## CHAPTER 4

## Adjusting Accounts for Financial Statements

## Creative Accounting

Student Success Cycle


Brampton, Ontario-The RCMP (Royal Canadian Mounted Police) opened a criminal investigation regarding irregular accounting practices at Nortel Networks Corp., Canada's largest high-tech company and one of the world's leading suppliers of telecommunications equipment. Analysts have speculated that the firing of chief executive Frank Dunn, the CFO, and the controller stem from Nortel making 2002 earnings look artificially worse than they were and 2003 earnings look better. Why? It is assumed that this was done so executives could collect an estimated $\$ 20$ million in bonuses linked to the company's return to profitability. The company currently provides biweekly performance updates required by the Ontario Securities Commission, auditing Nortel's results going back to 2000. Nortel is facing about $\$ 1$ billion in class-action lawsuits related to the accounting scandal. The lesson to be learned is that creative accounting beyond the boundaries of GAAP is extremely costly.
http://www.nortel.com

## CRITICAL THINKING CHALLENGE

Assuming you were a Nortel executive, how could you inflate 2003 earnings and shrink
2002 earnings? Explain how GAAP were violated by this strategy.

## learning objectives

LO1 Describe the purpose of adjusting accounts at the end of a period.

L02 Explain how the time period, matching, and revenue recognition principles affect the adjusting process.
Explain accrual accounting and cash basis accounting and how accrual accounting adds to the usefulness of financial statements.

L04 Prepare and explain adjusting entries for prepaid expenses, amortization, unearned revenues, accrued expenses, and accrued revenues.

Explain how accounting adjustments link to financial statements.
Explain and prepare an adjusted trial balance.

## LO7 $\mathbf{L O}^{7}$ Prepare financial statements

 from an adjusted trial balance.
## *APPENDIX 4A

*LO ${ }^{8}$ Explain and prepare correcting entries.
*APPENDIX 4B
*L09 Identify and explain two alternatives in recording prepaids and unearned revenues.

## chapter preview

Financial statements P. 26 reflect revenues when earned and expenses when incurred. This is known as accrual basis accounting. Accrual basis accounting is achieved by following the steps of the accounting cycle P. 75. We described the first four of these steps in Chapter 3.

An important part of the accounting cycle is the adjustment of account balances. The adjusted account balances are what is reported in financial statements that are prepared according to generally accepted accounting principles P. 31. Adjustment of accounts is necessary so that financial statements at the end of a reporting period reflect the effects of all transactions. This chapter emphasizes Steps Five and Six of the accounting cycle as highlighted in Exhibit 4.1. Preparation of financial statements, Step Seven of the accounting cycle, is reinforced in this chapter, with an emphasis on how adjusting entries impact the financial statements. Nortel, in the chapter opener, likely used adjusting entries to play an important role in producing irregular financial statements. To illustrate the adjusting process, we continue with the example of Finlay Interiors used in previous chapters.

## Purpose of Adjusting

The usual process during an accounting period is to record external transactions. External transactions are exchanges between two parties; these were the focus of Chapters 2 and 3. After external transactions are recorded, several accounts in the ledger need adjustment for their balances to appear in financial statements. This need arises because internal transactions remain unrecorded. Internal transactions represent exchanges within an organization that affect the accounting equation and are the focus of this chapter.

An example is the cost of certain assets that expire or are used up as time passes. The Prepaid Insurance account of Finlay Interiors is one of these. Finlay Interiors' trial balance (Exhibit 4.2) shows Prepaid Insurance with a balance of $\$ 2,400$. This amount is the premium for two years of insurance protection beginning on January 1, 2011. By January 31, 2011, because one month's coverage is used up, the $\$ 2,400$ is no longer the correct account balance for Prepaid Insurance. The Prepaid Insurance account balance must be reduced by one month's cost, or $\$ 100$ ( $\$ 2,400 / 24$ months). The income statement P. 27 must report this $\$ 100$ cost as insurance expense for January.

Another example is the $\$ 3,600$ balance in Supplies. Part of this balance includes the cost of supplies that were used in January. The cost of the supplies used must be reported as an expense in January. The balances of both the Prepaid Insurance and Supplies accounts must be adjusted before they are reported on the January 31 balance sheet P. 29.

Another adjustment necessary for Finlay Interiors relates to one month's usage of furniture. The balances of the Unearned Consulting Revenue, Consulting Revenue, and Salaries Expense accounts often also need adjusting before they appear on the statements. We explain why this adjusting process is carried out in the next section.

Describe the purpose of adjusting accounts at the end of a period.

Exhibit 4.1
Steps in the Accounting Cycle Introduced in Chapter 4


Exhibit 4.2
Trial Balance


## GAAP and the Adjusting Process

LO2 Explain how the time period, matching, and revenue recognition principles affect the adjusting process.

The adjusting process is based on three generally accepted accounting principles: the time period principle, the revenue recognition principle, and the matching principle. In this section, we explain how GAAP add to the usefulness of financial statements.

## The Accounting Period

The adjusting process is often linked to timeliness of information. Information must reach decision makers frequently and promptly, therefore accounting systems need to prepare periodic reports at regular intervals. This results in an accounting process impacted by the time period principle. The time period principle assumes that an organization's activities can be divided into specific time periods such as a month, a three-month quarter, or a year, as illustrated in Exhibit 4.3.

Exhibit 4.3
Accounting Periods


Time periods covered by statements are called accounting periods (or reporting periods). Reports covering a one-year period are known as annual financial statements. Recall that a company can adopt a fiscal year P. 27 based on the calendar year P. 27 or its natural business year P. 27.

Many organizations also prepare interim financial reports covering one, three (quarterly), or six (semi-annual) months of activity.

## Recognizing Revenues and Expenses

Because of the need for regular reporting of information, activities are often reported on or before their completion so as not to mislead decision makers. These activities are recorded through the adjusting process. Two main generally accepted accounting principles are used in the adjusting process: the matching principle and the revenue recognition principle. The matching principle aims to report or match expenses in the same accounting period as the revenues they helped to earn. For example, assume that as part of a $\$ 500$ consulting services contract Finlay Interiors is to supply a detailed written plan to one of its customers in March. In the process of earning this $\$ 500$ in revenue, Finlay Interiors will use $\$ 150$ of office supplies purchased and paid for in February. The $\$ 150$ of office supplies used in March is an expense that will be reported on the March income statement even though the supplies were purchased and paid for in February. The $\$ 150$ of office supplies used in March must be matched against the $\$ 500$ of March revenues in accordance with the matching principle. Financial statements will reflect accurate information about the income actually earned during the period only if expenses are properly matched against the revenues they helped to create.

To illustrate revenue recognition, we will look at two situations. First, assume that in March, Finlay Interiors provides $\$ 500$ of consulting services to a client and collects the cash immediately. The $\$ 500$ of revenue is earned in March and is reported on the March income statement in accordance with the revenue recognition principle. Second, assume that Finlay Interiors collected $\$ 1,000$ of cash in March for work to be done in April. The $\$ 1,000$ of revenue will be earned in April and will therefore be reported on the April income statement; the $\$ 1,000$ will not be reported as revenue in March because it has not yet been earned. A major goal of the adjusting process is to have revenue recognized (reported) in the time period when it is earned regardless of when the cash is actually received. This concept is the foundation on which the accrual basis of accounting was developed.

## Accrual Basis Compared to Cash Basis

Accrual basis accounting is founded on the revenue recognition principle, where revenues and expenses are recognized or recorded when earned or incurred regardless of when cash is received or paid. The word accrual and its root word accrue mean to accumulate or to add. So accrual basis accounting means that revenues and expenses must be added or matched to the time period in which they actually happened; when cash was received or paid is irrelevant to the recording of revenues and expenses. Accrual basis accounting then, is based on the three GAAP of revenue recognition, matching, and time period.

In contrast, cash basis accounting recognizes revenues and expenses when cash is received or paid. Cash basis accounting for the income statement, balance sheet, and statement of owner's equity is not consistent with generally accepted accounting principles. It is commonly held that accrual basis accounting provides a better indication of business performance than information about current cash receipts and payments. Accrual basis accounting also increases the comparability of financial statements from one period to another. Yet information about cash flows is also useful. This is why companies also include a cash flow statement, discussed in Chapter 19.

Explain accrual accounting and cash basis accounting and how accrual accounting adds to the usefulness of financial statements.

## Accrual Basis Accounting

Revenues ( = when earned)

- Expenses ( = when incurred)

Net Income
Cash Basis Accounting
Revenues ( = cash receipts)

- Expenses ( = cash payments)

Net Income


1. Describe a company's annual reporting period.
2. Why do companies prepare interim financial statements?
3. What accounting principles most directly lead to the adjusting process?
4. Is cash basis accounting consistent with generally accepted accounting principles?
Do: QS 4-1, QS 4-2

## Adjusting Accounts

Prepare and explain adjusting entries for prepaid expenses, amortization, unearned revenues, accrued expenses, and accrued revenues.

Exhibit 4.4
Framework for Adjustments

## Extend Your Knowledge

The process of adjusting accounts is similar to our process of analyzing and recording transactions in Chapter 3. We must analyze each account balance and the transactions that affect it to determine any needed adjustments. An adjusting entry is recorded at the end of the accounting period to bring an asset or liability account balance to its proper amount. This entry also updates the related expense or revenue account and is necessary to prepare the financial statements. Adjustments are journalized in the General Journal and then posted to accounts in the ledger like any other entry. This next section shows the mechanics of adjusting entries and their links to financial statements.

## Framework for Adjustments

It is helpful to group adjustments by their timing of cash receipt or payment in comparison to when they are recognized as revenues or expenses. Exhibit 4.4 identifies the five main adjustments, each of which is detailed in the following sections.


## Adjusting Prepaid Expenses

Prepaid expenses ${ }^{1}$ refer to items paid for in advance of receiving their benefits. Prepaid expenses are assets. As these assets are used, their costs become expenses. Adjusting entries for prepaids involve increasing (debiting) expenses and decreasing (crediting) assets as shown in Exhibit 4.5.

[^0]

The three common prepaid expenses are insurance, supplies, and amortization.

## Prepaid Insurance

We illustrate prepaid insurance using Finlay Interiors' payment of \$2,400 for two years of insurance protection beginning on January 1, 2011. The following entry records the purchase of the insurance:

| Jan. 1 | Prepaid Insurance....................................... <br> Cash ............................................................ <br> To record purchase of insurance for <br> 24 months. | 2,400 |  | 2,400 |
| :--- | :--- | :--- | :--- | :--- |

By January 31, one month's insurance coverage is used, causing a portion of the asset Prepaid Insurance to become an expense. This expense is $\$ 100(\$ 2,400 \times$ $1 / 24$ ). Our adjusting entry to record this expense and reduce the asset is:

Adjustment (a)

| Jan. | 31 | Insurance Expense... | 100 | 100 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Prepaid Insurance............................ |  |  |
|  |  | To record expired insurance. |  |  |

Posting this adjusting entry affects the accounts shown in Exhibit 4.6:

| Prepaid Insurance |  |  |  | Insurance Expense |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Jan. 1 | 2,400 | 100 | Jan. 31 |  | Jan. 31 |  |
| Balance | 2,300 |  |  |  |  |  |

After posting, the $\$ 100$ balance in Insurance Expense and the $\$ 2,300$ balance in Prepaid Insurance are ready for reporting in the financial statements. If the adjustment is not made at January 31, then (a) expenses are understated by $\$ 100$ and net income is overstated by $\$ 100$ for the January income statement, and (b) both Prepaid Insurance and owner's equity are overstated by $\$ 100$ in the January 31 balance sheet.

## Supplies

Finlay Interiors purchased $\$ 3,600$ of supplies in January and used some of them during this month. Daily usage of supplies was not recorded in Finlay Interiors' accounts because this information was not needed. When we report account balances in financial statements only at the end of a month, recordkeeping costs can be reduced by making only one adjusting entry at that time. This entry needs to record the total cost of all supplies used in the month.

The cost of supplies used during January must be recognized as an expense. Finlay Interiors calculates ("takes inventory of") the remaining unused supplies. The cost of the remaining supplies is then deducted from the cost of the purchased supplies to calculate the amount used. Finlay Interiors has $\$ 2,550$ of supplies

[^1]
## Exhibit 4.5

Adjusting for Prepaid Expenses
remaining out of the $\$ 3,600(\$ 2,500+\$ 1,100)$ purchased in January. The $\$ 1,050$ difference between these two amounts is the cost of the supplies used. This amount is January's Supplies Expense. Our adjusting entry to record this expense and reduce the Supplies asset account is:

Adjustment (b)

|  | 31 | Supplies Expense....................................... | 1,050 | 1,050 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Supplies .......................................... |  |  |
|  |  | To record supplies used. |  |  |

Posting this adjusting entry affects the accounts shown in Exhibit 4.7:

Exhibit 4.7<br>Supplies Accounts After<br>Adjusting for Prepaids

| Supplies |  |  |  |
| :---: | :---: | :---: | :---: |
| Jan. 1 | 2,500 | 1,050 |  |
| 1 Jan. 31 | 1,100 |  |  |
| Balance | 2,550 |  |  |
|  |  |  |  |


|  | Supplies Expense |
| :---: | :---: |
| Jan. 31 | 1,050 |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

The balance of the Supplies account is $\$ 2,550$ after posting and equals the cost of remaining unused supplies. If the adjustment is not made at January 31, then (a) expenses are understated by $\$ 1,050$ and net income overstated by $\$ 1,050$ for the January income statement, and (b) both Supplies and owner's equity are overstated by $\$ 1,050$ in the January 31 balance sheet.

## Other Prepaid Expenses

There are other prepaid expenses (including Prepaid Rent), which are accounted for in exactly the same manner as Insurance and Supplies above. We should also note that some prepaid expenses are both paid for and fully used up within a single accounting period. One example is when a company pays monthly rent on the first day of each month. The payment creates a prepaid expense on the first day of each month that fully expires by the end of the month. In these special cases, we can record the cash paid with a debit to the expense account instead of an asset account.
5. If the entry to adjust Prepaid Insurance was not recorded, what effect would this have on each component of the accounting equation?
Do: QS 4-3

## Adjusting for Amortization ${ }^{2}$

Capital assets include long-term tangible assets (such as property, plant and equipment) that are used to produce and sell products and services, and intangible assets (such as patents) that convey the right to use a product or process. These assets are expected to provide benefits for more than one period. Examples of property, plant and equipment assets are land, buildings, machines, vehicles and fixtures. Because these assets (except for land) wear out or decline in usefulness as they are used, an expense must be recorded to match the cost of the asset over the periods benefited. Amortization is the process of computing expense from matching (or allocating) the cost of capital assets over their expected useful lives.

[^2]Finlay Interiors uses furniture in earning revenue. This furniture's cost must be amortized to match the cost of the furniture over the time that the furniture helps earn revenue. Recall that Finlay Interiors purchased furniture for $\$ 6,000$ on January 1. Carol Finlay expects the furniture to have a useful life (benefit period) of two years. Carol expects to sell the furniture for about $\$ 1,200$ at the end of two years. This means that the net cost expected to expire over the estimated useful life is $\$ 4,800(=\$ 6,000-\$ 1,200)$.

There are several methods that we can use to allocate this $\$ 4,800$ net cost to expense. Finlay Interiors uses straight-line amortization. ${ }^{3}$ The straight-line amortization method allocates equal amounts of an asset's net cost over its estimated useful life. When the $\$ 4,800$ net cost is divided by the asset's useful life of 24 months ( 2 years $\times 12$ months per year), we get an average monthly cost of $\$ 200$ ( $\$ 4,800 / 24$ ). Our adjusting entry to record monthly amortization expense is:

| Adjustment (c) |  |  |  |
| :--- | :--- | :--- | :--- |
| Jan. 31 | Amortization Expense, Furniture.................... <br> Accumulated Amortization, Furniture.... <br> To record monthly amortization on <br> furniture. | 200 | 200 |

Posting this adjusting entry affects the accounts shown in Exhibit 4.8:

|  | Furniture |  |
| :--- | :--- | :---: |
| Jan. 1 | 6,000 |  |
| Bal. | 6,000 |  |

Accumulated Amortization, Furniture

200 Jan. 31

|  | Amortization Expense, <br> Furniture |
| :--- | :--- |
| Jan. 31 | 200 |

## Straight-Line Amortization

Calculated as:

| Cost of |
| :---: |
| asset | | Estimated value |
| :---: |
| at end of |
| estimated |
| useful life |

$=\frac{\text { Estimated useful life }}{\$ 6,000-\$ 1,200}$
$=$
24 months
$\$ 200$
per month

Exhibit 4.8
Accounts After Amortization Adjustments

Accumulated amortization is recorded in a contra asset account. A contra account is an account that is linked with another account and has an opposite normal balance to its counterpart. It is reported as a subtraction from the other account's balance. On Finlay Interiors' balance sheet, the balance in the contra asset account, Accumulated Amortization, Furniture, will be subtracted from the Furniture account balance as shown in Exhibit 4.10. The cost of the asset less its accumulated amortization is the book value of the asset. The market value of an asset is the amount it can be sold for. Market value is not tied to the book value of an asset.

After posting the adjustment, the Furniture account less its Accumulated Amortization, Furniture account equals the January 31 balance sheet amount for this asset. The balance in the Amortization Expense, Furniture account is the expense reported in the January income statement. If the adjustment is not made at January 31, then (a) expenses are understated by $\$ 200$ and net income is overstated by $\$ 200$ for the January income statement, and (b) both assets and owner's equity are overstated by $\$ 200$ in the January 31 balance sheet.

The use of the contra asset account Accumulated Amortization allows balance sheet readers to know both the cost of assets and the total amount of amortization charged to expense to date. Notice that the title of the contra account is Accumulated Amortization. This means that the account includes total amortization expense for all prior periods when the assets were being used. Finlay Interiors'

[^3]
## Exhibit 4.9

Accounts After Three Months of Amortization Adjustments

## Exhibit 4.10

Accumulated Amortization Contra Account in the Balance Sheet

6. If the year-end adjusting entry to record amortization expense was not recorded, what effect would this have on each component of the accounting equation?
7. Explain what a contra account is.

