

Accrual Accounting and the Financial Statements

3



SPOTLIGHT

Le Château has been selling fashion apparel, footwear, and accessories in Canada for over 50 years. What started as a single, family-owned store in Montreal in 1959 is now a global fashion brand, with its merchandise sold in 235 stores in Canada and 10 more in the Middle East. As the company's promotional materials state, Le Château's "fashion-forward image continues to inspire and engage its stylish clientele at home and abroad."

As you can see from Le Château's statement of loss on the next page, the company sold over \$300 million in merchandise in its fiscal 2012 year. Unfortunately, its expenses for the year were slightly higher, so it ended up reporting a net loss of about \$2.4 million. How does Le Château determine when to recognize the revenues and expenses it reports on this statement? Read on and you will find out!

LEARNING OBJECTIVES

- 1 Explain how accrual accounting differs from cash-basis accounting
- 2 Apply the revenue and expense recognition principles
- 3 Record adjusting journal entries
- 4 Prepare the financial statements
- 5 Record closing journal entries
- 6 Analyze and evaluate a company's debt-paying ability

Le Château Inc. Consolidated Statement of Loss (Adapted) For the Year Ended January 28, 2012	
(in thousands of dollars)	
Income	
Sales	\$302,707
Finance income	217
Total income	<u>302,924</u>
Expenses	
Cost of sales	96,145
Selling	168,035
General and administrative	39,752
Finance costs	1,974
Total expenses	<u>305,906</u>
Loss before income taxes	(2,982)
Income tax recovery	(596)
Net loss	<u>\$ (2,386)</u>

Chapter 2 focused on measuring and recording transactions up to the trial balance. This chapter completes our coverage of the accounting cycle by discussing the adjustment process, the preparation of financial statements, and the closing of the books at the end of the period. It also includes a discussion of accounting principles that govern the recognition of revenue and expenses. At the end of the chapter, you will learn how to evaluate a company's debt-paying ability.

OBJECTIVE

- 1 Explain how accrual accounting differs from cash-basis accounting

EXPLAIN HOW ACCRUAL ACCOUNTING DIFFERS FROM CASH-BASIS ACCOUNTING

Managers want to earn a profit. Investors search for companies whose share prices will increase. Banks seek borrowers who will pay their debts. Accounting provides the information these people use for decision making. Accounting information can be prepared using either the cash basis or the accrual basis of accounting.

When using **cash-basis accounting**, we record only business transactions involving the receipt or payment of cash. All other business transactions are ignored. If a business makes a \$1,000 sale on account, for example, with the customer taking delivery of the goods but not paying for them until a later date, we would not record the sale transaction until we receive the cash payment from the customer. Similarly, the business would not record the purchase of \$2,000 of inventory on account until it actually pays cash for the goods at some future date, despite having already received the inventory items from its supplier.

In contrast, when using **accrual accounting**, the receipt or payment of cash is irrelevant to deciding whether a business transaction should be recorded. What matters is whether the business has acquired an asset, earned revenue, taken on a liability, or incurred an expense. If it has, the transaction is recorded in the accounting records.

After the above sale on account, for example, the business has both gained an asset and earned revenue despite receiving no cash. Recall from Chapter 1 that an asset is a resource controlled by a company as a result of a past event and from which it expects to receive future economic benefits. The sale on account creates a \$1,000 account receivable, which is an asset because it entitles the company to receive the economic

benefit of cash at a future date when the customer pays off its account. The business has also earned \$1,000 in revenue by delivering goods to the customer, which is a key activity in its day-to-day business operations. Because this transaction results in both an asset and revenue, we record it under the accrual basis of accounting.

Similarly, after the preceding purchase of inventory on account, the business has acquired \$2,000 in assets in the form of goods it can sell to its customers in return for cash at some future date. It also has an obligation—in the form of a \$2,000 account payable—that it must settle by paying cash to its supplier at some future date, so the business has also taken on a liability. Since this transaction results in an asset and a liability, we must record it under the accrual basis of accounting.

If the business were using the cash basis of accounting, neither of these initial transactions would have been recorded, leading to the following understatements in the business's financial statements: \$3,000 in assets, \$2,000 in liabilities, and \$1,000 in revenue and net income. As a result, users relying on these cash-basis financial statements would have incomplete information about the company's financial position and results of operations, which would likely lead them to make poor business decisions.

Because the cash basis of accounting is inconsistent with the conceptual framework of accounting introduced in Chapter 1, it is not permitted by IFRS or ASPE, both of which provide extensive guidance on how to apply the accrual basis of accounting to prepare financial statements that present a relevant and faithful representation of a company's business activities.

Let's look at a simple example that illustrates the differences between the two methods of accounting. Suppose Pointz Corporation has the following transactions during July 2014:

1. Provides services to a customer for \$500 in cash.
2. Provides services to a customer for \$800 on account.
3. Pays employees' salaries of \$450 in cash.
4. Receives a \$50 hydro bill for electricity used during July.

The income statements for Pointz Corporation under the accrual basis and the cash basis of accounting appear as follows:

Pointz Corporation	
Income Statement Using Accrual Accounting	
For the Month Ended July 31, 2014	
Revenue	\$1,300
Expenses:	
Salaries	450
Hydro	50
Net income	<u>\$ 800</u>
Pointz Corporation	
Income Statement Using Cash-Basis Accounting	
For the Month Ended July 31, 2014	
Revenue	\$500
Expenses:	
Salaries	450
Hydro	0
Net income	<u>\$ 50</u>

The accrual-accounting statement reports an additional \$800 in revenue because we have recorded the sale on account that is ignored in the cash-basis statement. The accrual statement also includes the \$50 cost of hydro consumed during the month, which we have excluded from the cash statement because it remained unpaid at the end of the month. As a result of these differences, we report an additional \$750 in net income for the month (\$800 in revenue less \$50 in expenses) on the accrual basis compared to the cash basis.

Next we discuss the formal principles used to determine when revenues and expenses should be recognized under accrual accounting.

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3. Pays employees' salaries of \$450 in cash.
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The income statements for Pointz Corporation under the accrual basis and the cash basis of accounting appear above.

OBJECTIVE

- 2 Apply the revenue and expense recognition principles

APPLY THE REVENUE AND EXPENSE RECOGNITION PRINCIPLES

The Revenue Recognition Principle

In Chapter 1 we provided you with a basic definition of revenue, which stated that it consists of amounts earned by a company in the course of its ordinary, day-to-day business activities, primarily through the sale of goods and services. Now that you are more familiar with many fundamental accounting terms and concepts, we will provide the formal IFRS definition of revenue. IFRS defines revenue as “the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in equity, other than increases relating to contributions from equity participants” (ASPE has a fundamentally equivalent definition of revenue). Restating this in terms of the accounting equation, revenue is earned when ordinary business activities result in increases to both assets and shareholders' equity, other than when shareholders contribute capital to the business. When a business delivers goods to a customer who pays cash for them, the Cash asset increases and so does Shareholders' Equity (via Retained Earnings), so the business has earned revenue. But when a shareholder purchases additional shares in the business, which also increases Cash and Shareholders' Equity (via Share Capital), no revenue has been earned because the shareholder has simply injected more capital into the business.

