Instructions

Journalize the adjusting entries necessary on November 30.

PROBLEM 3-4A
Adjusting entries
Objectives 3, 4

P.A.S.S.

Dynamo Company specializes in the maintenance and repair of signs, such as billboards. On March 31, 2006, the accountant for Dynamo Company prepared the trial balances shown at the top of the next page.

Instructions

Journalize the seven entries that adjusted the accounts at March 31. None of the accounts were affected by more than one adjusting entry.

(continued)

Dynamo Company
Trial Balance
March 31, 2006

	Unadjusted		Adjusted	
Cash	4,750		4,750	
Accounts Receivable	17,400		17,400	
Supplies	3,880		1,175	
Prepaid Insurance	4,800		3,200	
Land	47,500		47,500	
Buildings	111,590		111,590	
Accumulated Depreciation—Buildings		56,600		60,700
Trucks	73,000		73,000	
Accumulated Depreciation—Trucks		11,800		20,300
Accounts Payable		6,920		7,435
Salaries Payable		—		1,080
Unearned Service Fees		6,400		4,750
Joy Autry, Capital		125,600		125,600
Joy Autry, Drawing	5,000		5,000	
Service Fees Earned		152,680		154,330
Salary Expense	73,600		74,680	
Depreciation Expense—Trucks	—		8,500	
Rent Expense	9,600		9,600	
Supplies Expense	—		2,705	
Utilities Expense	6,200		6,715	
Depreciation Expense—Buildings	—		4,100	
Taxes Expense	1,720		1,720	
Insurance Expense	—		1,600	
Miscellaneous Expense	960		960	
	360,000	360,000	374,195	374,195

PROBLEM 3-5A
Adjusting entries and adjusted trial balances
Objectives 3, 4

✓2. Total of Debit Column: $552,520

Greco Service Co., which specializes in appliance repair services, is owned and operated by Curtis Loomis. Greco Service Co.'s accounting clerk prepared the following trial balance at December 31, 2006:

Greco Service Co.
Trial Balance
December 31, 2006

Cash	4,200	
Accounts Receivable	20,600	
Prepaid Insurance	6,000	
Supplies	1,450	
Land	100,000	
Building	161,500	
Accumulated Depreciation—Building		75,700
Equipment	80,100	
Accumulated Depreciation—Equipment		35,300
Accounts Payable		7,500
Unearned Rent		7,200
Curtis Loomis, Capital		157,100
Curtis Loomis, Drawing	5,000	
Fees Earned		257,200
Salaries and Wages Expense	101,800	
Utilities Expense	28,200	
Advertising Expense	15,000	
Repairs Expense	12,100	
Miscellaneous Expense	4,050	
	540,000	540,000

The data needed to determine year-end adjustments are as follows:

a. Depreciation of building for the year, $3,600.
b. Depreciation of equipment for the year, $2,400.
c. Accrued salaries and wages at December 31, $2,170.

d. Unexpired insurance at December 31, $3,500.
e. Fees earned but unbilled on December 31, $4,350.
f. Supplies on hand at December 31, $375.
g. Rent unearned at December 31, $2,800.

Instructions

1. Journalize the adjusting entries. Add additional accounts as needed.
2. Determine the balances of the accounts affected by the adjusting entries and prepare an adjusted trial balance.

PROBLEM 3-6A
Adjusting entries and errors
Objective 3

SPREADSHEET

✓ *Corrected Net Income: $127,900*

At the end of July, the first month of operations, the following selected data were taken from the financial statements of Kay Lopez, an attorney:

Net income for July	$124,350
Total assets at July 31	500,000
Total liabilities at July 31	125,000
Total owner's equity at July 31	375,000

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

a. Unbilled fees earned at July 31, $9,600.
b. Depreciation of equipment for July, $3,500.
c. Accrued wages at July 31, $1,450.
d. Supplies used during July, $1,100.

Instructions

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

	Net Income	Total Assets	Total Liabilities	Total Owner's Equity
Reported amounts	$124,350	$500,000	$125,000	$375,000
Corrections:				
Adjustment (a)	+9,600	+9,600	0	+9,600
Adjustment (b)				
Adjustment (c)				
Adjustment (d)				
Corrected amounts				

Problems Series B

PROBLEM 3-1B
Adjusting entries
Objective 3

On October 31, 2006, the following data were accumulated to assist the accountant in preparing the adjusting entries for Melville Realty:

a. The supplies account balance on October 31 is $1,875. The supplies on hand on October 31 are $310.
b. The unearned rent account balance on October 31 is $4,020, representing the receipt of an advance payment on October 1 of three months' rent from tenants.
c. Wages accrued but not paid at October 31 are $2,150.
d. Fees accrued but unbilled at October 31 are $11,278.
e. Depreciation of office equipment is $1,000.