Do: QS 4-4

## Small Business Owner

You are preparing to make an offer to purchase a small family-run restaurant. The manager gives you a copy of her amortization schedule for the restaurant's building and equipment. It shows costs of $\$ 75,000$ and accumulated amortization of $\$ 55,000$. This leaves a net total for building and equipment of $\$ 20,000$. Is this information valuable in deciding on a purchase offer for the restaurant?

## Adjusting Unearned Revenues

Unearned revenues refer to cash received in advance of providing products and services. Unearned revenues, also known as deferred revenues, are a liability. When cash is accepted, an obligation to provide products and services is also accepted. As products and services are provided, the amount of unearned revenues becomes earned revenues. Adjusting entries for unearned revenues involve increasing (crediting) revenues and decreasing (debiting) unearned revenues as shown in Exhibit 4.11. These adjustments reflect economic events (including passage of time) that impact unearned revenues.

Furniture and Accumulated Amortization, Furniture accounts would appear on March 31, 2011, as shown in Exhibit 4.10, after the three monthly adjusting entries detailed in Exhibit 4.9.

| Furniture |  | Accumulated Amortization, Furniture |  |
| :---: | :---: | :---: | :---: |
| Jan. 1 | 6,000 |  |  |
|  |  | 200 | Jan. 31 |
|  |  | 200 | Feb. 28 |
|  |  | 200 | Mar. 31 |
| Total | 6,000 | 600 | Total |
|  |  |  |  |
| OUAssets |  |  |  |
| Cash ...............................................).e.......... |  |  |  |
|  | - | - |  |
| Furniture ${ }_{\text {S }}$,000 |  |  |  |
| Total assets.. |  | \$ |  |

## JUDGEMENT CALL

Answer-p. 151

## Exhibit 4.11

Adjusting for Unearned Revenues

We see an example of unearned revenues in Rogers Communications' 2005 annual report. Rogers reports unearned revenue of $\$ 176.3$ million on its balance sheet that includes subscriber deposits and amounts received related to services to be provided in the future. Another example is WestJet, which reports advance (unearned) ticket sales at December 31, 2005, of $\$ 127,450,000$.

Finlay Interiors also has unearned revenues. On January 26, Finlay Interiors agreed to provide consulting services to a client for a fixed fee of $\$ 1,500$ per month. On that same day, this client paid the first two months' fees in advance, covering the period from January 27 to March 27. The entry to record the cash received in advance is:


This advance payment increases cash and creates an obligation to do consulting work over the next two months. As time passes, Finlay Interiors will earn this payment. No external transactions are linked with this earnings process. By January 31, Finlay Interiors provides five days' service that amounts to consulting revenue of $\$ 250(=\$ 1,500 \times 5 / 30)$. The revenue recognition principle implies that $\$ 250$ of unearned revenue is reported as revenue on the January income statement. The adjusting entry to reduce the liability account and recognize earned revenue is:

## Adjustment (d)



The accounts look as shown in Exhibit 4.12 after posting the adjusting entry.

| Unearned Consulting Revenue |  |  |  | Consulting Revenue |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 31 | 250 | 3,000 | Jan. 26 | 2,200 | Jan. 10 |
|  |  |  |  | 1,600 | 15 |
|  |  |  |  | 250 | 31 |
|  |  | 2,750 | Balance | 4,050 | Total |

The adjusting entry transfers $\$ 250$ out of Unearned Consulting Revenue (a liability account) to a revenue account. If the adjustment is not made, then (a) revenue and net income are understated by $\$ 250$ in the January income statement, and (b) Unearned Consulting Revenue is overstated and owner's equity understated by $\$ 250$ on the January 31 balance sheet.
8. AltaCo credited Unearned Revenue for $\$ 20,000$ received on November 3, 2011, for work to be done just prior to Christmas. The work was completed as scheduled. If Unearned Revenue is not adjusted at year-end to reflect the completion of the work, which GAAP will be violated and why?
9. Describe how an unearned revenue arises. Give an example.

Do: QS 4-5

Exhibit 4.12
Unearned Revenue and Revenue Accounts After Adjustments


Exhibit 4.13
Adjusting for Accrued Expenses

## Exhibit 4.14

Notes Payable and Interest
Accounts After Accrual
Adjustments

## Adjusting Accrued Expenses

Accrued expenses refer to costs incurred in a period that are both unpaid and unrecorded. Accrued expenses are part of expenses and reported on the income statement. Adjusting entries for recording accrued expenses involve increasing (debiting) expenses and increasing (crediting) liabilities as shown in Exhibit 4.13.


Common examples of accrued expenses are interest, salaries, rent, and taxes. We use interest and salaries to show how to adjust accounts for accrued expenses.

## Accrued Interest Expense

It is common for companies to have accrued interest expense on notes payable and certain accounts payable at the end of a period. Interest expense is incurred with the passage of time. Unless interest is paid on the last day of an accounting period, we need to adjust accounts for interest expense incurred but not yet paid.

Interest of $\$ 35$ has accrued on Finlay Interiors' $\$ 6,000,7 \%$, six-month note payable for the month of January. ${ }^{4}$ The journal entry is:

## Adjustment (e)

| Jan. | 31 | Interest Expense ... | 35 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Interest Payable............................. |  | 35 |
|  |  | To record accrued interest. |  |  |

After the adjusting entry is posted, the expense and liability accounts appear as shown in Exhibit 4.14.


This means that $\$ 35$ of interest expense is reported on the income statement and that $\$ 35$ interest payable is reported on the balance sheet. Notice that the Notes Payable account is not affected by recording interest. If the interest adjustment is not made, then (a) Interest Expense is understated and net income overstated by $\$ 35$ in the January income statement, and (b) Interest Payable is understated and owner's equity overstated by $\$ 35$ on the January 31 balance sheet.

[^4]The $\$ 6,000$ principal and total interest of $\$ 210(\$ 6,000 \times 7 \% \times 6 / 12=\$ 210)$ will be paid six months from January 1 , the date the note was issued. ${ }^{5}$

## Accrued Salaries Expense

Finlay Interiors' only employee earns $\$ 70$ per day or $\$ 350$ for a five-day workweek beginning on Monday and ending on Friday. This employee gets paid every two weeks on Friday. On the 14th and the 28th of January, the wages are paid, recorded in the journal, and posted to the ledger. The unadjusted Salaries Expense and Cash paid for salaries appear as shown in Exhibit 4.15.

| Cash |  | Salaries Expense |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 700 | Jan. 14 | Jan. 14 | 700 |  |
| 700 | 28 | 28 | 700 |  |

The calendar in Exhibit 4.16 shows one working day after the January 28 payday (January 31). This means that the employee earns one day's salary by the close of business on Monday, January 31. While this salary expense is incurred, it is not yet paid or recorded by the company. The period-end adjusting entry to account for accrued salaries is:

## Adjustment ( $f$ )

| Jan. | 31 | Salaries Expense. | 70 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Salaries Payable............................. |  | 70 |
|  |  | To record one day's accrued salary; $1 \times \$ 70$ |  |  |

${ }^{5}$ When the note payable and accrued interest are paid on July 1, six months after the date of issue on January 1, the entry would be (assuming interest expense of $\$ 35$ per month has accrued):


Exhibit 4.15
Salary and Cash Accounts Before Adjusting

Exhibit 4.16
Salary Accrual Period and Paydays

## Exhibit 4.17

Salary Accounts After Accrual Adjustments

## Extend Your Knowledge



4-2

After the adjusting entry is posted, the expense and liability accounts appear as shown in Exhibit 4.17.

|  | Salaries Expense |  | Salaries Payable |  |  |
| ---: | ---: | :---: | :--- | :--- | :--- |
| Jan. 14 | 700 |  |  | 70 | Jan. 31 |
| 28 | 700 |  |  |  |  |
| 31 | 70 |  |  |  |  |
| Total | 1,470 |  |  |  |  |

This means that $\$ 1,470$ of salaries expense is reported on the income statement and that $\$ 70$ in salaries payable (liability) is reported in the balance sheet. If the adjustment is not made, then (a) Salaries Expense is understated and net income overstated by $\$ 70$ in the January income statement, and (b) Salaries Payable is understated and owner's equity overstated by $\$ 70$ on the January 31 balance sheet.

The accrued salaries are paid on the first payday of the next bi-weekly period, which occurs on Friday, February 11. The entry includes the added salaries expense for the 9 days worked in February:

|  | 11 | Salaries Payable ....................................... | $\begin{array}{r} 70 \\ 630 \end{array}$ | 700 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Salaries Expense ........................................ |  |  |
|  |  | Cash. |  |  |
|  |  | Paid two weeks' salary including one day accrued in January (1 day at \$70; 9 days at $\$ 70=\$ 630$ ). |  |  |


10. In error, the May utility bill for $\$ 6,900$ was not included in the May 31 adjusting entries. What effect would this error have on the components of the accounting equation?
11. What is an accrued expense? Give an example.
12. Music-Mart records $\$ 1,000$ of accrued salaries on December 31. Five days later on January 5 (the next payday), salaries of $\$ 7,000$ are paid. What is the January 5 entry?
Do: QS 4-6

## Adjusting Accrued Revenues

When products and services are delivered, we expect to receive payment for them. Accrued revenues refer to revenues earned in a period that are both unrecorded and not yet received in cash (or other assets). Accrued revenues are part of revenues and must be reported on the income statement. The adjusting entries increase (debit) assets and increase (credit) revenues as shown in Exhibit 4.18.


Common examples of accrued revenues are fees for services and products, interest, and rent. We use service fees and interest to show how to adjust accounts for accrued revenues.

## Accrued Services Revenue

Accrued revenues are earned but unrecorded because either the customer has not paid for them or the seller has not yet billed the customer. Finlay Interiors provides us with an example of an accrued revenue. In the second week of January, Finlay Interiors agreed to provide consulting services to a client for a fixed fee of $\$ 2,700$ per month from January 11 to February 10, or 30 days of service. The client agrees to pay $\$ 2,700$ cash to Finlay Interiors on February 10, 2011, when the service period is complete.

At January 31, 2011, 20 days of services are already provided to the client. Since the contracted services are not yet entirely provided, the client is not yet billed nor has Finlay Interiors recorded the services already provided. Finlay Interiors has earned $\$ 1,800(=\$ 2,700 \times 20 / 30)$. The revenue recognition principle implies that we must report the $\$ 1,800$ on the January income statement because it is earned in January. The balance sheet also must report that this client owes Finlay Interiors $\$ 1,800$. The year-end adjusting entry to account for accrued consulting services revenue is:

## Adjustment (g)

| Jan. 31 | Accounts Receivable ...................................... <br> Consulting Revenue ............................... <br> To record 20 days' accrued revenue. | 1,800 | 1,800 |
| :---: | :---: | :---: | :---: |

After the adjusting entry is posted, the affected accounts look as shown in Exhibit 4.19.

| Accounts Receivable |  |  |  | Consulting Revenue |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 15 | 1,900 | 1,900 | Jan. 25 | 2,200 | Jan. 10 |
| 31 | 1,800 |  |  | 1,600 | 15 |
| Balance | 1,800 |  |  | 250 | 31 |
|  |  |  |  | 1,800 | 31 |
|  |  |  |  | 5,850 | Total |

Accounts receivable are reported on the balance sheet at $\$ 1,800$, and $\$ 5,850$ of revenues are reported on the income statement. If the adjustment is not made, then (a) both Consulting Revenue and net income are understated by $\$ 1,800$ in the January income statement, and (b) both Accounts Receivable and owner's equity are understated by $\$ 1,800$ on the January 31 balance sheet.

When the first month's fee is received on February 10, Finlay Interiors makes the following entry to remove the accrued asset (accounts receivable) and recognize the added 10 days of revenue earned in February:


## Accrued Interest Revenue

In addition to the accrued interest expense we described earlier, interest can yield an accrued revenue when a company is owed money (or other assets) by a debtor. If a company is holding notes or accounts receivable that produce interest revenue,

Exhibit 4.19
Receivable and Revenue Accounts After Accrual Adjustments
we must adjust the accounts to record any earned and yet uncollected interest revenue. The adjusting entry is similar to the one for accruing services revenue, with a debit to Interest Receivable (asset) and a credit to Interest Revenue (equity).

13. An adjusting entry to record $\$ 6,000$ of accrued interest revenue was omitted due to an oversight. What effect would this error have on the components of the accounting equation?
Do: QS 4-7, QS 4-8

## Adjustments and Financial Statements

Explain how accounting adjustments link to financial statements.

Exhibit 4.20 lists the five major types of transactions requiring adjustment. Adjusting entries are necessary for each. Understanding this exhibit is important to understanding the adjusting process and its link to financial statements. Remember that each adjusting entry affects both income statement accounts and balance sheet accounts.

Exhibit 4.20
Summary of Adjustments and Financial Statement Links

| Before Adjusting |  |  | Adjusting Entry |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Balance Sheet Account | Income Statement Account |  |  |  |
| Prepaid Expense | Asset \& equity overstated | Expense understated | Dr Expense $\qquad$ Cr Asset $\qquad$ | $\begin{gathered} x x^{\prime} \end{gathered}$ | where $X X=$ how much of the prepaid was used during the period |
| Amortization | Asset \& equity overstated | Expense understated | Dr Expense $\qquad$ Cr Contra Asset..... | $\mathrm{XX}_{\mathrm{XX}}$ | where $\mathrm{XX}=$ how much of the asset's cost was matched as an expense to the period |
| Unearned Revenues | Liability overstated; equity understated | Revenue understated | Dr Liability Cr Revenue | $\mathrm{XX}_{\mathrm{XX}}$ | where $X X=$ how much of the liability was earned during the period |
| Accrued Expenses | Liability understated; equity overstated | Expense understated | Dr Expense $\qquad$ Cr Liability $\qquad$ | $x_{x x}^{x}$ | where $\mathrm{XX}=$ the amount of the unpaid and unrecorded expense for the period |
| Accrued Revenues | Asset \& equity understated | Revenue understated | Dr Asset Cr Revenue | $x_{x x}^{x}$ | where $\mathrm{XX}=$ the amount of the uncollected and unrecorded revenue for the period |

Note that adjusting entries related to the framework in Exhibit 4.20 never
affect cash. ${ }^{6}$ A common error made by students learning to prepare adjusting entries is either to debit or to credit cash. In the case of prepaids and unearned revenues, cash has already been correctly recorded; it is the prepaids and unearned revenues account balances that need to be fixed or adjusted. In the case of accrued revenues and expenses, cash will be received or paid in the future and is not to be accounted for until that time; it is the revenue or expense account balance that needs to be fixed or adjusted. Amortization is a non-cash transaction and therefore does not affect cash.

Exhibit 4.21 summarizes the adjusting entries of Finlay Interiors on January 31. The posting of adjusting entries to individual ledger accounts was shown when we described the transactions above and is not repeated here. Adjusting entries are often set apart from other journal entries with the caption Adjusting Entries, as shown in Exhibit 4.21.

[^5]
14. Explain how adjusting entries are linked to the components of the accounting equation.
Do: QS 4-9, QS 4-10

Exhibit 4.21
Journalizing Adjusting Entries of Finlay Interiors

Finlay Onteriors


## mid-chapter demonstration problem

The owner of a lawn service company prepares monthly financial statements.

## Part A

Prepare the appropriate adjusting entries for July 31 based on the following information available at the end of July.
a. The annual insurance amounting to $\$ 1,200$ went into effect on July 1 . The Prepaid Insurance account was debited and Cash credited on the same date.
b. The lawn service company's lawn tractor was purchased for \$3,200 last year. The value of the lawn tractor at the end of its estimated four-year useful life was determined to be $\$ 800$. This information was made available to record amortization for July.
c. A customer paid for the entire summer's service in April. The journal entry credited the Unearned Service Fees account when the payment was received. The monthly fee is $\$ 500$.
d. The last weekly salary of $\$ 1,400$ was paid to employees on Friday, July 27. Employees are paid based on a five-day workweek. Salaries for July 30 and 31 have accrued.
e. Service fees of $\$ 1,800$ were earned by July 31 but not recorded.

## Part B

Refer to (d) above. Prepare the entry to pay the salaries on Friday, August 3.

## Analysis component:

Refer to the opening chapter vignette. Nortel understated its 2002 earnings. Omitting which of the adjustments in Part A would accomplish this?
solution to Mid-Chapter Demonstration Problem
Part A
a. July 31 Insurance Expense......................................... 100

Prepaid Insurance.
To record insurance for July.

c. 31 Unearned Service Fees................................... 500

Service Fees Earned ............................... 500
To record service fees earned for July.
d. 31 Salaries Expense ............................................ 560

Salaries Payable
To record salaries for the last two days of July, calculated as $\$ 1,400 / 5=\$ 280 /$ day $\times 2$ days $=\$ 560$

| e. 31 | Accounts Receivable ...................................... <br> Service Fees Earned ................................. <br> To record accrued service revenue for July. | 1,800 | 1,800 |
| :---: | :---: | :---: | :---: | :---: |

## Part B

Aug. 3 Salaries Payable ............................................. 560
Salaries Expense ................................................... 840
Cash.
1400
To record payment of weekly salaries; where salaries expense is calculated as $\$ 1,400 / 5=\$ 280 /$ day $\times 3$ days $=\$ 840$.

## Analysis component:

Omitting adjustments (c) and (e) would cause revenues to be understated; hence, earnings or net income would also be understated.

## Adjusted Trial Balance

An unadjusted trial balance is a listing of accounts and balances prepared before adjustments are recorded. An adjusted trial balance is a list of accounts and balances prepared after adjusting entries are recorded and posted to the ledger. Exhibit 4.22 shows the unadjusted and adjusted trial balances for Finlay Interiors at January 31, 2011. Notice several new accounts arising from the adjusting entries. The listing of accounts is also slightly changed to match the order listed in the Chart of Accounts in Appendix II at the end of the book.


Explain and prepare an adjusted trial balance.

Exhibit 4.22
Unadjusted and Adjusted Trial Balance for Finlay Interiors


Prepare financial statements from an adjusted trial balance.