IFRS and ASPE have revenue recognition principles which specify the conditions that must be met before a business can recognize revenue from a transaction. The principles are generally consistent across the two sets of standards, and while they both contain several criteria that must be met before recognizing revenue, we will focus on the three most fundamental criteria at this early stage in your accounting learning. A transaction must satisfy *all three* of these conditions before the business can recognize revenue:

1. The control and benefits of the goods have been transferred to the customer, or the services have been provided to the customer.

2. The amount of revenue can be reliably measured.
3. It is probable that business will receive the economic benefits associated with the transaction, which usually come in the form of cash receipts.

To illustrate the application of these criteria, suppose you go shopping at Le Château and purchase a pair of pants for \$75, which you pay cash for and take home with you. After this transaction, Le Château can recognize revenue because all three conditions have been met: (1) you possess the pants, along with the benefit of wearing them; (2) the pants have a price of \$75; (3) Le Château received \$75 in cash from you. Suppose, instead, that you find a pair of \$75 pants you like but the store does not have your size in stock, so the sales clerk orders a pair in your size from another store, and tells you to come back to pick up and pay for them in three days. At this point, you do not have the pants, so you cannot benefit from wearing them, which leaves the first recognition condition unmet. In addition, after leaving the store, you may change your mind about the pants and never return to purchase them, which creates doubt about the third recognition condition. Le Château therefore cannot recognize revenue in this situation. Only if you return to the store to pick up and pay for the pants will Le Château be able to recognize any revenue.

As an example of service revenue recognition, assume a plumber comes to fix a leaky pipe under your bathroom sink, taking one hour and charging you \$75, which you pay for by credit card. The plumbing company can recognize \$75 in revenue here because all three recognition conditions have been met. In contrast, assume you simply call the plumbing company to arrange for a plumber to come to your home in two days to fix the leaky pipe, which the company estimates will take one hour and cost \$75. In this case, none of the three conditions has been met, so the plumbing company cannot yet recognize any revenue.

The Expense Recognition Principle

In Chapter 1 we defined expenses as costs incurred to purchase the goods and services a company needs to run its business on a day-to-day basis. As with revenue recognition, IFRS and ASPE contain formal principles which set out the criteria that must be satisfied before an expense can be recognized:

1. There has been a decrease in future economic benefits caused by a decrease in an asset *or* an increase in a liability.
2. The expense can be reliably measured.

So, for example, once you have left the store with your new pants, Le Château's pants inventory (an asset) decreases by one pair, so the first expense recognition condition has been met. Le Château can check its inventory records to determine the cost of the pants it sold you, so the expense can be reliably measured. Both conditions have now been satisfied, so Le Château can recognize an expense in the form of cost of goods sold. As for the situation where you are waiting for pants to be shipped from another store, Le Château cannot recognize an expense because its pants inventory will not decrease until you have actually purchased the pants.

In the case of the plumber who has fixed your leaky pipe, the plumbing company that employs him is now obligated to pay him for the one hour of work he did for you, which increases the company's Wages Payable liability. The plumber's hourly wage rate can be used to reliably measure the expense, so with both conditions satisfied, the company can recognize the wage expense associated with the plumber's work on your

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pipe. As for the situation where you have to wait two days for the plumber to come and fix your pipe, the plumbing company is not yet obligated to pay the plumber because he has not done the work for you. Without an increase in the Wages Payable liability, the first condition has not been met, so no expense can be recognized.

**STOP
+
THINK
(3-1)**

1. A client pays Windsor Group Ltd. \$900 on March 15 for consulting service to be performed April 1 to June 30. Assuming the company uses accrual accounting, has Windsor Group Ltd. earned revenue on March 15? When will Windsor Group Ltd. earn the revenue?
2. Windsor Group Ltd. pays \$4,500 on July 31 for office rent for the next three months. Has the company incurred an expense on July 31?

OBJECTIVE

- 3 Record** adjusting journal entries

RECORD ADJUSTING JOURNAL ENTRIES

At the end of a period, the business prepares its financial statements. This process begins with the trial balance introduced in Chapter 2. We refer to this trial balance as *unadjusted* because the accounts are not yet ready for the financial statements. In most cases, the simple label “Trial Balance” means “Unadjusted Trial Balance.”

Because IFRS and ASPE require accrual accounting, we must record adjusting journal entries to ensure that all assets and liabilities have been recorded at period end, and that all revenues earned and expenses incurred during the period have been included in the accounts. These entries are recorded at the end of the accounting period, just before the financial statements are prepared.

Types of Adjusting Entries

There are three main types of adjusting entries: deferrals, depreciation, and accruals. We will use a variety of transactions and related adjusting entries for the fictional Moreau Ltd. to illustrate each main type of adjustment. Other miscellaneous adjusting entries are usually required at the end of an accounting period. We will address some of these as they arise in later chapters of the book. The table below provides an overview of the main types of adjusting entries.

<i>Main Types of Adjusting Entries</i>	
Type	Description
Deferrals	An adjusting entry must be recorded when a company receives (pays) cash in advance of providing (receiving) the related good or service that has been paid for. This type of adjusting entry results in the <i>deferral</i> of the recognition of the related revenue (expense) until the future period in which the economic benefit is actually provided.
Depreciation	An adjusting entry must be recorded to reflect that the future economic benefits of a tangible asset decline with age. This type of adjusting entry, which can be considered a special form of deferral, results in the <i>depreciation</i> (amortization under ASPE) of the value of the asset over its useful life by expensing the portion of the asset's economic benefits that has been used up during an accounting period.
Accruals	An adjusting entry must be recorded when a company delivers (or receives) a good or service in advance of it being billed and paid for. This type of adjusting entry results in the <i>accrual</i> of the related revenue (expense) in the period in which the good or service is actually provided, regardless of the fact that it will not be billed or paid for until a future period.

Deferrals—Prepaid Expenses

A prepaid expense is an expense a company has paid for in advance of actually using the benefit. Because it will provide a future economic benefit to the company, it is recorded as an asset when the cash payment is made. Recording the initial transaction this way results in the **deferral** of the expense to the future period in which the related benefit is realized. Let's look at the initial and adjusting entries for prepaid rent and supplies.

PREPAID RENT. Rent is usually paid in advance of the rented item being used, creating an asset for the renter, who gains the benefit of using the rented item during the future rental period. Suppose Moreau Ltd. prepays three months' office rent (\$3,000) on April 1. The journal entry for the prepayment of three months' rent is as follows:

Apr. 1	Prepaid Rent (\$1000 × 3)	3,000	
	Cash.....		3,000
	Paid three months' rent in advance.		

The accounting equation shows that one asset increases and another decreases. Total assets are unchanged.

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
3,000	=	0	+	0
-3,000				

After posting, the Prepaid Rent account appears as follows:

Prepaid Rent	
Apr. 1	3,000

At the end of April, Moreau has only two months of future rental benefits remaining (2/3 of \$3,000), so we must adjust the Prepaid Rent account to reflect this and to expense the \$1,000 in Prepaid Rent used up during April (1/3 of \$3,000).*

Apr. 30	Rent Expense	1,000	
<i>Adjusting entry a</i>	Prepaid Rent		1,000
	To record rent expense.		