Instructions

1. Journalize the adjusting entries required at October 31, 2006.
2. Briefly explain the difference between adjusting entries and entries that would be made to correct errors.

PROBLEM 3-2B
Adjusting entries
Objective 3

Selected account balances before adjustment for Maltese Realty at May 31, 2006, the end of the current year, are as follows:

	Debits	Credits		Debits	Credits
Accounts Receivable	$11,250		Unearned Fees		$ 6,500
Supplies	1,750		Fees Earned		117,950
Prepaid Rent	7,500		Wages Expense	$59,400	
Equipment	52,500		Rent Expense	—	
Accumulated Depreciation		$8,900	Depreciation Expense	—	
Wages Payable		—	Supplies Expense	—	

Data needed for year-end adjustments are as follows:

a. Unbilled fees at May 31, $1,150.
b. Supplies on hand at May 31, $360.
c. Rent expired $6,000.
d. Depreciation of equipment during year, $1,650.
e. Unearned fees at May 31, $1,775.
f. Wages accrued but not paid at May 31, $2,180.

Instructions

Journalize the six adjusting entries required at May 31, based upon the data presented.

PROBLEM 3-3B
Adjusting entries
Objective 3

P.A.S.S.

Anguilla Company, an electronics repair store, prepared the following trial balance at the end of its first year of operations:

Anguilla Company
Trial Balance
April 30, 2006

Cash	2,300	
Accounts Receivable	15,000	
Supplies	3,600	
Equipment	75,800	
Accounts Payable		3,500
Unearned Fees		4,000
Oscar Daly, Capital		52,000
Oscar Daly, Drawing	3,000	
Fees Earned		90,500
Wages Expense	21,000	
Rent Expense	16,000	
Utilities Expense	11,500	
Miscellaneous Expense	1,800	
	150,000	150,000

For preparing the adjusting entries, the following data were assembled:

a. Fees earned but unbilled on April 30 were $3,200.
b. Supplies on hand on April 30 were $1,010.
c. Depreciation of equipment was estimated to be $3,850 for the year.
d. The balance in unearned fees represented the April 1 receipt in advance for services to be provided. Only $1,000 of the services was provided between April 1 and April 30.
e. Unpaid wages accrued on April 30 were $820.

Instructions

Journalize the adjusting entries necessary on April 30, 2006.

PROBLEM 3-4B
Adjusting entries
Objectives 3, 4

P.A.S.S.

Expose′ Company specializes in the repair of music equipment and is owned and operated by Gavin Staub. On June 30, 2006, the end of the current year, the accountant for Expose′ Company prepared the following trial balances:

Expose′ Company
Trial Balance
June 30, 2006

	Unadjusted		Adjusted	
Cash	8,315		8,315	
Accounts Receivable	30,500		30,500	
Supplies	3,750		1,080	
Prepaid Insurance	4,750		2,200	
Equipment	92,150		92,150	
Accumulated Depreciation—Equipment		33,480		40,500
Automobiles	36,500		36,500	
Accumulated Depreciation—Automobiles		18,250		21,900
Accounts Payable		8,310		8,730
Salaries Payable		—		1,560
Unearned Service Fees		6,000		4,000
Gavin Staub, Capital		69,360		69,360
Gavin Staub, Drawing	5,000		5,000	
Service Fees Earned		244,600		246,600
Salary Expense	172,300		173,860	
Rent Expense	18,000		18,000	
Supplies Expense	—		2,670	
Depreciation Expense—Equipment	—		7,020	
Depreciation Expense—Automobiles	—		3,650	
Utilities Expense	4,300		4,720	
Taxes Expense	2,725		2,725	
Insurance Expense	—		2,550	
Miscellaneous Expense	1,710		1,710	
	380,000	380,000	392,650	392,650

Instructions

Journalize the seven entries that adjusted the accounts at June 30. None of the accounts were affected by more than one adjusting entry.

PROBLEM 3-5B
Adjusting entries and adjusted trial balances
Objectives 3, 4

SPREADSHEET
P.A.S.S.