Exhibit 4.23
Preparing the Income Statement and Statement of Owner's Equity from the Adjusted Trial Balance

Step One Prepare income statement


Exhibit 4.24 shows how Finlay Interiors' asset and liability balances on the adjusted trial balance are transferred to the balance sheet. The ending owner's equity is determined on the statement of owner's equity and transferred to the balance sheet. There are different formats for the balance sheet. The account form balance sheet, used in previous chapters, lists assets on the left and liabilities and owner's equity on the right side of the balance sheet. Its name comes from its link to the accounting equation, Assets $=$ Liabilities + Equity. The balance sheet in Exhibit 2.11 (on P. 42) is in account form. The report form balance sheet lists items vertically, as shown in Exhibit 4.24. Both forms are widely used and are considered equally helpful to users. For consistency, we will use the report form in the preparation of financial statements from this point forward.

We usually prepare financial statements in the order shown: income statement, statement of owner's equity, and balance sheet. This order makes sense since the balance sheet uses information from the statement of owner's equity, which in turn uses information from the income statement.

Exhibit 4.24
Preparing the Balance Sheet from the Adjusted Trial Balance

Step Three Prepare balance sheet

15. Jordan Air Company has the following information in its unadjusted and adjusted trial balances:


|  | Unadjusted |  | Adjusted |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Debit | Credit | Debit | Credit |

What are the adjusting entries that Jordan Air likely recorded?
16. What types of accounts are taken from the adjusted trial balance to prepare an income statement?
17. In preparing financial statements from an adjusted trial balance, what statement is usually prepared first? second? third? Explain why.
Do: QS 4-11



#### Abstract

Financial Officer You are the financial officer for a retail outlet company. At the calendar year-end when you are reviewing adjusting entries to record accruals, you are called into the president's office. The president asks about accrued expenses and instructs you not to record these expenses until next year because they will not be paid until January or later. The president also asks how much the current year's revenues increased because of the recent purchase order from a new customer. You state that there is no effect on sales until next year because the purchase order says merchandise is to be delivered after January 15 and that is when your company plans to make delivery. The president points out that the order is already received, and your company is ready to make delivery, and tells you to record this sale in the current year. Your company would report a net income instead of a net loss if you carried out the president's orders for adjusting accruals. What do you do?


## Summary

L01 Describe the purpose of adjusting accounts at the end of a period. After external transactions are recorded, several accounts need adjusting for their balances to be correct because internal transactions remain unrecorded. The purpose of adjusting accounts at the end of a period is to recognize unrecorded revenues and expenses.

L02 Explain how the time period, matching, and revenue recognition principles affect the adjusting process. The value of information is often linked to its timeliness, so accounting systems prepare periodic reports at regular intervals such as a month, a three-month quarter, or a year. Adjustments are made so that revenues and expenses are recognized as they occur and matched to the proper period.

## LO3 Explain accrual accounting and cash basis

 accounting and how accrual accounting adds to the usefulness of financial statements. Accrual accounting recognizes revenue when earned and expenses when incurred, not necessarily when cash inflows and outflows occur. Cash basis accounting recognizes revenues when cash is received and expenses when cash is paid; it is not in accordance with GAAP.
## L04 Prepare and explain adjusting entries for

 prepaid expenses, amortization, unearned revenues, accrued expenses, and accrued revenues. Prepaid expenses, an asset, refer to items paid for in advance of receiving their benefits. As this asset is used, its cost becomes an expense.Dr. Expense $\qquad$ xx
Cr. Prepaid xx

Amortization is the expense created by spreading the cost of capital assets over the periods these assets are used. Accumulated Amortization, a contra asset account, is credited to track the total amount of the capital asset used.

Dr. Amortization Expense $\qquad$ xx Cr. Accumulated Amortization. xx To adjust for amortization.
Unearned revenues, a liability, refer to cash received in advance of providing products and services. As products and services are provided, the amount of unearned revenues becomes earned revenues.

Dr. Unearned Revenue xx
Cr. Revenue
xx

To adjust for unearned revenue that is earned.
Accrued expenses are costs incurred in a period that are unpaid and unrecorded.

```
Dr. Expense
            Cr. Liability
                                    xx
    To adjust for unrecorded and unpaid expenses.
```

Accrued revenues are revenues earned in a period that are unrecorded and not yet collected.

Dr. Receivable xx
Cr. Revenue.
xx
To adjust for unrecorded revenues not yet collected.
L05 Explain how accounting adjustments link to financial statements. Accounting adjustments bring an asset or liability account balance to its correct amount and update related expense or revenue accounts. Every adjusting entry affects one or more income statement and balance sheet accounts. An adjusting entry never affects cash. Adjustments are necessary for transactions that extend over more than one period. Exhibit 4.20 summarizes financial statement links by type of adjustment.

Explain and prepare an adjusted trial balance.
An adjusted trial balance is a list of accounts and balances prepared after adjusting entries are recorded and posted to the ledger. Financial statements are often prepared from the adjusted trial balance.

> L07 Prepare financial statements from an adjusted trial balance. We can prepare financial statements directly
from the adjusted trial balance that includes all account balances. Revenue and expense balances are transferred to the income statement and statement of owner's equity. Asset, liability, and owner's equity balances are transferred to the balance sheet. We usually prepare statements in the following order: income statement, statement of owner's equity, and balance sheet.
guidance answers to $\quad$ JUDGEMENT CALL

## Small Business Owner

We know that amortization is a process of cost allocation, not asset valuation. Knowing the amortization schedule of the restaurant is not especially useful in your estimation of what the restaurant's building and equipment are currently worth. Your assessment of the age, quality, and usefulness of the building and equipment is much more important. Also, you would use the current market values of similar assets in estimating the value of this restaurant's building and equipment.

## Financial Officer

It appears that you must make a choice to follow the president's orders or not to follow them. The require-
ments of acceptable practice are clear. Omitting adjustments and early recognition of revenue can mislead users of financial statements (including managers, owners, and lenders). One action is to request a second meeting with the president where you explain that accruing expenses and recognizing revenue when earned are required practices. You should also mention the ethical implications of not complying with accepted practice. Point out that the president's orders involve intentional falsification of the statements. If the president persists, you might discuss the situation with legal counsel and any auditors involved. Your ethical action might cost you this job. But the potential pitfalls of falsification of statements, reputation loss, personal integrity, and other costs are too great.


1. An annual reporting (or accounting) period covers one year and refers to the preparation of annual financial statements. The annual reporting period can follow the calendar year or a fiscal year. The fiscal year can follow the business's natural business year.
2. Interim (less than one year) financial statements are prepared to provide decision makers with information frequently and promptly.
3. The revenue recognition principle, the time period principle, and the matching principle lead most directly to the adjusting process.
4. No. Cash basis accounting is not consistent with generally accepted accounting principles.
5. If Prepaid Insurance is not adjusted, assets and equity will be overstated.
6. If the adjusting entry to record amortization was not recorded, assets and equity would be overstated.
7. A contra account is an account that is subtracted from the balance of a related account. Use of a contra account often provides more complete information than simply reporting a net amount.
8. Matching will be violated because revenues earned will not be assigned to the correct accounting period.
9. An unearned revenue arises when cash is (or other assets are) received from a customer before the services and products are delivered to the customer. Magazine subscription receipts in advance are one example.
10. The omission of the $\$ 6,900$ interest expense accrual will cause liabilities to be understated by $\$ 6,900$ and equity to be overstated by $\$ 6,900$.
11. An accrued expense refers to costs incurred in a period that are both unpaid and unrecorded prior to adjusting entries. One example is salaries earned by employees but not yet paid at the end of a period.
12. The January 5 entry to settle the accrued salaries and pay for added salaries is:

| Jan. 5 | Salaries Payable. | 1,000 | 7,000 |
| :---: | :---: | :---: | :---: |
|  | Salaries Expense | 6,000 |  |
|  | Cash. |  |  |
|  | Paid salary inclua from December |  |  |

13. The omission of an adjusting entry to record $\$ 6,000$ of accrued interest would cause assets and equity to be each understated by $\$ 6,000$.
14. The various adjusting entries are linked to the accounting equation as follows: (a) adjustment of prepaids and the recording of amortization cause assets and equity to decrease; (b) adjustment of unearned amounts causes liabilities to decrease and equity to increase; (d) accrual of revenues causes assets and equity to increase; and (e) accrual of expenses causes liabilities to increase and equity to decrease.
15. The probable adjusting entries of Jordan Air are:
```
Insurance Expense300
```

Prepaid Insurance ..... 300

```To record insurance expired.Salaries Expense1,400
```

Salaries Payable ..... 1,400
To record accrued salaries.
16. Revenue accounts and expense accounts.
17. The income statement is usually prepared first, followed by the statement of owner's equity because net income (loss) from the income statement flows into the statement of owner's equity. The balance sheet is then prepared since the ending capital balance from the statement of owner's equity flows into the equity section of the balance sheet.

## Read <br> Apply Do <br> demonstration problem

Check
The following information continues with The Cutlery, featured in the Chapter 3 Demonstration Problem. After the first month of business, The Cutlery's August 31, 2011, unadjusted trial balance appeared as follows:

| THE CUTLERY <br> Trial Balance August 31, 2011 |  |  |
| :---: | :---: | :---: |
| Account | Debit | Credit |
| Cash | \$ 1,530 |  |
| Accounts receivable .................. | -0- |  |
| Prepaid insurance ..................... | 600 |  |
| Furniture..... | 600 |  |
| Store equipment......................... | 16,200 |  |
| Accounts payable......................... |  | \$ 875 |
| Unearned haircutting services revenue ... |  | 500 |
| Barbara Schmidt, capital ............... |  | 18,000 |
| Barbara Schmidt, withdrawals........ | 200 |  |
| Haircutting services revenue .......... |  | 855 |
| Wages expense.................... | 125 |  |
| Rent expense............................. | 900 |  |
| Hydro expense | 75 |  |
| Totals. | \$20,230 | \$20,230 |

The following additional information is available for the month just ended:
a. Amortization of $\$ 50$ per month will be taken on the furniture.
b. It is estimated that the store equipment will have no value at the end of its estimated five-year (or 60-month) useful life. Barbara Schmidt will record a full month of amortization for August.
c. It was determined that the balance in unearned revenue at August 31 should be $\$ 420$.
d. The prepaid insurance represents six months of insurance beginning August 1 .
e. Accrued revenues at August 31 totalled $\$ 65$.

## Required

1. Prepare the adjusting entries needed on August 31, 2011, to record the previously unrecorded items.
2. Prepare T-accounts for accounts affected by the adjusting entries. Post the adjusting entries to the T-accounts.
3. Prepare an adjusted trial balance.
4. Prepare an income statement, a statement of owner's equity, and a balance sheet.

## Analysis component:

Calculate the net effect of the adjusting entries on the balance sheet. Is net income positively or negatively affected by these adjusting entries overall? Could the opposite effect be achieved? If so, how?

## Planning the Solution

- Analyze the information for each situation to determine which accounts need to be updated with an adjustment.
- Calculate the size of each adjustment and prepare the necessary journal entries.
- Show the amount entered by each adjustment in the designated accounts and determine the adjusted balance.
- Determine each entry's effect on net income for the year and on total assets, total liabilities, and owner's equity at the end of the year.
- Using the adjusted balances, prepare an adjusted trial balance.
- Using the adjusted trial balance, prepare the income statement, statement of owner's equity, and balance sheet.
- Analyze the adjusting entries and calculate the effect on each component of the accounting equation.


## solution to Demonstration Problem

1. Adjusting journal entries.


| c. 31 | Unearned Haircutting Services Revenue.......... <br> Haircutting Services Revenue................. <br> To recognize haircutting services revenues <br> earned; $\$ 500-\$ 420=\$ 80$. | 80 |
| :---: | :---: | :---: | :---: | :---: |
| d. 31 | Insurance Expense...................................... <br> Prepaid Insurance................................. <br> To adjust for the expired portion of prepaid <br> insurance; $\$ 600 / 6$ months $=\$ 100 /$ month. | 100 |

2. 


3.

| THE CUTLERY <br> Adjusted Trial Balance <br> August 31, 2011 |  |  |
| :---: | :---: | :---: |
| Account | Debit | Credit |
| Cash | \$ 1,530 |  |
| Accounts receivable | 65 |  |
| Prepaid insurance....................................... | 500 |  |
| Furniture. | 600 |  |
| Accumulated amortization, furniture ............... |  | \$ 50 |
| Store equipment........................................ | 16,200 |  |
| Accumulated amortization, store equipment.... |  | 270 |
| Accounts payable........................................ |  | 875 |
| Unearned haircutting services revenue ............ |  | 420 |
| Barbara Schmidt, capital ............................... |  | 18,000 |
| Barbara Schmidt, withdrawals ....................... | 200 |  |
| Haircutting services revenue.......................... |  | 1,000 |
| Amortization expense, furniture ..................... | 50 |  |
| Amortization expense, store equipment.......... | 270 |  |
| Wages expense .. | 125 |  |
| Insurance expense...................................... | 100 |  |
| Rent expense ... | 900 |  |
| Hydro expense........................................... | 75 |  |
| Totals. | \$20,615 | \$20,615 |

4. 



## Analysis component:

The net effect of the adjustments on assets, liabilities, and equity is detailed below.

| Entry | a. | b. | c. | d. |  | e. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Net effect |  |  |  |  |  |  |
| Assets | $\$ 50 \downarrow$ | $\$ 270 \downarrow$ | No effect | $\$ 100 \downarrow$ | $\$ 65 \uparrow$ | $\$ 355 \downarrow$ |
| Liabilities | No effect | No effect | $\$ 80 \downarrow$ | No effect | No effect | $\$ 80 \downarrow$ |
| Equity | $\$ 50 \downarrow$ | $\$ 270 \downarrow$ | $\$ 80 \uparrow$ | $\$ 100 \downarrow$ | $\$ 65 \uparrow$ | $\$ 275 \downarrow$ |

Equity decreased by $\$ 275$ as a result of the adjusting entries. Each of the adjustments that affected equity were income statement items (revenues or expenses) therefore net income was negatively affected by the adjusting entries (a net decrease in income of \$275).

The opposite effect could have been achieved if accrued revenues (Dr Receivables and Cr Revenues) plus the adjustment of unearned amounts (Dr Unearned Revenues and Cr Revenues) were greater than the adjustment of prepaids (Dr Expense and Cr Prepaid) plus amortization (Dr Amortization Expense and Cr Accumulated Amortization) and accrued expenses (Dr Expense and Cr Payable).

## A PPENDIX 4 A

## Correcting Errors

L08 Explain and prepare correcting entries.

Correcting entries, as the term implies, account for the correction of errors, and are not to be confused with adjusting entries.

If an error in a journal entry is discovered before the error is posted, it can be corrected in a manual system by drawing a line through the incorrect information. The correct information is written above it to create a record of change for the auditor. Many computerized systems allow the operator to replace the incorrect information directly.

When an error in a journal entry is not discovered until after it is posted, the usual practice is to correct the error by creating another journal entry. ${ }^{7}$ This correcting entry removes the amount from the wrong account and records it to the correct account. For example, suppose we recorded a purchase of office supplies with an incorrect debit to Office Equipment as follows:

| Oct. 14 | Office Equipment ......................................... <br> Cash .............................................................. <br> To record the purchase of office supplies. | 1,600 | 1,600 |
| :---: | :---: | :---: | :---: | :---: |

Once posted, the Office Supplies account balance is understated by $\$ 1,600$ and the Office Equipment account balance is overstated by the same amount. When we discover the error three days later, a correcting entry is made using either one or two entries as shown below:


In the approach to the left, the credit removes the error and the debit correctly records supplies. Alternatively, the two entries on the right could be used: the first entry reverses the incorrect entry entirely, and the second entry records the transaction as it should have been. Both methods achieve the same final results.

Computerized systems often use similar correcting entries. The exact procedure depends on the system used and management policy. Yet nearly all systems include controls to show when and where a correction is made.

18. On March 14, Accounts Receivable was debited for $\$ 4,100$ and Service Revenue was credited for $\$ 4,100$. At the end of the month, it was discovered that the March 14 entry should have been credited to Rent Revenue. What correcting entry is required?
Do: *QS 4-12, *QS 4-13
${ }^{7}$ For tracking purposes, correcting entries must be referenced to the incorrect entry and any calculations are to be documented.

## A P P E N D IX 4 B

## Alternatives in Recording Prepaids and Unearned Revenues

This section explains two alternatives in recording prepaid expenses and unearned revenues. We show the sequence of journal entries for both alternatives.

## Recording Prepaid Expenses in Expense Accounts

We explained that prepaid expenses are assets when they are purchased and are recorded with debits to asset accounts. Adjusting entries transfer the used amounts to expense accounts at the end of an accounting period.

There is an acceptable alternative practice of recording all prepaid expenses with debits to expense accounts. If any prepaids remain unused at the end of an accounting period, then adjusting entries transfer the unused portions from expense accounts to asset accounts. The financial statements are identical under either procedure, but the adjusting entries are different.

To illustrate, let's look at Finlay Interiors' cash payment for 24 months of insurance coverage beginning on January 1. Finlay Interiors recorded that payment with a debit to an asset account, but it could have been recorded as a debit to an expense account. Exhibit 4B. 1 shows these alternatives:


On January 31, insurance protection for one month is used up. This means $\$ 100$ ( $\$ 2,400 / 24$ ) is the expense for January. Exhibit 4 B .2 shows that the adjusting entry depends on how the original payment is recorded:

|  |  | Payment Recorded as Asset | Payment Recorded as Expense |
| :---: | :---: | :---: | :---: |
| Jan. 31 | Insurance Expense ....................... | 100 |  |
|  | Prepaid Insurance .................... | 100 |  |
| 31 | Prepaid Insurance ............ |  | 2,300 |
|  | Insurance Expense ..................... |  | 2,300 |



Identify and explain two alternatives in recording prepaids and unearned revenues.

Exhibit 4B. 1
Initial Entry for Prepaid Expenses for Two Alternatives

Exhibit 4B. 2
Adjusting Entry for Prepaid Expenses for Two Alternatives

## Exhibit 4B. 3

Account Balances Under Two Alternatives for Recording Prepaid Expenses

After adjusting entries are posted, the two alternatives give identical adjusted account balances at January 31 as shown in Exhibit 4B.6.

| Receipt Recorded as Revenue |  |  |  |
| :---: | :---: | :---: | :---: |
| Unearned Consulting Revenue |  |  |  |
|  | 2,750 | Jan. 31 |  |
| Consulting Revenue |  |  |  |
| Jan. 31 | 2,750 | 3,000 |  |

19. Miller Company records cash receipts of unearned revenues and cash payments of prepaid expenses in balance sheet accounts. Bud Company records these items in income statement accounts. Explain any difference in the financial statements of these two companies from their alternative ways of recording prepaids.
Do: *QS 4-14

## Exhibit 4B. 6

Account Balances Under Two Alternatives for Recording Unearned Revenues


## Summary of Appendix 4A and Appendix 4B

108
Explain and prepare correcting entries. A correcting entry is required when an error in a journal entry is not discovered until after it has been posted. The correcting entry can be done in one of two ways: the incorrect portion of the entry can be corrected, or the entire incorrect entry can be reversed and the correct entry recorded; both methods accomplish the same result.