Both assets and shareholders' equity decrease.

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
-1,000	=	0	-	1,000
				Rent Expense

After posting, Prepaid Rent and Rent Expense appear as follows:

Prepaid Rent				Rent Expense	
Apr. 1	3,000	Apr. 30	1,000	Apr. 30	1,000
Bal.	2,000			Bal.	1,000

SUPPLIES. Businesses often have a stock of unused supplies on hand at the end of an accounting period, which represent an asset that will be used up in future periods. These unused supplies are another type of prepaid expense. On April 2, Moreau paid cash for \$700 of office supplies, requiring the following journal entry:

Apr. 2	Supplies.....	700	
	Cash.....		700
	Paid cash for supplies.		

*See Exhibit 3-6, page 000, for a summary of adjustments a through g.

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
700	=	0	+	0
-700				

Moreau used some of these supplies during April, so to expense their use and adjust the Supplies asset to reflect the future benefit remaining at April 30, we need an adjusting entry. By counting and valuing the supplies on hand at April 30, we can determine the amount of the adjustment needed. If Moreau's count shows that \$400 in supplies remain at April 30, then we know that \$300 worth of supplies have been used during April (\$700 - \$400), and we can record this adjusting entry:

Apr. 30	Supplies Expense (\$700 - \$400)	300	
<i>Adjusting entry b</i>	Supplies		300
	To record supplies expense.		

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
-300	=	0	-	300 Supplies Expense

After posting, the Supplies and Supplies Expense accounts appear as follows:

Supplies				Supplies Expense	
Apr. 2	700	Apr. 30	300	Apr. 30	300
Bal.	400			Bal.	300

STOP + THINK (3-2)

At the beginning of the month, supplies were \$5,000. During the month, \$7,000 of supplies were purchased. At month's end, \$3,000 of supplies were still on hand. What adjusting entry is needed to account for the supplies, and what is the ending balance in the Supplies account?

Deferrals—Unearned Revenues

Businesses sometimes receive cash from customers before providing them with the goods or services they have paid for. Because the goods or services have not been delivered, the revenue recognition principle deems this to be **unearned revenue**. In fact, the business now has an obligation to provide the goods or services at some future date, which requires it to record a liability instead of revenue. Recording such transactions in this way results in a **deferral** of revenue recognition until the liability has been settled by providing the goods or services to the customer.

Suppose a customer engages Moreau Ltd. to provide consulting services over the next year, agreeing to pay Moreau \$450 per month for nine hours of services (\$50/hour), effective immediately. If Moreau receives the first \$450 payment on April 20, it records this entry to reflect the unearned revenue:

Apr. 20	Cash	450	
	Unearned Service Revenue		450
	Received cash in advance of providing services.		

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
450	=	450	+	0

After posting, the liability account appears as follows:

Unearned Service Revenue	
	Apr. 20 450

Unearned Service Revenue is a liability because Moreau Ltd. is obligated to perform nine hours of services for the client. During the last 10 days of April, Moreau performed three hours of services for the client, so by April 30, Moreau has settled one-third of the liability and earned one-third of the revenue ($\$450 \times 1/3 = \150). The following adjusting entry is needed to reflect these events:

Apr. 30	Unearned Service Revenue.....	150		
<i>Adjusting entry f</i>	Service Revenue			150
	To adjust unearned service revenue that has been earned ($\$450 \times 1/3$).			

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
0	=	-150	+	150 Service Revenue

This adjusting entry shifts \$150 of the total amount received (\$450) from liability to revenue. After posting, Unearned Service Revenue is reduced to \$300, and Service Revenue is increased by \$150, as follows:

Unearned Service Revenue				Service Revenue			
Apr. 30	150	Apr. 20	450				7,000
		Bal.	300			Apr. 30	150
						Bal.	7,150

Any time a business receives cash from a customer in advance of providing the related goods or services, similar initial and adjusting entries are required to properly reflect the obligation and defer the recognition of revenue until the goods or services have been provided.

Also note that one company's unearned revenue is another company's prepaid expense. As at April 30, for example, the \$300 in Unearned Service Revenue on Moreau's books would be reflected as \$300 in Prepaid Consulting Services on its customer's books. Under accrual accounting, the deferral of revenue by one company will result in the deferral of an expense by another company.

Depreciation of Property, Plant, and Equipment

Property, plant, and equipment, such as buildings, furniture, and machinery, are long-term tangible assets that provide several years of economic benefits to a company. Because the future benefits of a tangible asset decline with age, however, we must reduce its value each year to reflect this decline. To accomplish this, we record adjusting entries for **depreciation** (amortization under ASPE), which gradually reduce the value of the asset over its useful life by expensing the portion of the asset's economic benefits that has been used up during each accounting period. An exception is made for land, which we do not depreciate because it has an unlimited useful life, so its future economic benefits generally do not decline with age.

To illustrate depreciation, suppose that on April 3, Moreau Ltd. purchased \$16,500 of office furniture, including desks, chairs, and storage cabinets, on account. The entry to record this purchase is as follows:

Apr. 3	Furniture	16,500	16,500
	Accounts Payable		
	Purchased office furniture on account.		

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
16,500	=	16,500	+	0

After posting, the Furniture account appears as follows:

Furniture	
Apr. 3	16,500

Moreau Ltd.'s furniture is expected to remain useful for five years and then be worthless. One way to *estimate* the amount of depreciation for each year is to divide the cost of the asset (\$16,500 in our example) by its expected useful life (five years). This procedure—called the straight-line depreciation method—yields annual depreciation of \$3,300, or monthly depreciation of \$275 (\$3,300/12). (Chapter 7 covers depreciation and property, plant, and equipment in more detail.)

The adjusting entry to record depreciation for April is therefore:

Apr. 30	Depreciation Expense—Furniture.....	275	275
<i>Adjusting entry c</i>	Accumulated Depreciation—Furniture		
	To record depreciation.		

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
-275	=	0	-	275 Depreciation

Note that the adjusting entry does not decrease Assets by directly crediting the Furniture asset account. Instead, we decrease Assets by crediting an account called Accumulated Depreciation—Furniture, which is known as a contra asset account. A **contra account** has two distinguishing features:

1. It always has a companion account.
2. Its normal balance is opposite that of the companion account.

In this case, the Furniture account is the companion to the Accumulated Depreciation contra account. Since the Furniture account's normal balance is a debit, the normal balance of the Accumulated Depreciation account is a credit.

As its name suggests, the **Accumulated Depreciation** account accumulates all the depreciation recorded on the asset(s) included in the related companion account, so its balance increases over the life of the related assets being depreciated. A business's chart of accounts normally contains a separate Accumulated Depreciation account for each major category of depreciable asset.

After posting, the furniture-related accounts of Moreau Ltd. are as follows:

Furniture		Accumulated Depreciation—Furniture		Depreciation Expense—Furniture	
Apr. 3	16,500	Apr. 30	275	Apr. 30	275
Bal.	16,500	Bal.	275	Bal.	275

As at April 30, the **carrying amount** of Moreau's furniture is \$16,225, which is obtained by deducting the asset's accumulated depreciation (\$275) from its original cost (\$16,500). All long-term tangible assets are reported at their carrying amounts on the balance sheet, with the details of their original costs and accumulated depreciation normally disclosed in a note to the financial statements.