✓2. Total of Debit Column: $510,380

Berserk Company is a small editorial services company owned and operated by Ethel Pringle. On December 31, 2006, the end of the current year, Berserk Company's accounting clerk prepared the trial balance shown at the top of the next page.

The data needed to determine year-end adjustments are as follows:

a. Unexpired insurance at December 31, $1,600.
b. Supplies on hand at December 31, $280.
c. Depreciation of building for the year, $1,320.
d. Depreciation of equipment for the year, $4,100.
e. Rent unearned at December 31, $1,500.
f. Accrued salaries and wages at December 31, $1,760.
g. Fees earned but unbilled on December 31, $3,200.

Instructions

1. Journalize the adjusting entries. Add additional accounts as needed.
2. Determine the balances of the accounts affected by the adjusting entries and prepare an adjusted trial balance.

(continued)

Berserk Company
Trial Balance
December 31, 2006

Cash	3,700	
Accounts Receivable	18,900	
Prepaid Insurance	4,800	
Supplies	1,320	
Land	75,000	
Building	141,500	
Accumulated Depreciation—Building		91,700
Equipment	90,200	
Accumulated Depreciation—Equipment		65,300
Accounts Payable		8,100
Unearned Rent		4,500
Ethel Pringle, Capital		134,000
Ethel Pringle, Drawing	10,000	
Fees Earned		196,400
Salaries and Wages Expense	95,580	
Utilities Expense	28,250	
Advertising Expense	15,200	
Repairs Expense	11,500	
Miscellaneous Expense	4,050	
	500,000	500,000

PROBLEM 3-6B
Adjusting entries and errors
Objective 3

SPREADSHEET

✓*Corrected Net Income: $209,745*

At the end of November, the first month of operations, the following selected data were taken from the financial statements of Jaime McCune, an attorney:

Net income for November	$207,320
Total assets at November 30	440,960
Total liabilities at November 30	29,720
Total owner's equity at November 30	411,240

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

a. Supplies used during November, $1,025.
b. Unbilled fees earned at November 30, $7,650.
c. Depreciation of equipment for November, $3,100.
d. Accrued wages at November 30, $1,100.

Instructions

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

	Net Income	Total Assets	Total Liabilities	Total Owner's Equity
Reported amounts	$207,320	$440,960	$29,720	$411,240
Corrections:				
Adjustment (a)	−1,025	−1,025	0	−1,025
Adjustment (b)				
Adjustment (c)				
Adjustment (d)				
Corrected amounts				

Continuing Problem

P.A.S.S.

✓3. Total of Debit Column: $33,190

The trial balance that you prepared for Dancin Music at the end of Chapter 2 should appear as follows:

Dancin Music
Trial Balance
May 31, 2006

Cash	7,330	
Accounts Receivable	1,760	
Supplies	920	
Prepaid Insurance	3,360	
Office Equipment	5,000	
Accounts Payable		5,750
Unearned Revenue		4,800
Shannon Burns, Capital		10,000
Shannon Burns, Drawing	2,250	
Fees Earned		11,210
Wages Expense	2,800	
Office Rent Expense	2,600	
Equipment Rent Expense	1,150	
Utilities Expense	860	
Music Expense	1,780	
Advertising Expense	1,300	
Supplies Expense	180	
Miscellaneous Expense	470	
	31,760	31,760

The data needed to determine adjustments for the two-month period ending May 31, 2006, are as follows:

a. During May, Dancin Music provided guest disc jockeys for KPRG for a total of 110 hours. For information on the amount of the accrued revenue to be billed to KPRG, see the contract described in the May 3, 2006 transaction at the end of Chapter 2.
b. Supplies on hand at May 31, $170.
c. The balance of the prepaid insurance account relates to the May 1, 2006 transaction at the end of Chapter 2.
d. Depreciation of the office equipment is $100.
e. The balance of the unearned revenue account relates to the contract between Dancin Music and KPRG, described in the May 3, 2006 transaction at the end of Chapter 2.
f. Accrued wages as of May 31, 2006, were $130.

Instructions

1. Prepare adjusting journal entries. You will need the following additional accounts:

   18 Accumulated Depreciation—Office Equipment
   22 Wages Payable
   57 Insurance Expense
   58 Depreciation Expense

2. Post the adjusting entries, inserting balances in the accounts affected.
3. Prepare an adjusted trial balance.

Special Activities

ACTIVITY 3-1
Ethics and professional conduct in business

Ruth Harbin opened Macaw Real Estate Co. on January 1, 2005. At the end of the first year, the business needed additional capital. On behalf of Macaw Real Estate, Ruth applied to First City Bank for a loan of $120,000. Based on Macaw Real Estate's financial statements, which had been prepared on a cash basis, the First City Bank loan officer rejected the loan as too risky.