L09 Identify and explain two alternatives in recording prepaids and unearned revenues. It is acceptable to charge all prepaid expenses to expense accounts when they are purchased. When this is done, adjusting entries must transfer any unexpired amounts from expense accounts to asset accounts. It is also acceptable to credit all unearned revenues to revenue accounts when cash is received. In this case the adjusting entries must transfer any unearned amounts from revenue accounts to unearned revenue accounts.

18. The correcting entry can be done in one of two ways:

31 Service Revenue............................. 4,100
Rent Revenue ....................... 4,100 OR

31


## Glossary

Account form balance sheet A balance sheet that lists assets on the left and liabilities and owner's equity on the right side of the balance sheet. (p. 148)
Accounting period Time frame covered by financial statements and other reports; also called reporting periods. (p. 133)
Accrual basis accounting The approach to preparing financial statements that uses the adjusting process to recognize revenues when earned and expenses when incurred, not when cash is paid or received; the basis for generally accepted accounting principles. (p. 133)
Accrued expenses Costs incurred in a period that are both unpaid and unrecorded; adjusting entries for recording accrued expenses involve increasing (debiting) expenses and increasing (crediting) liabilities. (p. 140)
Accrued revenues Revenues earned in a period that are both unrecorded and not yet received in cash (or other assets); adjusting entries for recording accrued revenues involve increasing (debiting) assets and increasing (crediting) revenues. (p. 142)
Adjusted trial balance A listing of accounts and balances prepared after adjustments are recorded and posted to the ledger. (p. 147)
Adjusting entry A journal entry at the end of an accounting period to bring an asset or liability account balance to its proper amount while also updating the related expense or revenue account. (p. 134)
Amortization The expense created by allocating the cost of plant and equipment to the periods in which they are used; represents the expense of using the assets. (p. 136)
Book value of an asset The cost of the asset less its accumulated amortization. (p. 137)
Capital assets Include long-term tangible assets and intangible assets (except goodwill) that are expected to provide benefits for more than one period. (p. 136)
Cash basis accounting Revenues are recognized when cash is received, and expenses are recorded when cash is paid. (p. 133) Contra account An account linked with another account and having an opposite normal balance; reported as a subtraction from the other account's balance so that more complete information than simply the net amount is provided. (p. 137)

Correcting entries Accounting entries made in order to correct errors. (p. 156)
Depreciation See amortization. (p. 136)
External transactions Exchanges between the entity and some other person or organization. (p. 131)
Intangible assets Long-lived assets that have no physical substance but convey a right to use a product or process. (p. 136)

Interim financial reports Financial reports covering less than one year; usually based on one-, three- or six-month periods. (p. 133)
Internal transactions Exchanges within an organization that can also affect the accounting equation. (p. 131)
Market value of an asset Amount an asset can be sold for. Market value is not tied to the book value of an asset. (p. 137)
Matching principle The broad principle that requires expenses to be reported in the same period as the revenues that were earned as a result of the expenses. (p. 133)
Prepaid expenses Items that are paid for in advance of receiving their benefits. These are assets. (p. 134)
Property, plant and equipment Tangible long-lived assets used to produce goods or services. See capital assets. (p. 136)
Report form balance sheet A balance sheet that lists items vertically with assets above the liabilities and owner's equity. (p. 148)
Reporting period See accounting period. (p. 133)
Straight-line amortization method Allocates equal amounts of an asset's cost to amortization expense during its useful life. (p. 137)
Time period principle A broad principle that assumes that an organization's activities can be divided into specific time periods such as months, quarters, or years. (p. 132)
Unadjusted trial balance A listing of accounts and balances prepared before adjustments are recorded and posted to the ledger. (p. 147)
Unearned revenues Liabilities created when customers pay in advance for products or services; created when cash is received before revenues are earned; satisfied by delivering the products or services in the future. (p. 138)

For more study tools, quizzes, and problem material, visit the Student Success Centre at www.mcgrawhill.ca/studentsuccess/FAP

## Questions

1. What type of business is most likely to select a fiscal year that corresponds to the natural business year instead of the calendar year?
2. What is the difference between the cash basis and accrual basis of accounting?
3. Why is the accrual basis of accounting preferred over the cash basis?
4. Where is a prepaid expense reported in the financial statements?
5. What kinds of assets require adjusting entries to record amortization?
6. What contra account is used when recording and reporting the effects of amortization? Why is it used?
7. Where is an unearned revenue reported in the financial statements?
8. What is an accrued revenue? Give an example.
9. Review the consolidated balance DANIER sheet of Danier Leather in Appendix I. Identify an asset account that requires adjustment before annual financial statements can be prepared. What would be the effect on the income statement if this asset account were not adjusted?
10. Review the income statement of WestJet in Appendix I. How
 much amortization was recorded in the adjusting entry for amortization at the end of 2005?
*11. If a company initially records prepaid expenses with debits to expense accounts, what type of account is debited in the adjusting entries for prepaid expenses?

## Quick Study

For each of the following, identify the primary GAAP that has been violated and explain why.

1. Delta Company prepared its first set of financial statements for the three years ended July 31, 2011.
2. Warren Consulting purchased $\$ 9,800$ of supplies on September 30,2011 , and debited Office Supplies Expense. Warren's year-end is September 30.
3. On May 3, 2011, Mindy Car Wash collected $\$ 3,000$ in advance from a new limousine company to begin operating June 1, 2011. Mindy credited a revenue account for the $\$ 3,000$.
4. On November 15, 2011, TelsCo rented equipment for $\$ 1,500$. TelsCo is not recording the transaction until it pays (payment is required 15 days from the rental date).

In its first year of operations, Harris Co. earned \$39,000 in revenues and received \$33,000 cash from customers. The company incurred expenses of $\$ 22,500$, but had not paid for $\$ 2,250$ of them at year-end. In addition, Harris prepaid $\$ 3,750$ for expenses that would be incurred the next year. Calculate the first year's net income under the cash basis and calculate the first year's net income under the accrual basis.

Fargo's Detective Agency purchased a two-year insurance policy on April 1, 2011, paying cash of $\$ 7,680$. Its year-end is December 31. Record the following:
a. Journal entry on April 1, 2011.
b. Adjusting entry on December 31, 2011.
c. Adjusting entry on December 31, 2012.
d. How much of the insurance policy purchased on April 1, 2011, was actually used during the year 2013?

Softrock Minerals purchased a vehicle on March 1,2011 , for cash of $\$ 32,000$. It will be used by the president for business purposes for four years and then sold for about $\$ 8,000$. Softrock's yearend is December 31. Record the entry on March 1, 2011, and the adjusting entry required at the year-ends of 2011 and 2012.

On November 1, 2011, Fastfoot Industries collected $\$ 12,000$ from a customer for services to be provided in the future. On December 31, 2011, Fastfoot's year-end, it was determined that $\$ 3,000$ of this amount remained unearned. Prepare the entries for November 1 and December 31.

On December 31, 2011, Allied Consulting received the telephone bill for December usage of $\$ 1,840$. It must be paid by January 14, 2012. Record the adjusting entry on December 31, 2011, and the entry to record the payment on January 14, 2012.

## QS 4-1

GAAP and adjusting entries LO2

## QS 4-2

Accrual and cash accounting LO3

## QS 4-3

Preparing adjusting entriesprepaid expense
LO4

## QS 4-4

Preparing adjusting entriesamortization expenses LO4

## QS 4-5

Preparing adjusting entriesunearned revenue LO4

## QS 4-6

Preparing adjusting entriesaccrued expenses
LO4

## QS 4-7

Preparing adjusting entriesaccrued revenues

## QS 4-8

Preparing adjusting entries LO4

Stark Company records prepayments of expenses in asset accounts and receipts of unearned revenues in liability accounts. Using the list of accounts provided, identify the debit and credit entry required for each of the annual adjustments described in (a) through (e).

1. Cash
2. Amortization Expense
3. Prepaid Advertising
4. Accumulated Amortization-Equipment
5. Equipment
6. Services Revenue Earned
7. Advertising Expense
8. Unearned Services Revenue
9. Accounts Receivable
10. Equipment Expense

## Credits

a. Accrual of unpaid and unrecorded advertising that was used by Stark Company.
b. Adjustment of Unearned Services Revenue to recognize earned revenue.
c. Recorded revenue for work completed this accounting period; the cash will be received in the next period.
d. The cost of Equipment was matched to the time periods benefited.
e. Adjustment of Prepaid Advertising to recognize the portion used.

## QS 4-9

Recording and analyzing adjusting entries
LO4, 5
Adjusting entries affect one balance sheet account and one income statement account. For the entries listed below, identify the account to be debited and the account to be credited. Indicate which of the two accounts is the income statement account and which is the balance sheet account.
a. Entry to record annual amortization expense.
b. Entry to show wages earned by employees but not yet paid.
c. Entry to show revenue earned that was previously received as cash in advance.
d. Entry to show expiration of prepaid insurance.
e. Entry to show revenue earned but not yet billed.

QS 4-10
Linking adjustments to financial statements
LO5
For each type of adjustment in (a) through (e), indicate the effect on net income (overstated or understated) if the adjustment is not recorded.

|  | If adjustment is not recorded: |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Type of Adjustment | Net income will be overstated, understated, or no effect | Assets will be overstated, understated, or no effect | Liabilities will be overstated, understated, or no effect | Owner's Equity will be overstated, understated, or no effect |
| a. Prepaid Expenses |  |  |  |  |
| b. Amortization |  |  |  |  |
| c. Unearned Revenues |  |  |  |  |
| d. Accrued Expenses |  |  |  |  |
| e. Accrued Revenues |  |  |  |  |

QS 4-11
Interpreting adjusting entries L04, 6

The following information has been taken from Shank Company's unadjusted and adjusted trial balances at October 31, 2011.

|  | Unadjusted |  | Adjusted |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Debit | Credit | Debit | Credit |
| Prepaid insurance................................... | \$3,100 |  | \$2,350 |  |
| Interest payable..................................... |  | \$ -0- |  | \$ 750 |
| Insurance expense................................. | -0- |  | 750 |  |
| Interest expense .................................... | -0- |  | 750 |  |

Given this trial balance information, prepare the adjusting journal entries.

The following entry was recorded on November 14.

| Nov. 14 | Salaries Expense ........................................... <br> Cash ............................................................. <br> To record supplies expense. | 14,800 | 14,800 |
| :---: | :---: | :---: | :---: | :---: |

At month-end, it was discovered that Supplies Expense should have been debited on November 14 instead of Salaries Expense. Prepare the correcting entry required on November 30.

The following entry was recorded on January 10.

| Jan. 10 | Office Furniture ........................................... <br> Accounts Payable ........................................ <br> To record purchase of computer equipment <br> by borrowing from the bank. | 25,000 | 25,000 |
| :--- | :--- | :--- | :--- | :--- |

*QS 4-13
Correcting entries
LO8
*QS 4-14
Recording prepaids and unearned amounts as expenses and revenues LO9
At month-end, it was discovered that on January 10, computer equipment was purchased for $\$ 25,000$ by borrowing from the bank. Prepare the correcting entry required on January 31.

Foster Company initially records prepaid and unearned items in income statement accounts. Given Foster Company's practices, what is the appropriate adjusting entry for each of the following at November 30, 2011, the end of the company's first accounting period?
a. There are unpaid salaries of $\$ 3,000$.
b. Unused office supplies of $\$ 800$ were counted at year-end. There was no beginning balance in office supplies.
c. Earned but unbilled consulting fees of $\$ 2,300$ were discovered.
d. It was determined that there were unearned fees of $\$ 4,200$.

## Exercises

For each entry (1) to (12) below, enter the letter of the explanation that describes it in the blank space to the left. You can use some letters more than once.
a. To record amortization expense.
e. To record the earning of previously unearned
b. To record an accrued expense.
c. To record the use of a prepaid expense. revenue.
d. To record accrued revenue.

| 1. | Amortization Expense ................. | 3,000 |  | 7. | Insurance Expense ....... | 6,000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Accumulated Amortization... |  | 3,000 |  | Prepaid Insurance............... |  | 6,000 |
| 2. | Unearned Professional Fees .......... | 2,000 |  | 8. | Salaries Payable......................... | 1,500 |  |
|  | Professional Fees Earned.... |  | 2,000 |  | Cash |  | 1,500 |
| 3. | Rent Expense .. | 1,000 |  | 9. | Cash . | 6,500 |  |
|  | Prepaid Rent ...................... |  | 1,000 |  | Unearned Professional Fees... |  | 6,500 |
| 4. | Interest Expense.... | 4,000 |  | - 10. | Cash .. | 9,000 |  |
|  | Interest Payable.................. |  | 4,000 |  | Interest Receivable ..... |  | 9,000 |
| 5. | Prepaid Rent ............................. | 3,500 |  | - 11. | Interest Receivable ..................... | 7,000 |  |
|  | Cash .............................. |  | 3,500 |  | Interest Earned ................... |  | 7,000 |
| 6. | Salaries Expense....... | 5,000 |  | - 12. | Cash .. | 8,000 |  |
|  | Salaries Payable .................. |  | 5,000 |  | Accounts Receivable............ |  | 8,000 |

## Exercise 4-2

Adjusting entries
LO4

Prepare adjusting journal entries for the year ended December 31, 2011, for each of the independent situations in (a) to (f). Assume that prepaid expenses are initially recorded in asset accounts. Assume that fees collected in advance of work are initially recorded as liabilities.
a. Amortization on the company's equipment for 2011 was estimated to be $\$ 32,000$.
b. The Prepaid Insurance account had a $\$ 14,000$ debit balance at December 31, 2011, before adjusting for the costs of any expired coverage. An analysis of the company's insurance policies showed $\$ 2,080$ of unexpired insurance remaining.
c. The Office Supplies account had a $\$ 600$ debit balance on January 1, 2011; $\$ 5,360$ of office supplies were purchased during the year; and the December 31, 2011, count showed that $\$ 708$ of supplies are on hand.
d. Two-thirds of the work for a $\$ 30,000$ fee received in advance has now been performed.
e. The Prepaid Insurance account had an $\$ 11,200$ debit balance at December 31, 2011, before adjusting for the costs of any expired coverage. An analysis of the company's insurance policies showed that $\$ 9,200$ of coverage had expired.
f. Wages of $\$ 8,000$ have been earned by workers but not paid as of December 31, 2011.
g. Record the January 6, 2012 payment of $\$ 20,000$ in wages, inclusive of the $\$ 8,000$ December 31, 2011, accrual in (f) above.

## Exercise 4-3

Adjusting entries
LO4
Enviro Waste's year-end is December 31. The information in (a) to (e) is available at year-end for the preparation of adjusting entries:
a. Of the $\$ 18,500$ balance in Unearned Revenue, $\$ 2,500$ remains unearned.
b. The annual building amortization is $\$ 10,500$.
c. The Spare Parts Inventory account shows an unadjusted balance of $\$ 450$. A physical count reveals a balance on hand of $\$ 100$.
d. Unbilled and uncollected services provided to customers totalled $\$ 3,550$.
e. The utility bill for the month of December was received but is unpaid; $\$ 1,300$.

## Required

Prepare the required adjusting entries at December 31, 2011, for (a) to (e) and the subsequent cash entries required for ( f ) and ( g ).
f. The accrued revenues of $\$ 3,550$ recorded in (d) were collected on January 4, 2012.
g. The $\$ 1,300$ utility bill accrued in (e) was paid on January 14, 2012.

## Exercise 4-4

Adjusting entries
LO4
LesCo's year-end is September 30. The information in (a) to (e) is available at year-end for the preparation of adjusting entries:
a. Of the $\$ 18,000$ balance in Unearned Revenue, $\$ 12,000$ has been earned.
b. Furniture costing $\$ 7,200$ was purchased on September 1 of this accounting period. It will be used for four years and donated to charity after that time.
c. The Office Supplies account shows an unadjusted balance of $\$ 6,000$. A physical count reveals that $\$ 5,000$ has been used.
d. Services provided to customers today (year-end) but unbilled total $\$ 28,000$.
e. Rent of $\$ 7,000$ for the month of September is unpaid and unrecorded.

## Required

Prepare the required adjusting entries at September 30, 2011, for (a) to (e) and the subsequent entries required for ( f ) and ( g ).
f. The $\$ 28,000$ of service revenue accrued in (d) was collected on October 3, 2011.
g. The $\$ 7,000$ of rent accrued in (e) was paid on October 4, 2011.

Landmark Properties owns and operates an apartment building and prepares annual financial statements based on a March 31 fiscal year.
a. The tenants of one of the apartments paid five months' rent in advance on November 1, 2010. The monthly rental is $\$ 1,500$ per month. The journal entry credited the Unearned Rent account when the payment was received. No other entry had been recorded prior to March 31, 2011. Give the adjusting journal entry that should be recorded on March 31, 2011.
b. On January 1, 2011, the tenants of another apartment moved in and paid the first month's rent. The $\$ 1,350$ payment was recorded with a credit to the Rent Earned account. However, the tenants have not paid the rent for February or March. They have agreed to pay it as soon as possible. Give the adjusting journal entry that should be recorded on March 31, 2011.
c. On April 22, 2011, the tenants described in (b) paid $\$ 4,050$ rent for February, March, and April. Give the journal entry to record the cash collection.