**STOP
+
THINK
(3-3)**

What will the carrying amount of Moreau Ltd.'s furniture be at the end of May 2014?

Accruals—Accrued Expenses

Businesses often incur expenses they have not yet been billed for, let alone paid. Utility bills, for example, usually arrive after the business has consumed the electricity or gas being billed. For some types of expenses, such as salaries or loan interest, no bills will ever be received. At the end of each accounting period, businesses must record adjusting entries called **accruals** to get these unbilled, unpaid expenses, which we call **accrued expenses**, into the books. By recording these accruals, we ensure the related expenses and liabilities are properly reflected in the financial statements for the period.

Let's use Salary Expense to illustrate this concept. Suppose Moreau Ltd. has one employee that receives a monthly salary of \$1,900, which is paid in equal \$950 amounts on the 15th and last day of each month. If a payday falls on a weekend, the salary is paid on the following Monday. The following calendar illustrates Moreau's pay days for April:

April						
Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

On April 15, a Friday, Moreau records this entry to account for the first half-month's salary:

Apr. 15	Salary Expense.....	950	
	Cash.....		950
	To pay salary.		

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY	
-950	=	0	-	950	Salary Expense

After posting, the Salary Expense account is:

Salary Expense	
Apr. 15	950

Because April 30 falls on a Saturday, the employee will not receive the second half of the salary for April until Monday, May 2, two days after the end of the April accounting period. In this case, the business has incurred a half-month of Salary Expense that it owes the employee as at April 30. To reflect these facts, we record this accrual adjusting entry:

Apr. 30 <i>Adjusting entry d</i>	Salary Expense..... Salary Payable..... To accrue salary expense.	950 950	950
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The accounting equation shows that an accrued expense increases liabilities and decreases shareholders' equity:

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY	
0	=	950	-	950	Salary Expense

After posting, the Salary Payable and Salary Expense accounts appear as follows:

Salary Payable		Salary Expense	
	Apr. 30	950	
	Bal.	950	
			Apr. 15
			950
			Apr. 30
			950
			Bal.
			1,900

After the accrual, Moreau's accounts contain accurate salary information for April: it incurred \$1,900 in Salary Expense during the month and owed \$950 of this amount as at April 30. All accrued-expense adjustments are typically recorded this way—by debiting an expense account and crediting a liability account.

Accruals—Accrued Revenues

At the end of each accounting period, we must also consider the need to record accruals to account for **accrued revenues**, which are the opposite of accrued expenses. Businesses sometimes earn revenues they have not yet billed their customers for, let alone collected cash for. Service businesses such as accounting firms, for example, often provide services to their clients prior to invoicing for the work. Some types of revenues, such as loan interest, will never be invoiced. By recording accruals for these unbilled, uncollected revenues, we ensure that the related assets and revenues are properly reflected in the financial statements for the period.

To illustrate this type of accrual, assume that during the last half of April, Moreau performed \$250 worth of services for a client that were not invoiced until early May. The adjusting entry to record this accrual is as follows:

Apr. 30 <i>Adjusting entry e</i>	Accrued Service Revenue..... Service Revenue..... To accrue service revenue	250 250	250
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ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY	
250	=	0	+	250	Service Revenues

This entry increases Assets, in the form of Accrued Service Revenue, because Moreau will receive the economic benefit of cash after it bills and collects the \$250 from its client. Note that we have used Accrued Service Revenue instead of Accounts Receivable because the customer has not yet been billed, so no formal account receivable exists. This entry also increases Service Revenue by the same amount to reflect the revenue it has earned by providing the services in April. After posting, these accounts appear as follows:

Accrued Service Revenue		Service Revenue	
	2,250		7,000
Apr. 30	250	Apr. 30	150
		Apr. 30	250
Bal.	2,500	Bal.	7,400

In May, when Moreau invoices the client for the work in April, it will record an entry that debits Accounts Receivable and credits Accrued Service Revenue for \$250, since there is now a formal account receivable from this client.

We record similar accrual entries for other kinds of accrued revenues—an accrued revenue (or receivable) account is debited and a revenue account is credited.

STOP + THINK (3-4)	Suppose Moreau Ltd. holds a loan receivable from a client. At the end of April, \$125 of interest revenue	has been earned but not received. Prepare the adjusting entry at April 30.
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Summary of the Adjusting Process

At the end of every accounting period, we must record adjusting journal entries to ensure that we properly measure income for the period and that we accurately reflect the business’s financial position as at the end of the period. Exhibit 3-1 summarizes the main types of adjusting entries, along with the types of accounts they affect.

Exhibit 3-2 details the specific deferral and accrual adjusting entries (in blue text) needed at the end of each accounting period, as well as the journal entries to record the transactions that precede the deferrals and succeed the accruals.

Type of Adjusting Entry	Type of Account	
	Debit	Credit
Deferral—Prepaid Expense	Expense	Asset
Deferral—Unearned Revenue	Liability	Revenue
Depreciation	Expense	Contra asset
Accrual—Accrued Expense	Expense	Liability
Accrual—Accrued Revenue	Asset	Revenue

EXHIBIT 3-1
Summary of Adjusting Entries

Adapted from material provided by Beverly Terry.

EXHIBIT 3-2 Deferral and Accrual Adjusting Entries

DEFERRALS—Cash First					
	First			Later	
Prepaid expenses	<i>Pay cash and record an asset:</i>		→	<i>Record an expense and decrease the asset:</i>	
	Prepaid Expense	XXX		Expense	XXX
	Cash	XXX		Prepaid Expense	XXX
Unearned revenues	<i>Receive cash and record unearned revenue:</i>		→	<i>Record a revenue and decrease unearned revenue:</i>	
	Cash	XXX		Unearned Revenue	XXX
	Unearned Revenue	XXX		Revenue	XXX
ACCRUALS—Cash Later					
	First			Later	
Accrued expenses	<i>Accrue expense and a payable:</i>		→	<i>Pay cash and decrease the payable:</i>	
	Expense	XXX		Payable	XXX
	Payable	XXX		Cash	XXX
Accrued revenues	<i>Accrue revenue and a receivable:</i>		→	<i>Receive cash and decrease the receivable:</i>	
	Accrued Revenue (or Receivable)	XXX		Cash	XXX
	Revenue	XXX		Receivable	XXX

COOKING THE BOOKS ISSUES IN ACCRUAL ACCOUNTING

Accrual accounting provides some ethical challenges that cash accounting avoids. Suppose that on December 1, 2014, for example, Shop Online Inc. (SOI) pays \$3 million in cash for an advertising campaign, which will run during December, January, and February. The ads start running immediately. If SOI properly applies the expense recognition principle discussed earlier in the chapter, it should record one-third of the expense (\$1 million) during the year ended December 31, 2014, and leave the remaining \$2 million as a prepaid expense that will be recognized as an expense in 2015.