After receiving the rejection notice, Ruth instructed her accountant to prepare the financial statements on an accrual basis. These statements included $41,500 in accounts receivable and $13,200 in accounts payable. Ruth then instructed her accountant to record an additional $12,500 of accounts receivable for commissions on property for which a contract had been signed on December 28, 2005, but which would not be formally "closed" and the title transferred until January 20, 2006.

Ruth then applied for a $120,000 loan from Second National Bank, using the revised financial statements. On this application, Ruth indicated that she had not previously been rejected for credit.

Discuss the ethical and professional conduct of Ruth Harbin in applying for the loan from Second National Bank.

ACTIVITY 3-2
Accrued expense

On December 30, 2006, you buy a Ford Expedition. It comes with a three-year, 36,000-mile warranty. On January 18, 2007, you return the Expedition to the dealership for some basic repairs covered under the warranty. The cost of the repairs to the dealership is $725. In what year, 2006 or 2007, should **Ford Motor Co.** recognize the cost of the warranty repairs as an expense?

ACTIVITY 3-3
Accrued revenue

The following is an excerpt from a conversation between Nathan Cisneros and Sonya Lucas just before they boarded a flight to Paris on **American Airlines**. They are going to Paris to attend their company's annual sales conference.

Nathan: Sonya, aren't you taking an introductory accounting course at college?

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

Nathan: I guess I never really thought about it.

Sonya: You should think about it! Last year, I placed a $300,000 order on December 27. But when I got my bonus, the $300,000 sale wasn't included. They said it hadn't been shipped until January 5, so it would have to count in next year's bonus.

Nathan: A real bummer!

Sonya: Right! I was counting on that bonus including the $300,000 sale.

Nathan: Did you complain?

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

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

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

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

ACTIVITY 3-4
Adjustments and financial statements

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

Chestnut Television Repair
Income Statement
For the Year Ended August 31, 2006

Service revenue		$83,280
Less: Rent paid	$20,000	
Wages paid	18,500	
Supplies paid	5,100	
Utilities paid	3,175	
Insurance paid	2,400	
Miscellaneous payments	2,150	51,325
Net income		$31,955

Chestnut Television Repair
Balance Sheet
August 31, 2006

Assets	
Cash	$11,150
Amounts due from customers	6,100
Truck	30,000
Total assets	$47,250
Equities	
Owner's capital	$47,250

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

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

ACTIVITY 3-5
Codes of ethics

Obtain a copy of your college or university's student code of conduct. In groups of three or four, answer the following questions.

1. Compare this code of conduct with the accountant's Codes of Professional Conduct in Appendix B at the end of this text. What are the similarities and differences between the two codes of conduct?
2. One of your classmates asks you for permission to copy your homework, which your instructor will be collecting and grading for part of your overall term grade. Although your instructor has not stated whether one student may or may not copy another student's homework, is it ethical for you to allow your classmate to copy your homework? Is it ethical for your classmate to copy your homework?

ACTIVITY 3-6
Business strategy

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

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

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

Answers to Self-Examination Questions

1. **A** A deferral is the delay in recording an expense already paid, such as prepaid insurance (answer A). Wages payable (answer B) is considered an accrued expense or accrued liability. Fees earned (answer C) is a revenue item. Accumulated depreciation (answer D) is a contra account to a fixed asset.
2. **D** The balance in the supplies account, before adjustment, represents the amount of supplies available. From this amount ($2,250) is subtracted the amount of supplies on hand ($950) to determine the supplies used ($1,300). Since increases in expense accounts are recorded by debits and decreases in asset accounts are recorded by credits, answer D is the correct entry.
3. **C** The failure to record the adjusting entry debiting unearned rent, $600, and crediting rent revenue, $600, would have the effect of overstating liabilities by $600 and understating net income by $600 (answer C).
4. **C** Since increases in expense accounts (such as depreciation expense) are recorded by debits and it is customary to record the decreases in usefulness of fixed assets as credits to accumulated depreciation accounts, answer C is the correct entry.
5. **D** The book value of a fixed asset is the difference between the balance in the asset account and the balance in the related accumulated depreciation account, or $22,500 − $14,000, as indicated by answer D ($8,500).