## Exercise 4-5

Unearned and accrued revenues LO4

Selected information in T-account format is presented below. Journalize the most likely adjustments that caused the balances to change.

| a. Accounts Receivable |  |  |
| :--- | :--- | :--- |
| Unadjusted Bal. 12,000 |  |  |
| Dec. 31/11 |  |  |
| Adjusted Bal. 14,000 |  |  |
| Dec. 31/11 |  |  |

## c. Accumulated Amortization,

 Machinery| Machinery |  |  |
| :--- | ---: | ---: |
|  | 4,800 | Unadjusted Bal. <br> Dec. 31/11 |
|  | 5,200 | Adjusted Bal. <br> Dec. 31/11 |


| b. Prepaid Rent |  |
| :--- | :--- | :--- |
| Unadjusted Bal. 28,000  <br> Dec. 31/11  |  |
| Adjusted Bal. 20,000  <br> Dec. 31/11  |  |


| d. Unearned Fees |  |  |
| :--- | ---: | ---: |
|  | 3,400 | Unadjusted Bal. <br> Dec. 31/11 |
|  | 600 | Adjusted Bal. <br> Dec. 31/11 |

## Exercise 4-6

Identifying adjusting entries LO4

## e. Salaries Expense

| Unadjusted Bal. | 70,000 |
| :--- | ---: |
| Dec. 31/11 |  |
| Adjusted Bal. |  |
| Dec. 31/11 |  |

Determine the missing amounts in each of these four independent situations:

|  | a | b | c | d |
| :---: | :---: | :---: | :---: | :---: |
| Supplies on hand, January 1 ...................... | \$ 300 | \$1,600 | \$1,360 | $?$ |
| Supplies purchased during the year ............ | 2,100 | 5,400 | ? | \$6,000 |
| Supplies on hand, December 31 ................ | 750 | ? | 1,840 | 800 |
| Supplies expense for the year .................... | ? | 1,300 | 9,600 | 6,575 |

Delcor Management has five part-time employees, each of whom earns $\$ 200$ per day. They are normally paid on Fridays for work completed on Monday through Friday of the same week. They were all paid in full on Friday, December 28, 2012. The next week, all five of the employees worked only four days because New Year's Day was an unpaid holiday. Show the adjusting entry that would be recorded on Monday, December 31, 2012, Delcor's year-end, and the journal entry that would be made to record paying the employees' wages on Friday, January 4, 2013.

The following three situations require adjusting journal entries to prepare financial statements as of April 30, 2011. For each situation, present the adjusting entry and the entry that would be made to record the payment of the accrued liability during May 2011.
a. The company has a $\$ 780,000$ note payable that requires $0.8 \%$ interest to be paid each month on the 20th of the month. The interest was last paid on April 20 and the next payment is due on May 20.
b. The total weekly salaries expense for all employees is $\$ 9,000$. This amount is paid at the end of the day on Friday of each week with five working days. April 30 falls on Tuesday of this year, which means that the employees had worked two days since the last payday. The next payday is May 3.
c. On April 1, the company retained a lawyer at a flat monthly fee of $\$ 2,500$. This amount is payable on the 12th of the following month.

## Exercise 4-7

Missing data in supplies expense calculations
LO4, 5

## Exercise 4-8

Adjusting and subsequent cash entries for accrued expenses LO4

## Exercise 4-9

Adjustments and subsequent cash entries for accrued expenses LO4

## Exercise 4-10

Identifying the effects of adjusting entries
LO4, 5


## Exercise 4-11

Adjusting entries
LO4, 6

## Check figure:

Adjusted trial balance, debits $=\$ 65,000$

Following are two income statements for Javelin Company for the year ended December 31, 2011. The left column was prepared before any adjusting entries were recorded and the right column includes the effects of adjusting entries. The company records cash receipts and disbursements related to unearned and prepaid items in balance sheet accounts. Analyze the statements and prepare the adjusting entries that must have been recorded. (Note: Of the $\$ 12,000$ increase in Fees earned, $30 \%$ represents additional fees earned but not billed. The other $70 \%$ was earned by performing services that the customers had paid for in advance.)

| JAVELIN COMPANY Income Statements For Year Ended December 31, 2011 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Before Adjustments | Adjustments | After Adjustments |
| Revenues: |  |  |  |
| Fees earned......................................... | \$ 48,000 |  | \$ 60,000 |
| Commissions earned ................................. | 85,000 |  | 85,000 |
| Total revenues...................................... | \$133,000 |  | \$145,000 |
| Operating expenses: |  |  |  |
| Amortization expense, computers ................ | \$ -0- |  | \$ 3,000 |
| Amortization expense, office furniture .......... | -0- |  | 3,500 |
| Salaries expense ...................................... | 25,000 |  | 29,900 |
| Insurance expense.................................... | -0- |  | 2,600 |
| Rent expense........................................... | 9,000 |  | 9,000 |
| Office supplies expense .............................. | -0- |  | 960 |
| Advertising expense .................................. | 6,000 |  | 6,000 |
| Utilities expense ...................................... | 2,500 |  | 2,640 |
| Total operating expenses ........................ | \$ 42,500 |  | \$ 57,600 |
| Net income................................................ | \$ 90,500 |  | \$ 87,400 |

## Analysis component:

Identify and explain which GAAP requires that adjusting entries be recorded. By how much would revenues, expenses, and net income be overstated/understated if adjustments were not recorded at December 31, 2011, for Javelin Company?

| Ayotte Music <br> Trial Balances February 28, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
|  | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |
| Cash $\qquad$ <br> Accounts receivable $\qquad$ <br> Prepaid insurance. $\qquad$ <br> Equipment $\qquad$ <br> Accumulated amortization, equipment. $\qquad$ <br> Accounts payable. $\qquad$ <br> Jane Adams, capital $\qquad$ <br> Jane Adams, withdrawals $\qquad$ <br> Revenues $\qquad$ <br> Amortization expense, equipment <br> Salaries expense $\qquad$ <br> Insurance expense $\qquad$ <br> Totals. $\qquad$ |  | \$ 6,000 <br> 1,200 <br> 9,000 <br> 45,000 <br> \$61,200 |  |  |  |  |

## Additional information:

a. Annual amortization of the equipment; $\$ 2,400$.
b. $\$ 250$ of the Prepaid Insurance balance has expired.
c. Unbilled and unrecorded revenues at year-end totalled $\$ 1,400$.

## Required

Referring to Exhibit 4.22, use the information provided to complete the columns.

Using the completed adjusted trial balance columns from Exercise 4-11, prepare an income statement, a statement of owner's equity, and a balance sheet. Assume that the owner made no investments during the year.

## Analysis component:

Which GAAP requires the preparation of financial statements?

For each of the following incorrect entries, journalize the appropriate correcting entry(ies).
a. The purchase of office supplies on credit for $\$ 1,800$ was recorded as:

b. A credit customer paid her account in full: $\$ 4,500$. This was recorded as:

| Cash....................................................... | 4,500 |  |
| :---: | :---: | :---: |
| Revenue ........................................ |  | 4,500 |

c. The owner withdrew cash of $\$ 1,500$. This was recorded as:

| Salaries Expense . | 1,500 | 1,500 |
| :---: | :---: | :---: |
| Cash |  |  |

d. Work was performed for a customer today and cash of $\$ 750$ was received. This was recorded as:


## Analysis component:

If the error in (b) is not corrected, what is the effect on the income statement and balance sheet?

Classic Customs began operations on December 1, 2011. In setting up the bookkeeping procedures, the company decided to debit expense accounts when the company prepays its expenses and to credit revenue accounts when customers pay for services in advance. Prepare journal entries for items (a) through (c) and adjusting entries as of December 31, 2011, for items (d) through (f):

## *Exercise 4-14

Adjustments for prepaid items recorded in expense and revenue accounts LO9

## Exercise 4-12 <br> Preparing financial statements LO7

Check figure:
Total assets $=\$ 14,950$

## *Exercise 4-13 Journalizing correcting entries L08

a. Supplies were purchased on December 1 for $\$ 6,000$.
b. The company prepaid insurance premiums of $\$ 2,880$ on December 2 .
c. On December 15, the company received an advance payment of $\$ 24,000$ from one customer for remodelling work.
d. By counting the supplies on December 31, Classic Customs determined that $\$ 3,840$ were on hand.
e. An analysis of the insurance policies in effect on December 31 showed that $\$ 480$ of insurance coverage had expired.
f. As of December 31, it was determined that $\$ 7,200$ of the amount received in advance on December 15 had been earned.

## * Exercise 4-15

Alternative procedures for revenues received in advance LO9

Pavillion Company experienced the following events and transactions during July:

July 1 Received \$2,000 in advance of performing work for Andrew Renking. Received $\$ 8,400$ in advance of performing work for Matt Swarbuck. Completed the job for Andrew Renking.
Received $\$ 7,500$ in advance of performing work for Drew Sayer.
Completed the job for Matt Swarbuck.
The job for Drew Sayer has not been started.
a. Give journal entries (including any adjusting entry as of the end of the month) to record these items using the procedure of initially crediting the Unearned Fees account when a payment is received from a customer in advance of performing services.
b. Give journal entries (including any adjusting entry as of the end of the month) to record these items using the procedure of initially crediting the Fees Earned account when a payment is received from a customer in advance of performing services.
c. Under each method, determine the amount of earned fees that should be reported on the income statement for July and the amount of unearned fees that should appear on the balance sheet as of July 31 .

## Problems

## Problem 4-1A

Preparing adjusting entriesprepaid expenses
LO4

Impala Window Washing Services shows the following selected accounts on its December 31, 2011, unadjusted trial balance:

| Account | Debit | Credit |
| :--- | ---: | ---: |
| Prepaid insurance ........................... | $\$ 12,000$ |  |
| Prepaid office rent .................... | 72,000 |  |
| Prepaid subscriptions ....................... | 900 |  |
| Prepaid equipment rental ............ | 36,000 |  |

## Required

Prepare the required annual adjusting entries at December 31, 2011, based on the following additional information:
a. The balance in Prepaid Insurance was for a six-month insurance policy purchased and in effect on September 1, 2011.
b. $\$ 6,000$ of the balance in Prepaid Office Rent had not been used as at December 31, 2011.
c. $\$ 240$ of the balance in Prepaid Subscriptions had been used as at December 31, 2011.
d. The company paid $\$ 36,000$ to rent equipment for a three-year period beginning April 1, 2011.

## Analysis component:

If the above adjustments were not recorded, identify the types of accounts that would be affected and if they would be over- or understated.

Details regarding Leroux Steel's purchases of plant and equipment items during 2011 follow:

| Date of Purchase | Plant and Equipment Item | Cost | Estimated <br> Useful Life | Estimated Sales Value at End of Estimated Useful Life |
| :---: | :---: | :---: | :---: | :---: |
| a. Jan. 1 | Machine A | \$28,000 | 5 years | \$ -0- |
| b. Apr. 1 | Machine B | 56,000 | 4 years | 8,000 |
| c. Nov. 1 | Machine C | 8,400 | 2 years | 1,200 |

## Required

Prepare the adjusting entry at December 31, 2011, Leroux's year-end, for each plant and equipment item.

## Analysis component:

What is the purpose of recording amortization? If amortization is not recorded, how would the income statement be affected?

Outdoor's Best pre-sells yard maintenance packages for the gardening season. During October, the company collects cash from clients for Christmas trees to be delivered in December. Snow removal services are also provided. The following selected accounts appear on the November 30, 2011, year-end unadjusted trial balance:

| Account | Debit | Credit |
| :---: | ---: | ---: |
| Unearned lawn services .................. | $\$ 112,500$ |  |
| Unearned garden services............ | 20,500 |  |
| Unearned snow removal services .... | 9,000 |  |
| Unearned Christmas tree sales ....... | 43,500 |  |

## Required

Prepare adjusting journal entries at November 30, 2011, using the following additional information.
a. $\$ 66,000$ of the Unearned Lawn Services account represents payments received from customers for the 2012 season. The remainder represents services actually performed during the 2011 season.
b. $\$ 19,500$ of the Unearned Garden Services account had been earned by November 30, 2011.
c. $\$ 8,750$ of the Unearned Snow Removal Services account remained unearned at November 30, 2011.
d. Outdoor's arranges with its customers to deliver trees from December 5 to December 20. As a result, the Unearned Christmas Tree Sales account will be earned in total by December 20.

## Analysis component:

If the Unearned Lawn Services of $\$ 112,500$ had been recorded as a revenue when received instead of as a liability, what would the effect have been on the financial statements assuming no year-end adjustments?

In reviewing the accounts on March 31 for the month just ended, Mannix Resources discovered the following:
a. Interest of $\$ 2,250$ had accrued on the note payable as at March 31 . It is to be paid on April 2.
b. Unpaid and unrecorded salaries at March 31 totalled $\$ 19,600$. The $\$ 19,600$ plus salaries of $\$ 29,400$ for the first three days of April were paid on April 3.
c. The March telephone bill for $\$ 960$ is unpaid and unrecorded at March 31 . It is to be paid on April 15.
d. Mannix normally pays rent in three-month installments. At March 31, rent of $\$ 5,000$ per month had not been paid for February, March, or April. The balance owing plus rent for May, June, and July was paid on April 26.
e. Mannix pays commissions to the technicians at the rate of $4 \%$ of services performed. During March, total services performed were $\$ 960,000$. Commissions are unrecorded and unpaid at March 31. Commissions are paid on the 15th of the following month.

## Required

Using the information provided above, prepare adjusting journal entries at March 31 along with the appropriate subsequent cash entries.

In reviewing the accounts on March 31 for the month just ended, DigiTech discovered the following:
a. DigiTech owns the building that it occupies. Part of the building is rented to E-Quip Company for $\$ 3,200$ per month. E-Quip had not paid the March rent as at March 31. On April 3, DigiTech collected the rent accrued on March 31.
b. Services performed but unrecorded at March 31 totalled $\$ 10,800$. This amount was collected on April 7.
c. Interest for the month of March had accrued on a note receivable in the amount of $\$ 700$. The interest accrued on March 31 was collected on April 1.
d. On February 1, DigiTech signed a $\$ 24,000$ six-month contract to perform services for a client. DigiTech has been providing the services but as of March 31 no cash had been received. On April 2, DigiTech collected the revenue accrued on March 31.

## Required

Using the information provided above, prepare adjusting journal entries at March 31 along with the appropriate subsequent cash entries.

## Problem 4-3A

Preparing adjusting entriesunearned revenues LO4

## Problem 4-4A

Preparing adjusting and subsequent cash entriesaccrued expenses

## LO4

## Problem 4-5A

Preparing adjusting and subsequent cash entriesaccrued revenues
LO4

## Problem 4-6A

Adjusting entries; adjusted trial balance
LO4, 6


PacRim Careers provides training to individuals who pay tuition directly to the business. The business also offers extension training to groups in off-site locations. PacRim Careers follows the practice of initially recording prepaid expenses and unearned revenues in balance sheet accounts. Facts that require eight adjusting entries on December 31, 2011, the business's year-end, are presented below:
a. An analysis of the company's policies shows that $\$ 6,000$ of insurance coverage has expired.
b. An inventory shows that teaching supplies costing $\$ 5,200$ are on hand at the end of the year.
c. The estimated annual amortization on the equipment is $\$ 24,000$.
d. The estimated annual amortization on the professional library is $\$ 12,000$.
e. The school offers off-campus services for specific employers. On November 1, the company agreed to do a special six-month course for a client. The contract calls for a monthly fee of $\$ 4,400$, and the client paid the first five months' fees in advance. When the cash was received, the Unearned Extension Fees account was credited.
f. On October 15, the school agreed to teach a four-month class for an individual for $\$ 6,000$ tuition per month payable at the end of the class. The services to date have been provided as agreed, but no payment has been received.
g. The school's two employees are paid weekly. As of the end of the year, two days' wages have accrued at the rate of $\$ 200$ per day for each employee.
h. The balance in the Prepaid Rent account represents the rent for December.

| PACRIM CAREERS <br> Trial Balances December 31, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash $\qquad$ <br> Accounts receivable. <br> Teaching supplies $\qquad$ <br> Prepaid insurance $\qquad$ <br> Prepaid rent $\qquad$ <br> Professional library $\qquad$ <br> Accumulated amortization, professional library. $\qquad$ <br> Equipment $\qquad$ <br> Accumulated amortization, equipment. $\qquad$ <br> Accounts payable $\qquad$ <br> Salaries payable. $\qquad$ <br> Unearned extension fees $\qquad$ <br> Sheila Carr, capital $\qquad$ <br> Sheila Carr, withdrawals $\qquad$ <br> Tuition fees earned $\qquad$ <br> Extension fees earned. $\qquad$ <br> Amortization expense, equipment. <br> Amortization expense, <br> professional library. $\qquad$ <br> Salaries expense $\qquad$ <br> Insurance expense. $\qquad$ <br> Rent expense $\qquad$ <br> Teaching supplies expense $\qquad$ <br> Advertising expense $\qquad$ <br> Utilities expense $\qquad$ <br> Totals $\qquad$ | $\begin{array}{r} \$ 52,000 \\ -0- \\ 20,000 \\ 30,000 \\ 4,000 \\ 60,000 \\ \\ 140,000 \\ \\ \\ \\ \\ \\ \\ 80,000 \\ \\ -0-1 \end{array}$ | $\begin{array}{r} \$ 18,000 \\ 32,000 \\ 72,000 \\ -0- \\ 22,000 \\ 127,200 \\ \\ 204,000 \\ 76,000 \\ \\ \\ \\ \\ \hline 551,200 \\ \hline \end{array}$ |  |  |  |  |

## Required

1. Prepare the eight necessary adjusting journal entries.

## Analysis component:

2. Refer to the format presented in Exhibit 4.22 and complete the adjusted trial balance using the information in (a) through (h) above.
3. If the adjustments were not recorded, calculate the over- or understatement of income.
4. Is it ethical to ignore adjusting entries?

Wedona Energy's year-end is January 31. Based on an analysis of the unadjusted trial balance at January 31, 2011, the following information was available for the preparation of adjusting entries:
a. Equipment purchased on November 1 of this accounting period for $\$ 36,000$ is estimated to have a useful life of three years. After three years of use, it is expected that the equipment will be scrapped due to technological obsolescence.
b. Of the $\$ 9,000$ balance in Unearned Consulting Fees, $\$ 3,000$ had been earned.
c. The Prepaid Rent account showed a balance of $\$ 22,500$. This was paid on October 1 of this accounting period and represents six months of rent commencing on the same date.
d. Accrued wages at January 31 totalled $\$ 9,000$.
e. Three months of interest had accrued at the rate of $7 \%$ per year on a $\$ 42,000$ note payable.
f. Unrecorded and uncollected consulting fees at year-end were $\$ 4,750$.
g. A $\$ 1,350$ insurance policy was purchased on April 1 of the current accounting period and debited to the Prepaid Insurance account. Coverage began April 1 for 18 months.
h. The annual amortization on the office furniture was $\$ 450$.
i. Repair revenues accrued at year-end totalled $\$ 2,050$.
j. The Store Supplies account had a balance of $\$ 800$ at the beginning of the accounting period. During the year, $\$ 1,500$ of supplies were purchased and debited to the Store Supplies account. At year-end, a count of the supplies revealed a balance of $\$ 150$.