But also suppose that 2014 is a great year for SOI, with its net income being much higher than expected. SOI's top managers believe, however, that 2015 will be much less profitable due to increased competition. In this case, company managers have a strong incentive to expense the full \$3 million during 2014, an unethical action that would keep \$2 million of advertising expense off the 2015 income statement and increase its net income by the same amount (ignoring income taxes).

Unethical managers can also exploit the revenue recognition principle to artificially improve reported liabilities, revenues, and net income. Suppose it is now December 31, 2014, and Highfield Computer Products Ltd., which is having a poor fiscal year, has just received a \$1 million advance cash payment for merchandise it will deliver early in January. If top managers are unethical, the company can "manufacture" revenue and net income by recording the \$1 million cash payment as revenue in 2014 instead of as unearned revenue (a liability) at the end of the year.

MyAccountingLab
Accounting Cycle Tutorial: Adjustments
- Application Exercise 1

Exhibit 3-3 summarizes the adjusting process we followed for Moreau Ltd. at April 30, 2014. Panel A contains the information used to record each adjusting entry in Panel B, while Panel C presents all of Moreau's ledger accounts, with each adjusting entry keyed with the corresponding letter from Panel A.

Exhibit 3-3 includes an additional accrual adjustment (*entry g*) to accrue the income tax expense Moreau owes for April. This is typically the last adjusting entry a business makes at the end of an accounting period because it is based on the net income for the period, which can only be determined after all other adjusting entries have been posted to the accounts. If we assume Moreau owes \$540 of income tax for April, the adjusting entry is as follows:

Apr. 30	Income Tax Expense	540	
<i>Adjusting entry g</i>	Income Tax Payable		540
	To accrue income tax expense.		

The Adjusted Trial Balance

Before we prepare the financial statements, it is helpful to compile an **adjusted trial balance** listing all of the ledger accounts and their adjusted balances, which are what we need to report on the financial statements. Exhibit 3-4 contains the adjusted trial balance for Moreau Ltd. Note how clearly the adjusted trial balance presents the adjustments made to the account balances contained in the initial unadjusted trial balance. This presentation format makes it easy for us to see the impacts of all our adjusting entries on the accounts in the ledger. We see, for example, that we adjusted Supplies downward by \$300 to arrive at the account's \$400 balance as at April 30, 2014.

MyAccountingLab
Accounting Cycle Tutorial:
Adjustments - Application Exercise 3

EXHIBIT 3-4**Worksheet for the Preparation of Adjusted Trial Balance**

Moreau Ltd. Preparation of Adjusted Trial Balance April 30, 2014						
Account Title	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	24,800				24,800	
Accrued service revenue	2,250		(e) 250		2,500	
Supplies	700			(b) 300	400	
Prepaid rent	3,000			(a) 1,000	2,000	
Furniture	16,500				16,500	
Accumulated depreciation—furniture				(c) 275		275
Accounts payable		13,100				13,100
Salary payable				(d) 950		950
Unearned service revenue		450	(f) 150			300
Income tax payable				(g) 540		540
Common shares		20,000				20,000
Retained earnings		11,250				11,250
Dividends	3,200				3,200	
Service revenue		7,000		(e) 250 (f) 150		7,400
Rent expense			(a) 1,000		1,000	
Salary expense	950		(d) 950		1,900	
Supplies expense			(b) 300		300	
Depreciation expense—furniture			(c) 275		275	
Utilities expense	400				400	
Income tax expense			(g) 540		540	
	51,800	51,800	3,465	3,465	53,815	53,815

Balance Sheet
(Exhibit 3-7)

Statement of Retained Earnings
(Exhibit 3-6)

Income Statement
(Exhibit 3-5)

OBJECTIVE**4 Prepare the financial statements****PREPARE THE FINANCIAL STATEMENTS**

The April 2014 financial statements of Moreau Ltd. can be prepared from the adjusted trial balance in Exhibit 3-4. The right side of the exhibit highlights which financial statement(s) the accounts are reported on.

- The income statement (Exhibit 3-5) reports the revenue and expense accounts.
- The statement of retained earnings (Exhibit 3-6) reports the changes in retained earnings.
- The balance sheet (Exhibit 3-7) reports assets, liabilities, and shareholders' equity.
- The arrows in Exhibits 3-5, 3-6, and 3-7 show the flow of data from one statement to the next.

Why is the income statement prepared first and the balance sheet last?

1. The income statement is prepared first because it reports net income (revenues minus expenses), which is needed to prepare the statement of retained earnings. This link is illustrated by arrow 1 between Exhibits 3-5 and 3-6.
2. The balance sheet is prepared last because it relies on the ending balance from the statement of retained earnings to complete the shareholders' equity section of the statement. This link is illustrated by arrow 2 between Exhibits 3-6 and 3-7.

You will note that the statement of cash flows is not included in the list of statements that are prepared from the adjusted trial balance. The reason it is not included, as you will discover in Chapter 12, is that the statement of cash flows is not prepared from the adjusted trial balance, but rather from the comparative balance sheets, the income statement, and other sources.

Formats for the Financial Statements

Companies can format their balance sheets and income statements in various ways. Here we will highlight some of the most common balance sheet and income statement formats.

BALANCE SHEET FORMATS. In Chapter 1 we introduced you to the difference between current and non-current (or long-term) assets. Recall that a current asset is an asset we expect to convert to cash, sell, or consume *within one year* of the balance sheet date, or within the business's normal operating cycle if it is longer than one year. A non-current asset is any asset that does not qualify as a current asset. We make a similar distinction between current and non-current liabilities, with a current liability being one we expect to repay within one year of the balance sheet date, or within the business's normal operating cycle if it is longer than one year; while a non-current liability will be repaid beyond one year or the normal operating cycle. A **classified balance sheet** separates current assets from non-current assets and current liabilities from non-current liabilities, and also subtotals the current assets and current liabilities. Exhibit 3-8 contains the classified balance sheet of Le Château as at January 28, 2012. An unclassified balance sheet does not separate current and non-current assets or liabilities. Regardless of which of these two formats is used, current assets are always listed in order of decreasing **liquidity**, which is a measure of how quickly they can be converted to cash, (the most liquid asset). IFRS and ASPE require the use of classified balance sheets.

A balance sheet prepared in **report format** lists assets at the top, followed by liabilities, and then shareholders' equity. Le Château's balance sheet in Exhibit 3-8 is in report format.

A balance sheet prepared in **account format** uses a T-account as a framework, with assets (debits) listed on the left side and liabilities and shareholders' equity (credits) on the right. The Moreau Ltd. balance sheet in Exhibit 3-7 is in account format. Companies are free to choose the report format or the account format when preparing their balance sheets.

INCOME STATEMENT FORMATS. A **single-step income statement** lists all the revenues together under a heading such as Revenues or Income. The expenses are also

EXHIBIT 3-5
Income Statement

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Accounting Cycle Tutorial:
Financial Statements - Application
Exercise 2

Moreau Ltd.			
Income Statement			
For the Month Ended April 30, 2014			
Revenue:			
Service revenue			\$7,400
Expenses:			
Salary	\$1,900		
Rent	1,000		
Utilities.....	400		
Supplies	300		
Depreciation.....	<u>275</u>	3,875	
Income before tax.....		<u>3,525</u>	
Income tax expense.....			<u>540</u>
Net income			<u><u>\$2,985</u></u>

EXHIBIT 3-6
Statement of Retained Earnings

Moreau Ltd.	
Statement of Retained Earnings	
For the Month Ended April 30, 2014	
Retained earnings, April 1, 2014	\$11,250
Add: Net income	<u>2,985</u>
	14,235
Less: Dividends	<u>(3,200)</u>
Retained earnings, April 30, 2014	<u><u>\$11,035</u></u>

EXHIBIT 3-7
Balance Sheet

Moreau Ltd.			
Balance Sheet			
As at April 30, 2014			
Assets		Liabilities	
Cash.....	\$24,800	Accounts payable	\$13,100
Accrued service revenue....	2,500	Salary payable	950
Supplies	400	Unearned service revenue.....	300
Prepaid rent	2,000	Income tax payable.....	<u>540</u>
Furniture.....	\$16,500	Total liabilities	<u>14,890</u>
Less accumulated depreciation	<u>(275)</u>	Shareholders' Equity	
	16,225	Common shares	20,000
		Retained earnings	<u>11,035</u>
		Total shareholders' equity	<u>31,035</u>
Total assets	<u><u>\$45,925</u></u>	Total liabilities and shareholders' equity.....	<u><u>\$45,925</u></u>

①

②

EXHIBIT 3-8
Classified Balance Sheet
of Le Château Inc.

Le Château Inc.
 Consolidated Balance Sheet (Adapted)
 As at January 28, 2012

	(in thousands of dollars)
ASSETS	
Current assets	
Cash and cash equivalents	\$ 7,193
Accounts receivable	2,358
Income taxes refundable	2,137
Derivative financial instruments	129
Inventories	119,325
Prepaid expenses	1,564
Total current assets	<u>132,706</u>
Property and equipment	95,744
Intangibles	5,344
Total assets	<u>\$ 233,794</u>
 LIABILITIES AND SHAREHOLDERS' EQUITY	
Current liabilities	
Trade and other payables	\$ 21,820
Deferred revenue	3,918
Current portion of provisions	300
Current portion of long-term debt	<u>16,323</u>
Total current liabilities	<u>42,361</u>
Long-term debt	29,145
Provisions	120
Deferred income taxes	2,954
Deferred lease credits	<u>16,109</u>
Total liabilities	<u>90,689</u>
 Shareholders' equity	
Share capital	37,729
Contributed surplus	2,328
Retained earnings	102,956
Accumulated other comprehensive income	<u>92</u>
Total shareholders' equity	<u>143,105</u>
Total liabilities and shareholders' equity	<u>\$ 233,794</u>

listed together in a single category titled Expenses, or Expenses and Losses. This format contains only a single step: the subtracting of Total Expenses from Total Revenues to arrive at Net Income. Le Château's income statement at the opening of the chapter is in single-step format.

A **multi-step income statement** contains a number of subtotals to highlight important relationships among revenues and expenses. Le Château's multi-step statement of loss in Exhibit 3-9 highlights gross profit, results from operating activities, and loss before income taxes prior to arriving at the net loss reported at the bottom of the statement. We will discuss the components of the income statement in more detail in Chapter 11.

Companies are free to use either format for their income statements, or they can use a format of their own design if it better suits their reporting needs.

EXHIBIT 3-9
Multi-Step Statement of Loss
for Le Château Inc.

Le Château Inc.	
Consolidated Statement of Loss (Adapted)	
For the Year Ended January 28, 2012	
(in thousands of dollars)	
Sales	\$302,707
Cost of sales	96,145
Gross profit	206,562
Selling	168,035
General and administrative	39,752
Total operating expenses	207,787
Results from operating activities	(1,225)
Finance costs	1,974
Finance income	(217)
Loss before income taxes	(2,982)
Income tax recovery	(596)
Net loss	\$ (2,386)

MID-CHAPTER SUMMARY PROBLEM

The trial balance of Goldsmith Inc. shown below pertains to December 31, 2014, which is the end of its year-long accounting period. Data needed for the adjusting entries include the following (all amounts in thousands):

- a. Supplies on hand at year-end, \$2.
- b. Depreciation on furniture and fixtures, \$20.
- c. Depreciation on building, \$10.
- d. Salary owed but not yet paid, \$5.
- e. Accrued service revenue, \$12.
- f. Of the \$45 balance of unearned service revenue, \$32 was earned during the year.
- g. Accrued income tax expense, \$35.

Requirements

1. Open the ledger accounts with their unadjusted balances. Show dollar amounts in thousands, as shown for Accounts Receivable:

Accounts Receivable
370

2. Journalize the Goldsmith Inc. adjusting entries at December 31, 2014. Key entries by letter, as in Exhibit 3-3, page 000. Make entries in thousands of dollars.
3. Post the adjusting entries.
4. Copy the trial balance to a worksheet, enter the adjusting entries, and prepare an adjusted trial balance, as shown in Exhibit 3-4.
5. Prepare the income statement, the statement of retained earnings, and the balance sheet. (At this stage, it is not necessary to classify assets or liabilities as current or long term.) Draw arrows linking these three financial statements.

Name: Goldsmith Inc.
Industry: Service corporation
Fiscal Period: Year ended
 December 31, 2014

Goldsmith Inc.
Trial Balance
December 31, 2014

	(in thousands)	
Cash.....	\$ 198	
Accrued service revenue.....	370	
Supplies.....	6	
Furniture and fixtures.....	100	
Accumulated depreciation—furniture and fixtures.....		\$ 40
Building.....	250	
Accumulated depreciation—building.....		130
Accounts payable.....		380
Salary payable		
Unearned service revenue.....		45
Income tax payable		
Common shares.....		100
Retained earnings.....		193
Dividends.....	65	
Service revenue.....		286
Salary expense.....	172	
Supplies expense		
Depreciation expense—furniture and fixtures		
Depreciation expense—building		
Income tax expense		
Miscellaneous expense.....	13	
Total.....	\$1,174	\$1,174

Requirement 4

Goldsmith Inc.
Preparation of Adjusted Trial Balance
December 31, 2014

(amounts in thousands)

	Unadjusted Trial Balance		Adjustments		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	198				198	
Accrued service revenue	370		(e) 12		382	
Supplies	6			(a) 4	2	
Furniture and fixtures	100				100	
Accumulated depreciation— furniture and fixtures		40		(b) 20		60
Building	250				250	
Accumulated depreciation—building		130		(c) 10		140
Accounts payable		380				380
Salary payable				(d) 5		5
Unearned service revenue		45	(f) 32			13
Income tax payable				(g) 35		35
Common shares		100				100
Retained earnings		193				193
Dividends	65				65	
Service revenue		286		(e) 12 (f) 32		330
Salary expense	172		(d) 5		177	
Supplies expense			(a) 4		4	
Depreciation expense— furniture and fixtures			(b) 20		20	
Depreciation expense—building			(c) 10		10	
Income tax expense			(g) 35		35	
Miscellaneous expense	13				13	
	1,174	1,174	118	118	1,256	1,256

Create a worksheet with columns for the original trial balance, adjustments, and the adjusted trial balance. List all the account names that have a balance in their T-accounts. Write the account balances from the December 31, 2014, trial balance in the first two columns. Write the adjustment amounts in the next two columns. Write the "Bal." amounts from the T-accounts in the Adjusted Trial Balance columns. Ensure total debits equal total credits for each pair of columns. Double-check the adjusted trial balance amounts by adding the adjustments to the original trial balance amounts. Double-underline the totals to show that the columns have been added and the totals are final.