## Required

Prepare adjusting journal entries on January 31, 2011, based on the above.

RaiLink records prepaid expenses and unearned revenues in balance sheet accounts. The following information concerns the adjusting entries to be recorded on December 31, 2010, for the year just ended.
a. The Office Supplies account started the year with a $\$ 6,000$ balance. During 2010, the company purchased supplies at a cost of $\$ 24,800$, which was added to the Office Supplies account. The inventory of supplies on hand at December 31 had a cost of $\$ 5,280$.
b. An analysis of the company's insurance policies provided these facts:

| Policy | Date of Purchase | Years of Coverage | Total Cost |
| :---: | :--- | :---: | ---: |
| 1 | April 1, 2009 | 2 | $\$ 31,680$ |
| 2 | April 1, 2010 | 3 | 26,136 |
| 3 | August 1,2010 | 1 | 5,400 |

The total premium for each policy was paid in full at the purchase date, and the Prepaid Insurance account was debited for the full cost. Appropriate adjusting entries have been made to December 31, 2009.
c. The company has 15 employees who earn a total of $\$ 4,200$ in salaries for every working day. They are paid each Monday for their work in the five-day workweek ending on the preceding Friday. December 31, 2010, falls on Monday, and all 15 employees worked the first day of the week. They will be paid salaries for five full days on Monday, January 7, 2011.
d. The company purchased a building on August 1, 2010. The building cost $\$ 1,710,000$ and is expected to have a $\$ 90,000$ residual value at the end of its predicted 30 -year life.
e. Because the company is not large enough to occupy the entire building, it arranged to rent some space to a tenant at $\$ 4,800$ per month, starting on November 1, 2010. The rent was paid on time on November 1, and the amount received was credited to the Rent Earned account. However, the tenant has not paid the December rent. The company has worked out an agreement with the tenant, who has promised to pay both December's and January's rent in full on January 15.
f. On November 1, the company also rented space to another tenant for $\$ 4,350$ per month. The tenant paid five months' rent in advance on that date. The payment was recorded with a credit to the Unearned Rent account.

## Required

1. Use the information to prepare adjusting entries as of December 31, 2010.
2. Prepare journal entries to record the subsequent cash transactions in January 2011 described in parts (c) and (e).

## Problem 4-7A <br> Adjusting entries

 LO4
## Problem 4-8A

Adjusting and subsequent cash journal entries
LO4

## 172

## Problem 4-9A

Adjusting entries LO4

Rainmaker Environmental Consultants is just finishing its second year of operations. The company's unadjusted trial balance at October 31, 2011, follows:

|  | Rainmaker Environmental Cons Unadjusted Trial Balance October 31, 2011 |  |  |
| :---: | :---: | :---: | :---: |
| Acct. No. | Account | Debit | Credit |
| 101 | Cash... | \$ 28,000 |  |
| 106 | Accounts receivable ................................. | 56,000 |  |
| 109 | Interest receivable................................... | -0- |  |
| 111 | Notes receivable. | 30,000 |  |
| 126 | Supplies... | 4,600 |  |
| 128 | Prepaid insurance ................................... | 9,350 |  |
| 131 | Prepaid rent........................................... | 21,000 |  |
| 161 | Office furniture ...................................... | 61,440 |  |
| 162 | Accumulated amortization, office furniture $\qquad$ |  | \$ 20,480 |
| 201 | Accounts payable .................................... |  | 35,000 |
| 210 | Wages payable ....................................... |  | -0- |
| 233 | Unearned consulting fees ......................... |  | 13,160 |
| 301 | Jeff Moore, capital ................................... |  | 60,000 |
| 302 | Jeff Moore, withdrawals ............................ | 16,450 |  |
| 401 | Consulting fees earned ............................. |  | 314,600 |
| 409 | Interest revenue...................................... |  | 1,400 |
| 601 | Amortization expense, office furniture ......... | -0- |  |
| 622 | Wages expense...................................... | 147,000 |  |
| 637 | Insurance expense ................................... | -0- |  |
| 640 | Rent expense......................................... | 64,000 |  |
| 650 | Supplies expense .................................... | 6,800 |  |
|  | Totals. | \$444,640 | \$444,640 |

Rainmaker prepares adjustments each October 31. The following additional information is available on October 31, 2011.
a. It was determined that $\$ 12,000$ of the unearned consulting fees had not yet been earned.
b. It was discovered that $\$ 6,000$ of the balance in the Consulting Fees Earned account was for services to be performed in November.
c. The balance in the Prepaid Rent account represents three months of rent beginning September 1, 2011.
d. Accrued wages at October 31 totalled $\$ 6,800$.
e. The office furniture was purchased on March 1,2010 , and has an estimated useful life of two years. After two years of use, it is expected that the furniture will be worthless.
f. Accrued consulting fees at year-end totalled $\$ 4,200$.
g. Interest of $\$ 200$ had accrued on the note receivable for the month of October.
h. The balance in the Prepaid Insurance account represents the remaining balance of a two-year policy purchased on April 1, 2010.
i. A count of the supplies on October 31 revealed a balance remaining of $\$ 900$.

## Required

Prepare adjusting journal entries for October 31, 2011, based on the above.

## Problem 4-10A

Posting, adjusted trial balance, and preparing financial statements
L06, 7

## Check figures:

3. Adjusted trial balance,
debits $=\$ 486,560$
4. Net income $=\$ 35,940$

## Required

Using the information in Problem 4-9A, complete the following:

1. Set up balance column accounts for Rainmaker Environmental Consultants and enter the balances listed in the unadjusted trial balance.
2. Post the adjusting entries prepared in Problem $4-9 \mathrm{~A}$ to the accounts.
3. Prepare an adjusted trial balance.
4. Use the adjusted trial balance to prepare an income statement, a statement of owner's equity and a balance sheet. Assume that the owner, Jeff Moore, made no owner investments during the year.

## Analysis component:

Assume that total revenues and expenses reported for the year ended October 31, 2010, were $\$ 189,000$ and $\$ 157,600$; respectively. Compare the business's financial performance for the years ended October 31, 2010 and 2011.

## Note

For Part 1, your instructor may ask you to set up T-accounts instead of balance column accounts. The solution is available in both formats.

Arrow Hospitality showed the following:

| Arrow Hospitality Trial Balances September 30, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash ....................................... | \$ 6,000 |  |  |  |  |  |
| Accounts receivable.................... | 11,200 |  |  |  |  |  |
| Repair supplies ........................... | 2,200 |  |  |  |  |  |
| Prepaid rent .............................. | 14,000 |  |  |  |  |  |
| Office furniture.......................... | 26,000 |  |  |  |  |  |
| Accounts payable ........................ |  | \$ 8,000 |  |  |  |  |
| Notes payable ............................ |  | 21,600 |  |  |  |  |
| Al Zink, capital ............................ |  | 67,758 |  |  |  |  |
| Al Zink, withdrawals .................... | 5,000 |  |  |  |  |  |
| Hospitality revenues .................... |  | 128,000 |  |  |  |  |
| Salaries expense ......................... | 142,200 |  |  |  |  |  |
| Repair supplies expense............... | 15,500 |  |  |  |  |  |
| Interest expense......................... | 1,458 |  |  |  |  |  |
| Internet expenses....................... | 1,800 |  |  |  |  |  |
| Totals ...................................... | \$225,358 | \$225,358 |  |  |  |  |

Additional information available at year-end:
a. Interest of $\$ 162$ had accrued on the notes payable for the month of September.
b. The office furniture was acquired on February 1, 2011, and has an estimated four-year life. The furniture will be sold for about $\$ 2,000$ at the end of its four-year life.
c. A count of the Repair Supplies revealed a balance on hand of $\$ 700$.
d. A review of the Prepaid Rent account showed that $\$ 10,000$ had been used.
e. Accrued salaries of $\$ 2,800$ had not been recorded at year-end.
f. The September Internet bill for $\$ 100$ had been received and must be paid by October 14.
g. Accrued revenues of $\$ 6,200$ were not recorded at year-end.

## Required

Prepare adjusting entries for (a) through (g) using the information provided.

## Required

1. Using the format presented in Problem $4-11 \mathrm{~A}$, complete the adjusted trial balance by including the adjusting entries prepared in Problem 4-11A.
2. Prepare an income statement, a statement of owner's equity and a balance sheet based on the adjusted trial balance completed in Part 1. Assume that the owner, Al Zink, made an investment during the year of $\$ 3,600$.

## Analysis component:

Assume that total assets reported at September 30, 2010, were $\$ 76,900$. Determine what total liabilities and equity were on that date and comment on the change in the financial position from 2010 to 2011.

## Problem 4-11A

 Adjusting entries LO4
## Problem 4-12A

Preparation of financial statements LO6, 7

Check figures:

1. Adjustments columns $=\$ 24,762$;

Adjusted trial balance
columns $=\$ 238,620$
2. Net loss $=\$ 45,320$


## 174

## Chapter 4 Adjusting Accounts for Financial Statements

## Problem 4-13A

Preparing financial statements from the adjusted trial balance LO7

This adjusted trial balance is for GalaVu Entertainment as of December 31, 2011:

|  | Debit | Credit |
| :---: | :---: | :---: |
| Accounts receivable. | \$ 22,000 |  |
| Accounts payable. |  | \$ 44,000 |
| Accumulated amortization, automobiles...... |  | 21,000 |
| Accumulated amortization, equipment........ |  | 5,000 |
| Advertising expense. | 25,000 |  |
| Amortization expense, automobiles. | 9,000 |  |
| Amortization expense, equipment. | 5,000 |  |
| Automobiles. | 80,000 |  |
| Cash.. | 11,000 |  |
| Equipment | 65,000 |  |
| Fees earned. |  | 160,000 |
| Interest earned |  | 8,000 |
| Interest expense | 12,000 |  |
| Interest payable. |  | 6,000 |
| Interest receivable | 5,000 |  |
| John Conroe, capital. |  | 123,900 |
| John Conroe, withdrawals . | 19,000 |  |
| Land. | 35,000 |  |
| Long-term notes payable. |  | 115,000 |
| Notes receivable (due in 90 days). | 80,000 |  |
| Office supplies.. | 4,000 |  |
| Office supplies expense | 13,000 |  |
| Repairs expense, automobiles... | 8,400 |  |
| Salaries expense | 90,000 |  |
| Salaries payable.. |  | 5,500 |
| Unearned fees |  | 11,000 |
| Wages expense | 16,000 |  |
| Totals. | \$499,400 | \$499,400 |

## Required

Use the information in the trial balance to prepare:
a. The income statement for the year ended December 31, 2011.
b. The statement of owner's equity for the year ended December 31, 2011, assuming that the owner made additional investments of $\$ 50,000$ during the year.
c. The balance sheet as of December 31, 2011.

## Analysis component:

The owner, John Conroe, is very pleased with the change in the business's financial position. Specifically, he noted that his equity increased. "My banker told me that as long as equity is increasing, my business is doing great." Comment.

On August 1, 2011, Delanie Tugut began a tour company in the Northwest Territories called Tugut Arctic Tours. The following occurred during the first month of operations:

```
Aug. 1 Purchased office furniture on account; $5,200.
    Delanie Tugut invested $7,000 cash into her new business.
    Collected $3,900 in advance for a three-week guided caribou hunt beginning
    the last week of August.
    3 Paid $6,000 for six months' rent for office space effective August 1.
    4 Received $3,000 for a four-day northern lights viewing tour.
    7 Paid $1,500 for hotel expenses regarding the August 4 tour.
    15 Delanie withdrew cash of $500 for personal use.
    22 Met with a Japanese tour guide to discuss a $150,000 tour contract.
    31 Paid wages of $1,300.
```


## Required

1. Prepare General Journal entries to record the August transactions.
2. Set up the following T-accounts: Cash (101); Prepaid Rent (131); Office Furniture (161); Accumulated Amortization, Office Furniture (162); Accounts Payable (201); Unearned Revenue (233); Delanie Tugut, Capital (301); Delanie Tugut, Withdrawals (302); Revenue (401); Amortization Expense, Office Furniture (602); Wages Expense (623); Rent Expense (640); Telephone Expense (688); and Hotel Expenses (696).
3. Post the entries to the accounts; calculate the ending balance in each account.
4. Prepare an unadjusted trial balance at August 31, 2011.
5. Use the following information to prepare and post adjusting entries on August 31:
a. The office furniture has an estimated life of four years and a $\$ 208$ residual value.
b. Two-thirds of the August 2 advance has been earned.
c. One month of the Prepaid Rent has been used.
d. The August telephone bill was not received as of August 31 but amounted to $\$ 320$.
6. Prepare an adjusted trial balance.
7. Prepare an income statement, a statement of owner's equity, and a balance sheet.

## Analysis component:

When a company shows revenue on its income statement, does this mean that cash equal to revenues was received during the period in which the revenues were reported?

The accountant for Karma Counselling Services found several errors in reviewing the unadjusted trial balance on September 30. You are to prepare correcting entries based on the following information:
a. The Counselling Fees Earned account included an entry debiting cash for $\$ 7,000$ that should have been debited to Accounts Receivable.
b. Utilities Expense was debited $\$ 1,680$ that should have been recorded as Telephone Expense.
c. The Office Supplies account shows a credit of $\$ 2,800$ regarding the use of Cleaning Supplies.
d. A transaction involving $\$ 19,600$ of service revenue performed on account was incorrectly recorded as a debit to Accounts Payable and a credit to Unearned Service Revenue.
e. Equipment was incorrectly debited for $\$ 1,200$ with a corresponding credit to Accounts Payable regarding supplies that were sold to a neighbouring store on credit.

## Required

Journalize the correcting entries required on September 30.

## Analysis component:

The error in (b) shows that an incorrect expense account was debited. Since the net effect on the financial statements is nil after recording the correction, is it necessary to prepare a correcting entry for this type of error?

Willis Consulting follows the approach of recording prepaid expenses as expenses and unearned revenues as revenues. Willis's unadjusted trial balance for the year ended March 31, 2011, follows.

| WILLIS CONSULTING <br> Trial Balances March 31, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash ....................................... | \$ 20,000 |  |  |  |  |  |
| Accounts receivable..................... | 49,700 |  |  |  |  |  |
| Prepaid rent ................................ | -0- |  |  |  |  |  |
| Prepaid insurance....................... | -0- |  |  |  |  |  |
| Accounts payable ....................... |  | \$ 2,500 |  |  |  |  |
| Unearned consulting fees ............. |  |  |  |  |  |  |
| Bruce Willis, capital ..................... |  | 15,600 |  |  |  |  |
| Consulting fees earned................ |  | 82,000 |  |  |  |  |
| Rent expense ............................. | 28,000 |  |  |  |  |  |
| Insurance expense...................... | 2,400 |  |  |  |  |  |
| Totals ....................................... | \$100,100 | \$100,100 |  |  |  |  |

## Check figures:

3. Cash balance, Aug. 31/11 $=\$ 4,600$
4. $\mathrm{Dr}=\$ 19,100$
5. $\mathrm{Dr}=\$ 19,524$
6. Net income $=\$ 1,376$

## *Problem 4-15A <br> Correcting entries <br> L08

## *Problem 4-16A

Recording prepaid expenses and unearned revenues


## Check figure:

Adjusted trial balance,
debits $=\$ 100,100$

## *Problem 4-17A

Recording prepaid expenses and unearned revenues LO4, 9

## Additional information:

a. A review of the Consulting Fees Earned account showed that $\$ 5,600$ of the balance has not yet been earned.
b. The balance in the Rent Expense account was paid on January 15, 2011, and represents seven months of rent beginning February 1, 2011.
c. It was determined that $\$ 1,900$ of the balance in the Insurance Expense account was used by March 31, 2011.

## Required

Refer to Exhibit 4.22 and use the information provided to complete the columns above.

The following events occurred for a company during the last two months of its fiscal year ended December 31, 2011:

| Nov. | 1 | Paid $\$ 3,000$ for future newspaper advertising. |
| :---: | :---: | :---: |
|  | 1 | Paid \$4,320 for insurance through October 31 of the following year. |
|  | 30 | Received $\$ 6,600$ for future services to be provided to a customer. |
| Dec. | 1 | Paid $\$ 5,400$ for the services of a consultant, to be received over the next three months. |
|  | 15 | Received $\$ 15,300$ for future services to be provided to a customer. |
|  | 31 | Of the advertising paid for on November 1, $\$ 1,800$ worth had not yet been published by the newspaper. |
|  | 31 | Part of the insurance paid for on November 1 had expired. |
|  | 31 | Services worth $\$ 2,400$ had not yet been provided to the customer who paid on November 30. |
|  | 31 | One-third of the consulting services paid for on December 1 had been received. |
|  | 31 | The company had performed $\$ 6,000$ of the services that the customer had paid for on December 15. |

## Required

1. Prepare the November and December entries for the above activities under the approach that records prepaid expenses as assets and records unearned revenues as liabilities. Also, prepare adjusting entries at the end of the year.
2. Prepare the November and December entries under the approach that records prepaid expenses as expenses and records unearned revenues as revenues. Also, prepare adjusting entries at the end of the year.

## Analysis component:

Explain why the alternative sets of entries in requirements 1 and 2 do not result in different financial statement amounts.