Requirement 5

The title must include the name of the company, "Income Statement," and the specific period of time covered. It is critical that the time period is defined.

Gather all the revenue and expense account names and amounts from the Debit and Credit Adjusted Trial Balance columns of the worksheet.

Notice that income tax expense is always reported separately from the other expenses, and it appears as the last item before net income (or net loss).

Goldsmith Ltd.		
Income Statement		
For the Year Ended December 31, 2014		
(amounts in thousands)		
Revenue:		
Service revenue		\$330
Expenses:		
Salary	\$177	
Depreciation—furniture and fixtures	20	
Depreciation—building	10	
Supplies	4	
Miscellaneous	<u>13</u>	<u>224</u>
Income before tax		106
Income tax expense		<u>35</u>
Net income		<u>\$ 71</u>

The title must include the name of the company, "Statement of Retained Earnings," and the specific period of time covered. It is critical that the time period is defined.

Beginning retained earnings and dividends are from the Adjusted Trial Balance columns of the worksheet.

The net income amount is transferred from the income statement.

Goldsmith Inc.	
Statement of Retained Earnings	
For the Year Ended December 31, 2014	
(amounts in thousands)	
Retained earnings, January 1, 2014	\$193
Add: Net income	<u>71</u>
	264
Less: Dividends	<u>(65)</u>
Retained earnings, December 31, 2014	<u>\$199</u>

The title must include the name of the company, "Balance Sheet," and the date of the balance sheet. It shows the financial position on one specific date.

Gather all the asset, liability, and common shares accounts and amounts from the Adjusted Trial Balance columns of the worksheet. The retained earnings amount is transferred from the statement of retained earnings.

It is imperative that Total assets = Total liabilities + Shareholders' equity.

Goldsmith Inc.			
Balance Sheet			
As at December 31, 2014			
(amounts in thousands)			
Assets		Liabilities	
Cash	\$198	Accounts payable	\$380
Accounts receivable	382	Salary payable	5
Supplies	2	Unearned service revenue	13
Furniture and fixtures	\$100	Income tax payable	<u>35</u>
Less accumulated		Total liabilities	<u>433</u>
depreciation	<u>(60)</u> 40		
Building	\$250	Shareholders' Equity	
Less accumulated		Common shares	100
depreciation	(140) 110	Retained earnings	<u>199</u>
Total assets	<u>\$732</u>	Total shareholders' equity	<u>299</u>
		Total liabilities and	
		shareholders' equity	<u>\$732</u>

RECORD CLOSING JOURNAL ENTRIES

OBJECTIVE

5 Record closing journal entries

Recall that a business's Retained Earnings represent the accumulated net income of the business since its inception, less any net losses and dividends declared during this time. To keep track of this balance, at the end of each fiscal year we must record **closing entries**, which are journal entries that transfer the balances in all revenue, expense, and dividend accounts into the Retained Earnings account. After these entries, all the income statement and dividend accounts have zero balances, leaving them ready to begin tracking revenues, expenses, and dividends for the next fiscal year.

Because the revenue, expense, and dividend accounts are closed at the end of each year, we call them **temporary accounts**. In effect, they temporarily contain a business's revenues, expenses, and dividends for a year, and then are returned to zero balances before starting the next fiscal year. In contrast, all the asset, liability, and shareholders' equity accounts we report on the balance sheet are **permanent accounts** because their balances carry forward from year to year. The balances in these accounts at the end of one fiscal year become the beginning balances of the next fiscal year.

To record and post the closing journal entries at the end of a fiscal year, follow this process:

- ① Debit each revenue account for the amount of its credit balance. Credit Retained Earnings for the sum of the revenues. Now the sum of the revenues has been added to Retained Earnings.
- ② Credit each expense account for the amount of its debit balance. Debit Retained Earnings for the sum of the expenses. The sum of the expenses has now been deducted from Retained Earnings.
- ③ Credit the Dividends account for the amount of its debit balance. Debit Retained Earnings. The dividends have now been deducted from Retained Earnings.
- ④ Post all of the closing journal entries to the ledger to close the accounts for the year.

Exhibit 3-10 illustrates the process of journalizing and posting the closing entries for Moreau Ltd. at the end of April. Panel A contains the closing journal entries, which have been prepared using the revenue, expense, and dividend account balances contained in Moreau's adjusted trial balance in Exhibit 3-4. Panel B shows these entries being posted to the ledger accounts. Note that after the closing entries have been posted, the ending credit balance of \$11,035 in the Retained Earnings account matches the Retained Earnings balance in the statement of retained earnings in Exhibit 3-6 and the balance sheet in Exhibit 3-7. If the ending balance in the Retained Earnings account does not match the balance reported in these financial statements, then you know you have made an error in the closing process.

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Accounting Cycle Tutorial: Adjustments and Closing Entries - Tutorial

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Accounting Cycle Tutorial:
Adjustments and Closing Entries -
Application Exercise 2

ANALYZE AND EVALUATE A COMPANY'S DEBT-PAYING ABILITY

OBJECTIVE

- 6 Analyze and evaluate a company's debt-paying ability

As we have noted, managers, investors, and creditors use accounting information to make business decisions. A bank considering lending money must predict whether the borrower can repay the loan. If the borrower already has a lot of debt compared to its assets, the probability of repayment may be low. If the borrower owes relatively little, however, the odds of repayment are higher. To evaluate a company's debt-paying ability, decision makers examine data and ratios calculated using information in the financial statements. Let's see how this process works.

Net Working Capital

Net Working Capital (or simply working capital) is a figure that indicates a *company's* liquidity. In this context, liquidity refers to the ease with which a company will be able to use its current assets to pay off its current liabilities. The higher a company's liquidity, the easier it will be able to pay off its current liabilities. The calculation for net working capital is:

$$\text{Net working capital} = \text{Total current assets} - \text{Total current liabilities}$$

Generally, a company is considered to be liquid when its current assets sufficiently exceed its current liabilities. The sufficiency of the excess is usually evaluated using the current ratio, (which we discuss below), and typically varies by industry.

Using the balance sheet data in Exhibit 3-8, we can calculate Le Château's net working capital at the end of 2012 (all dollar amounts in thousands from here on):

$$\text{Net working capital} = \$132,706 - \$42,361 = \$90,345$$

Le Château's current assets exceed its current liabilities by \$90,345, meaning that after the company pays all of its current liabilities, it will still have almost \$100,000 in current assets to fund other business activities. For a company of its size, Le Château would be considered highly liquid.