## Alternate Problems

## Problem 4-1B

Preparing adjusting entriesprepaid expenses LO4

Welsh's Cleaning Services is gathering information for its year-end, April 30, 2011. Selected accounts on the April 30, 2011, unadjusted trial balance are reproduced below:

| Account | Debit | Credit |
| :---: | :---: | :---: |
| Prepaid equipment rental | \$9,000 |  |
| Prepaid warehouse rental | 7,800 |  |
| Prepaid insurance. | 3,600 |  |
| Cleaning supplies . | 1,450 |  |

## Required

Prepare the required annual adjusting entries at April 30, 2011, based on the following additional information:
a. The balance in the Prepaid Equipment Rental account is for 18 months of equipment rental that began December 1, 2010.
b. $\$ 3,000$ of the balance in the Prepaid Warehouse Rental account had been used as of April 30, 2011.
c. The balance in the Prepaid Insurance account represents six months of insurance effective February 1, 2011.
d. A count of the cleaning supplies revealed that $\$ 1,200$ had been used.

## Analysis component:

Which GAAP require the recording of adjusting entries and why?

Details regarding Hornby Bay Consulting's plant and equipment items follow:

| Date of Purchase | Plant and Equipment Item | Cost | Estimated <br> Useful Life | Estimated Sales Value at End of Estimated Useful Life |
| :---: | :---: | :---: | :---: | :---: |
| a. Dec. 1, 2010 | Furniture | \$ 30,600 | 3 years | \$ -0- |
| b. Mar. 1, 2011 | Equipment | 210,000 | 10 years | 12,000 |
| c. Nov. 1, 2011 | Building | 307,600 | 15 years | 70,000 |

## Required

Prepare the adjusting entry to record amortization for each capital asset item at November 30, 2011, Hornby Bay Consulting's year-end.

## Analysis component:

What is the purpose of recording amortization? If amortization is not recorded, how would each of the components of the accounting equation be affected?

Ocean Tours sells scuba diving and kayaking excursions, along with a number of unique sightseeing packages. The company requires a $50 \%$ payment from the customer at the time of booking. The following selected accounts appear on Ocean Tours' January 31, 2011, year-end unadjusted trial balance:

| Account | Debit |
| :---: | ---: |
| Credit |  |
| Unearned heli-tour revenue ........... | $\$ 26,000$ |
| Unearned tour package revenue ..... | 480,000 |
| Unearned scuba diving revenue...... | 133,000 |
| Unearned kayaking tour revenue .... | 64,000 |

## Required

Prepare adjusting journal entries at January 31, 2011, using the following additional information:
a. Ocean Tours has custom helicopter packages in which groups are flown in and out of island retreats. The balance in this unearned account is for a group scheduled for early March 2011.
b. $\$ 397,000$ of the Unearned Tour Package Revenue account had been earned by January 31, 2011.
c. $\$ 36,000$ of the Unearned Scuba Diving Revenue account remained unearned at January 31, 2011.
d. $\$ 8,350$ of the Unearned Kayaking Tour Revenue account represents payments received from customers for February and March 2011.

## Analysis component:

Using your understanding of GAAP, explain how and why unearned revenues are adjusted at the end of the accounting period.

## Problem 4-2B

Preparing adjusting entriesamortization expense
LO4

## Problem 4-3B

Preparing adjusting entriesunearned revenues LO4

## 178

## Chapter 4 Adjusting Accounts for Financial Statements

## Problem 4-4B

Preparing adjusting and subsequent cash entriesaccrued expenses LO4

## Problem 4-5B

Preparing adjusting and subsequent cash entriesaccrued revenues LO4

In reviewing the accounts on September 30, 2011, for the month just ended, WonderWeb Designers discovered the following:
a. Interest of $\$ 3,800$ had accrued on the bank loan as at September 30. It is to be paid on October 2.
b. Accrued wages at September 30 totalled $\$ 27,000$. On October 4, the first biweekly payday of October, $\$ 45,000$ was paid to employees representing the six days accrued on September 30 plus the first four working days in October.
c. The September cell phone bill for $\$ 180$ was unpaid and unrecorded at September 30. It will be paid on October 5.
d. On September 30, $\$ 390$ of cable charges were accrued regarding the past two months of usage that were not recorded or paid. This amount was paid on October 2.
e. $\$ 1,950$ of property taxes covering September were accrued on September 30. This amount was paid on October 15.

## Required

Using the information provided above, prepare adjusting journal entries at September 30 along with the appropriate subsequent cash entries.

In reviewing the accounts on March 31, 2011, for the month just ended, WonderWeb discovered the following:
a. Interest of $\$ 650$ had accrued on the note receivable as of March 31 . The accrual, representing 25 days in March plus an additional five days in April, was collected on April 5.
b. Accrued consulting fees totalling $\$ 5,400$ were recorded on March 31 . This amount was collected on April 6.
c. Web design work totalling $\$ 6,800$ was completed on March 31 but not recorded. This amount was collected on April 13.
d. WonderWeb rents the basement of its building to a student. The student has not paid the March rent of $\$ 350$ as at March 31. On April 27, the March rent plus the rent for April was collected.

## Required

Using the information provided above, prepare adjusting journal entries at March 31 along with the appropriate subsequent cash entries.

Design Institute provides one-on-one training to individuals who pay tuition directly to the business and also offers extension training to groups in off-site locations. The business follows the practice of initially recording prepaid expenses and unearned revenues in balance sheet accounts. Presented after the following unadjusted trial balance are facts that will lead to eight adjusting entries as of December 31, 2011.

| DESIGN INSTITUTE <br> Trial Balance <br> December 31, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash $\qquad$ <br> Accounts receivable $\qquad$ <br> Teaching supplies. $\qquad$ <br> Prepaid insurance. $\qquad$ <br> Prepaid rent $\qquad$ <br> Professional library $\qquad$ <br> Accumulated amortization, professional library. $\qquad$ <br> Equipment $\qquad$ <br> Accumulated amortization, equipment. $\qquad$ <br> Accounts payable $\qquad$ <br> Salaries payable. $\qquad$ <br> Unearned extension fees $\qquad$ <br> Jay Stevens, capital $\qquad$ <br> Jay Stevens, withdrawals $\qquad$ <br> Tuition fees earned $\qquad$ <br> Extension fees earned.................... <br> Amortization expense, equipment. $\qquad$ <br> Amortization expense, professional library.. $\qquad$ <br> Salaries expense $\qquad$ <br> Insurance expense. $\qquad$ <br> Rent expense $\qquad$ <br> Teaching supplies expense $\qquad$ <br> Advertising expense $\qquad$ <br> Utilities expense $\qquad$ <br> Totals | $\$ 50,000$ <br> $-0-$ <br> 60,000 <br> 18,000 <br> 2,600 <br> 10,000 <br>  <br> 30,000 <br>  <br>  <br>  <br>  <br>  <br> 20,000 <br>  <br>  <br> $-0-$ <br> $-0-$ <br> 43,200 <br> $-0-$ <br> 28,600 <br> $-0-$ <br> 18,000 <br> 12,400 <br> $\$ 292,800$ | $\$ 1,500$ $\begin{array}{r} 16,000 \\ 12,200 \\ -0- \\ 27,600 \\ 68,500 \\ 105,000 \\ 62,000 \end{array}$ |  |  |  |  |

Additional facts available on December 31, 2011, the business's year-end:
a. An analysis of the company's policies shows that $\$ 6,400$ of insurance coverage has expired.
b. An inventory shows that teaching supplies costing $\$ 2,500$ are on hand at the end of the year.
c. The estimated annual amortization on the equipment is $\$ 4,000$.
d. The estimated annual amortization on the professional library is $\$ 2,000$.
e. The school offers off-campus services for specific operators. On November 1, the company agreed to do a special four-month course for a client. The contract calls for a $\$ 4,600$ monthly fee, and the client paid the first two months' fees in advance. When the cash was received, the Unearned Extension Fees account was credited.
f. On October 15, the school agreed to teach a four-month class to an individual for $\$ 2,200$ tuition per month payable at the end of the class. The services have been provided as agreed, and no payment has been received.
g. The school's only employee is paid weekly. As of the end of the year, wages of $\$ 540$ have accrued.
h. The balance in the Prepaid Rent account represents the rent for December.

## Required

1. Prepare the eight necessary adjusting journal entries.

## Check figure:

2. Adjusted Trial Balance, debits $=\$ 304,840$

## Analysis component:

2. Refer to the format presented in Exhibit 4.22 and prepare an adjusted trial balance using the information in (a) through (h) above.
3. If the adjustments were not recorded, calculate the over- or understatement of income.
4. Is it ethical to ignore adjusting entries?

## Problem 4-7B

Adjusting entries
LO4

Boardwalk Equities' year-end is May 31. Based on an analysis of the unadjusted trial balance at May 31, 2011, the following information was available:
a. Machinery costing $\$ 21,000$ was acquired on September 1 of this accounting period. It is estimated to have a useful life of six years. The machinery will have no value at the end of its sixyear life.
b. It was determined that $\$ 3,000$ of completed work was included in the $\$ 8,000$ Unearned Revenue account balance at year-end.
c. The Prepaid Insurance account showed a balance of $\$ 90,000$. This was paid and takes effect on March 1 of this accounting period and represents a two-year policy.
d. Accrued salaries at year-end were $\$ 5,000$.
e. $\$ 2,520$ of interest had accrued on the $\$ 72,000$ note payable.
f. Accrued revenues at year-end totalled $\$ 1,700$.
g. $\$ 12,000$ worth of advertising was prepaid on January 1 of the current accounting period and debited to the Prepaid Advertising account. This covered four months of advertising beginning on the same date.
h. The annual amortization on the office equipment was $\$ 1,800$.
i. Interest revenue accrued at year-end totalled $\$ 350$.
j. The Office Supplies account had a balance of $\$ 2,000$ at the beginning of the accounting period. During the year, $\$ 5,000$ of supplies were purchased and debited to the Office Supplies account. At year-end, a count of the supplies revealed that $\$ 5,500$ had been used.

## Required

Prepare adjusting journal entries based on the above.

Perfecto records prepaid expenses and unearned revenues in balance sheet accounts. The following information concerns the adjusting entries that need to be recorded on October 31, 2012, for the year just ended.
a. The Office Supplies account started the fiscal year with a $\$ 500$ balance. During the fiscal year, the company purchased supplies at a cost of $\$ 3,650$, which was added to the Office Supplies account. The inventory of supplies on hand at October 31 had a cost of $\$ 700$.
b. An analysis of the company's insurance policies provided these facts:

| Policy | Date of Purchase | Years of Coverage | Total Cost |
| :---: | :--- | :---: | ---: |
| 1 | April 1, 2011 | 2 | $\$ 3,000$ |
| 2 | April 1, 2012 | 3 | 3,600 |
| 3 | August 1,2012 | 1 | 660 |

The total premium for each policy was paid in full at the purchase date, and the Prepaid Insurance account was debited for the full cost.
c. The company has 10 employees who earn a total of $\$ 800$ for every working day. They are paid each Monday for their work in the five-day workweek ending on the preceding Friday. October 31, 2012 falls on Wednesday, and all 10 employees worked the first three days of the week. They will be paid salaries for five full days on Monday, November 5, 2012.
d. The company purchased a building on August 1,2012 . The building cost $\$ 155,000$, and is expected to have a $\$ 20,000$ residual value at the end of its predicted 25 -year life.
e. Because the company is not large enough to occupy the entire building, it arranged to rent some space to a tenant at $\$ 600$ per month, starting on September 1, 2012. The rent was paid on time on September 1, and the amount received was credited to the Rent Earned account. However, the tenant has not paid the October rent. The company has worked out an agreement with the tenant, who has promised to pay both October's and November's rent in full on November 15.
f. On September 1 , the company also rented space to another tenant for $\$ 525$ per month. The tenant paid five months' rent in advance on that date. The payment was recorded with a credit to the Unearned Rent account.

## Required

1. Use the information to prepare adjusting entries as of October 31, 2012.
2. Prepare journal entries to record the subsequent cash transactions described in items (c) and (e).

Alissa Kay, the owner of Colt Surveying Services, has been in business for two years. The unadjusted trial balance at December 31, regarding the month just ended, follows:

Problem 4-9B
Adjusting journal entries LO4

|  | Colt Surveying Services Unadjusted Trial Balance December 31, 2011 |  |  |
| :---: | :---: | :---: | :---: |
| Acct. No. | Account | Debit | Credit |
| 101 | Cash... | \$ 2,800 |  |
| 106 | Accounts receivable ................................ | 3,955 |  |
| 126 | Supplies................................................ | 320 |  |
| 128 | Prepaid advertising .................................. | 2,800 |  |
| 131 | Prepaid rent........................................... | 13,500 |  |
| 167 | Surveying equipment ............................... | 29,000 |  |
| 168 | Accumulated amortization, surveying equipment $\qquad$ |  | \$ 3,674 |
| 201 | Accounts payable ................................... |  | 1,900 |
| 203 | Interest payable ...................................... |  | -0- |
| 210 | Wages payable ...................................... |  | -0- |
| 233 | Unearned surveying fees........................... |  | 2,400 |
| 251 | Notes payable ........................................ |  | 18,000 |
| 301 | Alissa Kay, capital.................................... |  | 14,326 |
| 302 | Alissa Kay, withdrawals ............................ | 2,150 |  |
| 401 | Surveying fees earned.............................. |  | 67,049 |
| 601 | Amortization expense, surveying equipment $\qquad$ | 1,837 |  |
| 622 | Wages expense...................................... | 19,863 |  |
| 633 | Interest expense ..................................... | 945 |  |
| 640 | Rent expense ......................................... | 22,000 |  |
| 650 | Supplies expense .................................... | 1,479 |  |
| 655 | Advertising expense.................................. | 500 |  |
| 690 | Utilities expense..................................... | 6,200 |  |
|  | Totals................................................... | \$107,349 | \$107,349 |

The following additional information is available on December 31, 2011:
a. Amortization on the equipment for the month was $\$ 167$.
b. $\$ 2,000$ of the balance in Unearned Surveying Fees is unearned at December 31.
c. The balance in Prepaid Rent is for six months of rent beginning December 1.
d. Accrued wages at month-end were $\$ 5,000$.
e. December's interest in the amount of $\$ 105$ had accrued on the notes payable.
f. Accrued surveying fees at month-end totalled $\$ 790$.
g. The balance in Prepaid Advertising covers four months of advertising beginning December 15.
h. A count of the supplies on December 31 showed $\$ 150$ had been used.
i. The December electricity bill for $\$ 540$ was received on December 31 . It is unrecorded and unpaid.

## Required

Prepare adjusting journal entries based on the above.

## Analysis component:

Explain the differences between Accumulated Amortization and Amortization Expense.

## 182

## Problem 4-10B

Posting, adjusted trial balance, and preparing financial statements LO6, 7

Check figures:
3. Adjusted trial balance,
debits $=\$ 113,951$
4. Net income $=\$ 6,853$

## Required

Using the information in Problem 4-9B, complete the following:

1. Set up balance column accounts for Colt Surveying Services and enter the balances listed in the unadjusted trial balance.
2. Post the adjusting entries prepared in Problem $4-9 \mathrm{~B}$ to the balance column accounts.
3. Prepare an adjusted trial balance.
4. Use the adjusted trial balance to prepare an income statement, a statement of owner's equity and a balance sheet. Assume that the owner, Alissa Kay, made owner investments of $\$ 2,000$ during the month.

## Analysis component:

At December 31, 2011, how much of the business's assets are financed by the owner? by debt? Assuming total assets at the end of the previous month totalled $\$ 42,100$, did equity financing increase or decrease during December? Generally speaking, is this a favourable or unfavourable change?

## Note

For Part 1, your instructor may ask you to set up T-accounts instead of balance column accounts. The solution is available in both formats.

Orca Bay Hockey Holdings showed the following:

| Orca Bay Hockey Holdings Unadjusted Trial Balance June 30, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash | \$ 56,000 |  |  |  |  |  |
| Accounts receivable.................... | 14,000 |  |  |  |  |  |
| Repair supplies ......................... | 1,400 |  |  |  |  |  |
| Prepaid arena rental .................... | 91,000 |  |  |  |  |  |
| Hockey equipment..................... | 214,000 |  |  |  |  |  |
| Accumulated amortization, hockey equipment $\qquad$ |  | \$ 82,000 |  |  |  |  |
| Accounts payable ....................... |  | 2,700 |  |  |  |  |
| Unearned ticket revenue .............. |  | 9,800 |  |  |  |  |
| Notes payable ........................... |  | 80,000 |  |  |  |  |
| Ben Gibson, capital ..................... |  | 225,700 |  |  |  |  |
| Ben Gibson, withdrawals ............... | 36,000 |  |  |  |  |  |
| Ticket revenue........................... |  | 275,000 |  |  |  |  |
| Salaries expense ......................... | 175,000 |  |  |  |  |  |
| Arena rental expense................... | 84,000 |  |  |  |  |  |
| Other expenses ........................... | 3,800 |  |  |  |  |  |
| Totals ...................................... | \$675,200 | $\underline{\underline{\$ 675,200}}$ |  |  |  |  |

Additional information available at year-end:
a. The Prepaid Arena Rental of $\$ 91,000$ was paid on February 1, 2011. It represents seven months of rent on the arena.
b. A count of the Repair Supplies at year-end revealed that $\$ 950$ had been used.
c. Annual amortization of the hockey equipment was $\$ 41,000$.
d. A review of the Unearned Ticket Revenue account at year-end showed that included in the balance was $\$ 6,300$ that had not yet been earned.
e. Accrued salaries of $\$ 29,000$ had not been recorded at year-end.
f. Interest of $\$ 900$ had accrued regarding the Notes Payable.
g. On June 5, 2011, cash of $\$ 46,000$ was received for $2011 / 2012$ Season Tickets (the season begins in October). This amount is included in the Ticket Revenue balance.

## Required

Prepare adjusting entries on June 30,2011 , for (a) through (g) using the information provided.

## Required

1. Using the format presented in Problem 4-11B, complete the adjusted trial balance by including the adjusting entries prepared in Problem 4-11B.
2. Prepare an income statement, a statement of owner's equity, and a balance sheet based on the adjusted trial balance completed in Part 1. Assume that the owner, Ben Gibson, made an investment during the year of $\$ 10,000$.

## Analysis component:

Assume that total liabilities reported at June 30,2010 , were $\$ 45,000$. Determine what equity and total assets were on that date and comment on the change in the financial position from 2010 to 2011.

This adjusted trial balance is for Horizon Courier as of December 31, 2011:

|  | Debit | Credit |
| :---: | :---: | :---: |
| Accounts payable................................... |  | \$ 124,000 |
| Accounts receivable ............................... | \$ 110,000 |  |
| Accumulated amortization, equipment ..... |  | 190,000 |
| Accumulated amortization, trucks ............ |  | 48,000 |
| Advertising expense ............................... | 26,400 |  |
| Amortization expense, equipment............ | 46,000 |  |
| Amortization expense, trucks ................... | 24,000 |  |
| Cash .................................................... | 48,000 |  |
| Delivery fees earned............................... |  | 580,000 |
| Equipment ........................................... | 260,000 |  |
| Interest earned. |  | 24,000 |
| Interest expense..................................... | 25,000 |  |
| Interest payable ..................................... |  | 22,000 |
| Interest receivable .................................. | 6,000 |  |
| Kim Ainesworth, capital .......................... |  | 115,000 |
| Kim Ainesworth, withdrawals ................... | 40,000 |  |
| Land .................................................... | 90,000 |  |
| Long-term notes payable ........................ |  | 190,000 |
| Notes receivable (due in 90 days) ............ | 200,000 |  |
| Office supplies ....................................... | 12,000 |  |
| Office supplies expense.......................... | 33,000 |  |
| Repairs expense .................................... | 34,600 |  |
| Salaries expense .................................... | 64,000 |  |
| Salaries payable..................................... |  | 30,000 |
| Trucks ................................................... | 124,000 |  |
| Unearned delivery fees........................... |  | 110,000 |
| Wages expense ..................................... | 290,000 |  |
| Totals .............................................. | $\underline{\text { \$1,433,000 }}$ | $\underline{\text { \$1,433,000 }}$ |

## Required

Use the information in the trial balance to prepare:

1. The income statement for the year ended December 31, 2011.
2. The statement of owner's equity for the year ended December 31, 2011, assuming the owner invested $\$ 20,000$ during 2011.
3. The balance sheet as of December 31, 2011.

## Problem 4-12B

Preparation of financial statements LO6, 7

## Check figures:

1. Adjustments columns $=\$ 186,350$;

Adjusted trial balance
columns $=\$ 746,100$
2. Net loss $=\$ 167,150$


## Problem 4-13B

Preparing financial statements from the adjusted trial balance LO7

## Check figures:

1. Net income $=\$ 61,000$
2. Total assets $=\$ 612,000$

## Problem 4-14B

Journalizing, posting, adjusted trial balance, adjusting entries, adjusted trial balance, financial statements LO4, 5, 6, 7

On July 1, 2011, Melanie Thornhill began her third month of operating an electronics repair shop called MT Repairs out of her dad's garage. The following occurred during the third month of operations:

```
July 1 Collected $1,800 as a deposit for work to be done at the local college in
    the fall.
    1 Melanie Thornhill withdrew $2,000 cash for personal expenses.
    2 Paid $1,100 for repair supplies purchased on account last month.
    Did work for a client and immediately collected $700.
    4 Performed services for a customer and collected $1,800.
    7 Hired a new technician to start next week on a casual basis at $200 per day.
    15 Melanie withdrew cash of $500 for personal use.
    22 Purchased repair supplies for cash; $800.
    31 Paid wages of $1,400.
```


## Required

1. Prepare General Journal entries to record the July transactions.
2. Set up the following T-accounts with June 30 adjusted balances: Cash (101), \$3,200; Repair Supplies (131), \$1,500; Tools (161), \$8,400; Accumulated Amortization, Tools (162), \$280; Accounts Payable (201), $\$ 1,600$; Unearned Revenue (233), $\$ 350$; Melanie Thornhill, Capital (301) \$?; Melanie Thornhill, Withdrawals (302), \$0; Revenue (401), \$12,900; Amortization Expense, Tools (602), \$280; Wages Expense (623), \$980; Rent Expense (640), \$4,000; and Repair Supplies Expense (696), \$1,350.
3. Post the entries to the accounts; calculate the ending balance in each account.
4. Prepare an unadjusted trial balance at July $31,2011$.
5. Use the following information to prepare and post adjusting entries for the month of July:
a. The tools have an estimated life of five years with no residual value.
b. One-quarter of the repair supplies balance remained on hand at July 31 .
c. Accrued the July rent expense of $\$ 2,000$; it will be paid in August.
d. $\$ 1,900$ of the unearned revenues remained unearned as at July 31 .
6. Prepare an adjusted trial balance.
7. Prepare an income statement, a statement of owner's equity, and a balance sheet.

## Analysis component:

When a company shows expenses on its income statement, does this mean that cash equal to the expenses was paid during the period in which the expenses were reported?

As the accountant for Broden's Telemarketing Services, you discovered the following errors in the May 31 unadjusted trial balance that require correction:
a. Advertising Expense was debited and Accounts Receivable was credited on May 17 for $\$ 12,000$ of repairs paid for by Broden's.
b. On May 18, Computer Equipment was debited and Accounts Payable was credited, each for $\$ 8,000$ regarding the purchase of office furniture in exchange for a promissory note.
c. On May 28, Cash was debited and Telemarketing Fees Earned was credited for $\$ 10,000$ cash received in advance from a client.
d. The Telephone Expense account included $\$ 1,800$ of delivery expense.
e. The Telemarketing Fees Earned account was credited for $\$ 450$ of interest revenue.

## Required

Journalize the correcting entries required on May 31.

## Analysis component:

The error in (e) shows that an incorrect revenue account was credited. Since the net effect on the financial statements is nil after recording the correction, is it necessary to prepare a correcting entry for this type of error?

Meli Janitorial Services follows the approach of recording prepaid expenses as expenses and unearned revenues as revenues. Meli's unadjusted trial balance for the year ended October 31, 2011, follows.

| MELI JANITORIAL SERVICES <br> Trial Balances October 31, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash $\qquad$ <br> Accounts receivable. $\qquad$ <br> Prepaid advertising. $\qquad$ <br> Cleaning supplies. $\qquad$ <br> Equipment $\qquad$ <br> Accumulated amortization, equipment. $\qquad$ <br> Unearned window washing fees.. Unearned office cleaning fees. $\qquad$ <br> Joel Meli, capital. $\qquad$ <br> Window washing fees earned $\qquad$ <br> Office cleaning fees earned $\qquad$ <br> Advertising expense $\qquad$ <br> Salaries expense $\qquad$ <br> Amortization expense, equipment. $\qquad$ <br> Cleaning supplies expense $\qquad$ <br> Totals. $\qquad$ | $\begin{array}{r} \$ 29,000 \\ 18,000 \\ -0- \\ -0- \\ 62,000 \\ \\ \\ \\ \\ \\ 7,300 \\ 97,000 \\ \\ -0- \\ 22,000 \\ \hline \$ 235,300 \\ \hline \end{array}$ | $\begin{array}{r} \$ 3,000 \\ -0- \\ -0- \\ 18,300 \\ 76,000 \\ 138,000 \\ \\ \\ \\ \hline \$ 235,300 \end{array}$ |  |  |  |  |

## Additional information:

a. On October 31, a physical count revealed cleaning supplies on hand of $\$ 3,100$.
b. Annual amortization on the equipment is $\$ 3,000$.
c. It was determined that $\$ 8,500$ of the balance in Office Cleaning Fees Earned had not yet been earned as of October 31.
d. A review of the Window Washing Fees Earned account showed that only $\$ 71,000$ had been earned as of October 31.
e. $\$ 5,000$ of the total recorded in the Advertising Expense account had not yet been used.

## Required

Refer to Exhibit 4.22 and use the information provided to complete the columns above.

The following occurred for a company during the last two months of its fiscal year ended May 31, 2011:

```
Apr. 1 Paid $3,450 for future consulting services.
    1 Paid $2,700 for insurance through March 31 of the following year.
    30 Received $7,500 for future services to be provided to a customer.
May 1 Paid $3,450 for future newspaper advertising.
    23 Received $9,450 for future services to be provided to a customer.
    31 Of the consulting services paid for on April 1, $1,500 worth had been received.
    31 Part of the insurance paid for on April 1 had expired.
    31 Services worth $3,600 had not yet been provided to the customer who
    paid on April }30
31 Of the advertising paid for on May 1, \$1,050 worth had not been published yet.
31 The company had performed \(\$ 4,500\) of the services that the customer had paid for on May 23.
```


## *Problem 4-16B

Recording prepaid expenses and unearned revenues LO ${ }^{9}$


## Check figure:

Adjusted trial balance,
debits $=\$ 238,300$

## *Problem 4-17B

Recording prepaid expenses and unearned revenues
LO4, 9

## Required

1. Prepare entries for April and May under the approach that records prepaid expenses and unearned revenues in balance sheet accounts. Also, prepare adjusting entries at the end of the year.
2. Prepare entries for April and May under the approach that records prepaid expenses and unearned revenues in income statement accounts. Also, prepare adjusting entries at the end of the year.

## Analysis component:

Explain why the alternative sets of entries in requirements 1 and 2 do not result in different financial statement amounts.

## Analytical and Review Problem

## A \& R Problem 4-1

The Salaries Payable account of James Bay Company Limited appears below:

| Salaries Payable |  |  |  |
| ---: | ---: | ---: | :---: |
|  |  | 22,520 |  |
| Entries during 2011 | 398,120 | 388,400 |  |$\quad$ Entries during 2011 20

The company records the salary expense and related liability at the end of each week and pays the employees on the last Friday of the month.

## Required

Calculate:

1. What was the salary expense for 2011?
2. How much was paid to employees in 2011 for work done in 2010?
3. How much was paid to employees in 2011 for work done in 2011?
4. How much will be paid to employees in 2012 for work done in 2011?

## Ethics Challenge

EC 4-1

Jackie Houston is a new accountant for Seitzer Company. She is learning on the job from Bob Welch, who has already worked several years for Seitzer. Jackie and Bob are preparing the yearend adjusting entries. Jackie has calculated that amortization expense for the fiscal year should be recorded as:
Amortization Expense, Equipment
123,546
Accum. Amort., Equipment $\qquad$ 123,546

Bob is rechecking the numbers and says that he agrees with her computation. However, he says that the credit entry should be made directly to the Equipment account. He argues that while accumulated amortization is taught in the classroom, "It is easier to ignore the contra account and just credit the Equipment account directly for the annual amortization. Besides, the balance sheet shows the same amount for total assets under both methods."

## Required

1. How should amortization be recorded? Do you support Jackie or Bob?
2. Evaluate the strengths and weaknesses of Bob's reasons for preferring his method.
3. Indicate whether the situation faced by Jackie is an ethical problem.

## Focus on Financial Statements

You have been given the following information for RPE Consulting for the year ended July 31, 2011.

| RPE Consulting Trial Balances July 31, 2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| Account | Debit | Credit | Debit | Credit | Debit | Credit |
| Accounts payable ..................... |  | \$ 9,300 |  |  |  | \$ 10,200 |
| Accounts receivable ..................... | \$ 12,000 |  |  |  | \$ 22,460 |  |
| Accum. amort., office equipment $\qquad$ |  | 12,000 |  |  |  | 18,000 |
| Advertising expense..................... | 13,800 |  |  |  | 14,700 |  |
| Amort. expense, office equipment $\qquad$ | -0- |  |  |  | 6,000 |  |
| Cash ........................................ | 27,000 |  |  |  | 27,000 |  |
| Consulting fees earned ................. |  | 156,000 |  |  |  | 168,160 |
| Insurance expense ........................ | -0- |  |  |  | 2,440 |  |
| Interest expense.......................... | 1,400 |  |  |  | 2,200 |  |
| Interest payable .......................... |  | -0- |  |  |  | 800 |
| Notes payable............................ |  | 44,000 |  |  |  | 44,000 |
| Office equipment ........................ | 92,000 |  |  |  | 92,000 |  |
| Office supplies ............................ | 18,000 |  |  |  | 3,000 |  |
| Office supplies expense ................ | -0- |  |  |  | 15,000 |  |
| Prepaid insurance ........................ | 7,320 |  |  |  | 4,880 |  |
| Ray Edds, capital........................ |  | 28,420 |  |  |  | 28,420 |
| Ray Edds, withdrawals ................... | 10,000 |  |  |  | 10,000 |  |
| Rent expense ............................. | 13,200 |  |  |  | 13,200 |  |
| Salaries expense.......................... | 71,000 |  |  |  | 77,600 |  |
| Salaries payable ........................... |  | -0- |  |  |  | 6,600 |
| Unearned consulting fees .............. |  | 16,000 |  |  |  | 14,300 |
| Totals.. | \$265,720 | $\underline{\$ 265,720}$ |  |  | \$290,480 | \$290,480 |

## Required

1. Prepare the company's income statement, statement of owner's equity, and balance sheet. Assume that the owner, Ray Edds, invested \$20,000 during the year ended July 31, 2011.

## Analysis component:

2. Analyze the unadjusted and adjusted trial balances and identify the adjustments that must have been made by inserting them in the two middle columns. Label each entry with a letter.
3. If the adjustments had not been recorded, identify the net overstatement/understatement of each component of the accounting equation.

## Part 1

## FFS 4-2

Refer to WestJet's income statement on page I-21 in Appendix I at the end of the textbook.
a. Prepare two possible adjusting entries that would have caused 2005 Guest revenues to increase.
b. Prepare two possible adjusting entries that would have caused 2005 Aircraft leasing expenses to increase.

## Part 2

Refer to WestJet's balance sheet on page I-20 in Appendix I at the end of the textbook.
c. Prepare the possible adjusting entry that would have caused the December 31, 2005, balance in Prepaid expenses and deposits to decrease.
d. Prepare a possible adjusting entry that would have caused the December 31, 2005, balance in Accounts payable and accrued liabilities to increase.

## Critical Thinking Mini Case


#### Abstract

It's a week before Scotiabank's October 31, 2011, year-end. You are the personnel director and are reviewing some financial information regarding the March 1, 2009, purchase of office furniture for the western region offices totalling $\$ 700,000$ ( $\$ 300,000$ was paid in cash and the balance was financed over four years at $4 \%$ annual interest with annual principal payments of $\$ 100,000$ ). The useful life of the furniture was estimated to be five years with a projected resale value at that time of $\$ 20,000$. Insurance was purchased on the furniture at a cost of $\$ 8,000$ annually, payable each March 1. You leave the office for the day wondering what needs to be considered regarding these items in preparation for year-end.


Required
Using the elements of critical thinking described on the inside front cover, respond.

Serial Problem
(This comprehensive problem was introduced in Chapter 3 and continues in Chapters 5 and 6. If the Chapter 3 segment has not been completed, the assignment can begin at this point. You need to use the facts presented on PP. 128-129 in Chapter 3. Because of its length, this problem is most easily solved if you use the Working Papers ${ }^{8}$ that accompany this book.)

After the success of its first two months, Mary Graham has decided to continue operating Echo Systems. (The transactions that occurred in these months are described in Chapter 3.) Before proceeding in December, Graham adds these new accounts to the chart of accounts for the ledger:


## Required

1. Prepare journal entries to record each of the following transactions for Echo Systems. Post the entries to the accounts in the ledger.
2. Prepare adjusting entries to record the events described on December 31 (items $a$ to $f$ ). Post the entries to the accounts in the ledger.
3. Prepare an adjusted trial balance as of December 31, 2011.
4. Prepare an income statement for the three months ended December 31, 2011.
5. Prepare a statement of owner's equity for the three months ended December 31, 2011.
6. Prepare a balance sheet as of December 31, 2011.
[^6]Transactions and other data:

Dec. 3 Paid $\$ 2,100$ to the Lakeshore Mall for the company's share of mall advertising costs.
3 Paid $\$ 1,200$ to repair the company's computer.
4 Received \$7,500 from Alamo Engineering Co. for the receivable from the prior month.
10 Paid Carly Smith for six days' work at the rate of $\$ 200$ per day.
14 Notified by Alamo Engineering Co. that Echo's bid of $\$ 12,000$ on a proposed project was accepted. Alamo paid an advance of $\$ 3,000$.
17 Purchased $\$ 2,310$ of computer supplies on credit from Abbott Office Products.
18 Sent a reminder to Fostek Co. to pay the fee for services originally recorded on November 8.
20 Completed project for Elite Corporation and received $\$ 11,250$ cash.
24-28 Took the week off for the holidays.
31 Received $\$ 5,700$ from Fostek Co. on its receivable.
31 Reimbursed Mary Graham's business automobile expenses of 600 kilometres at $\$ 1.00$ per kilometre.
31 Mary Graham withdrew $\$ 3,600$ cash from the business
31 The following information was collected to be used in adjusting entries prior to preparing financial statements for the company's first three months:
a. The December 31 inventory of computer supplies was $\$ 1,440$.
b. Three months have passed since the annual insurance premium was paid.
c. As of the end of the year, Carly Smith has not been paid for four days of work at the rate of $\$ 200$ per day.
d. The computer is expected to have a four-year life with no residual value.
e. The office equipment is expected to have a three-year life with no residual value.
f. Prepaid rent for three of the four months has expired.


[^0]:    ${ }^{1}$ Prepaids are also called deferrals because the recognition of the expense or revenue on the income statement is deferred to a future accounting period.

[^1]:    

[^2]:    ${ }^{2}$ In 1990, the revised CICA Handbook, section 3600, recommended the use of the term amortization instead of depreciation, but the use of depreciation was not ruled out. Also, fixed assets was replaced by capital assets. Despite these recommendations, the new terminology has not yet been adopted by all users. Thus, depreciation continues to be a common term.

[^3]:    ${ }^{3}$ We explain the details of amortization methods in Chapter 12 . We briefly describe the straight-line method here to help you understand the adjusting process.

[^4]:    ${ }^{4}$ Interest on the $\$ 6,000,7 \%$, six-month note payable was calculated using the formula
    Interest $=$ Principal of the note $\times$ Annual interest rate $\times$ Time expressed in years OR $i=P r t$.
    Therefore $\$ 6,000 \times 7 \% \times 1 / 12=\$ 35$.
    Where the term of the note is in days, Interest $=$ Principal $\times$ Rate $\times \frac{\text { Exact days }}{365}$. Interest is discussed in greater detail in Chapter 10.

[^5]:    ${ }^{6}$ Adjusting entries related to bank reconciliations affect cash but these adjustments are excluded from the framework in Exhibit 4.20 and will be discussed in Chapter 9.

[^6]:    ${ }^{8}$ If students have not purchased the working paper package, the working papers for the serial problem are available online in the Student Success Centre (SSC).