Current Ratio

Another means of evaluating a company's liquidity using its current assets and current liabilities is via the **current ratio**, which is calculated as follows:

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}}$$

The higher the current ratio, the better we consider the company's liquidity. As a rule of thumb, a company's current ratio should be at least 1.50, which indicates the company has \$1.50 in current assets for every \$1.00 in current liabilities. The threshold does, however, vary by industry, and in some cases can be as low as 1.00 or as high as 2.00. A current ratio of less than 1.00 is considered low by any standard, as it indicates that current liabilities exceed current assets, or that the net working capital is negative.

Le Château's current ratio at January 28, 2012 was:

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$132,706}{\$42,361} = 3.13$$

By any measure, Le Château's current ratio of 3.13 is outstanding, and indicates to current and potential lenders that the company will have no trouble paying its current liabilities. With a current ratio that high, the company could even take on significant additional current debt and pay it off with no difficulty.

Debt Ratio

We can also evaluate a company's debt-paying ability using the **debt ratio**, which is calculated as follows:

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

This ratio indicates the proportion of a company's assets that is financed with debt, which helps evaluate the company's ability to pay both current and long-term debts (total liabilities). In contrast to the current ratio, a low debt ratio is better than a high debt ratio because it indicates a company has not used an excessive amount of debt to finance its assets, which means it should be easier for the company to use its assets to generate the cash needed to pay off its liabilities. Companies with low debt ratios are less likely to encounter financial difficulty.

Le Château's debt ratio at January 28, 2012 was:

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\$90,689}{\$233,794} = 0.39$$

As with the current ratio, the threshold for an acceptable debt ratio varies by industry, but most companies have a ratio between 0.60 and 0.70 (60% and 70%). Le Château's debt ratio of 0.39 (39%) is therefore well below the norm, and indicates the company will have little difficulty paying down its debts. When considered along with its very high current ratio, we can say with great confidence that Le Château has a very high debt-paying ability at the end of 2012.

How Do Transactions Affect the Ratios?

Companies such as Le Château are keenly aware of how transactions affect their ratios. Lending agreements often require that a company's current ratio not fall below a certain level, or that its debt ratio not rise above a specified threshold. When a company fails to meet one of these conditions, it is said to default on its lending agreements. The penalty for default can be severe, and in the extreme can require immediate repayment of the loan. As noted, Le Château's debt-paying ability is very high, so it is not in danger of default. Companies that do face this danger can pursue a variety of strategies to avoid default, including:

- Increase sales to enhance both net income and current assets.
- Decrease expenses to improve net income and reduce liabilities.
- Sell additional shares to increase cash and shareholders' equity.

Let's use Le Château Inc. to examine the effects of some transactions on the company's current ratio and debt ratio. As shown in the preceding section, Le Château's ratios are as follows:

$$\text{Current ratio} = \frac{\$132,706}{\$42,361} = 3.133 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794} = 0.388$$

The managers of any company would be concerned about how inventory purchases, collections on account, expense accruals, and depreciation would affect its ratios. Let's see how Le Château would be affected by some typical transactions. For each transaction, the journal entry helps identify the effects on the ratios.

- a.** Issued shares and received cash of \$5 million (all journal entry amounts in thousands of dollars).

<i>Journal entry:</i>	Cash	5,000
	Share capital	5,000

The increase in Cash, a current asset, affects both ratios as follows:

$$\text{Current ratio} = \frac{\$132,706 + \$5,000}{\$42,361} = 3.251 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794 + \$5,000} = 0.380$$

The issuance of shares slightly improves both ratios, as current assets increase while liabilities remain unchanged.

- b.** Paid cash to purchase buildings for \$2 million.

<i>Journal entry:</i>	Buildings	2,000
	Cash	2,000

Cash, a current asset, decreases, but total assets stay the same; liabilities are unchanged.

$$\text{Current ratio} = \frac{\$132,706 - \$2,000}{\$42,361} = 3.086 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794 - \$2,000 + \$2,000} = 0.388$$

The cash purchase of a building hurts the current ratio, but doesn't affect the debt ratio.

- c.** Sold inventory that had been purchased at a cost of \$20 million.

<i>Journal entry:</i>	Cost of Sales	20,000
	Inventory	20,000

This transaction causes a decrease in current and total assets, but leaves liabilities unchanged:

$$\text{Current ratio} = \frac{\$132,706 - \$20,000}{\$42,361} = 2.661 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794 - \$20,000} = 0.424$$

As a result, both ratios are worse after this entry is recorded.

- d.** Collected accounts receivable of \$1 million.

<i>Journal entry:</i>	Cash	1,000
	Accounts Receivable	1,000

$$\text{Current ratio} = \frac{\$132,706 + \$1,000 - \$1,000}{\$42,361} = 3.133 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794 + \$1,000 - \$1,000} = 0.388$$

This transaction has no effect on total current assets, total assets, or total liabilities, so the ratios do not change.

- e.** Accrued expenses of \$3 million.

<i>Journal entry:</i>	Operating Expenses	3,000
	Accrued Expenses Payable	3,000

$$\text{Current ratio} = \frac{\$132,706}{\$42,361 + \$3,000} = 2.926 \quad \text{Debt ratio} = \frac{\$90,689 + \$3,000}{\$233,794} = 0.401$$

After this entry, current and total liabilities increase while assets remain unchanged, so both ratios are slightly hurt by this accrual.

- f. Recorded depreciation of \$15 million.

<i>Journal entry:</i>	Depreciation Expense	15,000
	Accumulated Depreciation	15,000

No liabilities or current assets are affected, but the credit to Accumulated Depreciation reduces total assets, so the debt ratio increases.

$$\text{Current ratio} = \frac{\$132,706}{\$42,361} = 3.133 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794 - \$15,000} = 0.414$$

- g. Made cash sales of \$30 million.

<i>Journal entry:</i>	Cash	30,000
	Sales Revenue	30,000

These cash sales improve both the current ratio and the debt ratio as follows:

$$\text{Current ratio} = \frac{\$132,706 + \$30,000}{\$42,361} = 3.841 \quad \text{Debt ratio} = \frac{\$90,689}{\$233,794 + \$30,000} = 0.344$$

The following Decision Guidelines summarize the key factors to consider when evaluating a company's debt-paying ability.

◀ DECISION GUIDELINES ▶

EVALUATE DEBT-PAYING ABILITY USING NET WORKING CAPITAL, THE CURRENT RATIO, AND THE DEBT RATIO

In general, a larger amount of net working capital is preferable to a smaller amount. Similarly, a *high* current ratio is preferable to a low current ratio. *Increases* in net working capital and increases in the current ratio improve debt-paying ability. By contrast, a low debt ratio is preferable to a high debt ratio. Improvement in debt-paying ability is indicated by a decrease in the debt ratio.

No single ratio gives the whole picture about a company. Therefore, lenders and investors use many ratios to evaluate a company. Let's apply what we have learned. Suppose you are a loan officer at the Bank of Montreal, and Le Château has asked you for a \$20 million loan to remodel its stores. How will you make this loan decision? The Decision Guidelines show how bankers and investors use two key ratios.

USING NET WORKING CAPITAL AND THE CURRENT RATIO

Decision

How can you measure a company's ability to pay current liabilities with current assets?

Who uses net working capital and the current ratio for decision making?

What are good net working capital and current ratio values?

Guidelines

Net working capital = Total current assets – Total current liabilities

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}}$$

Lenders and other creditors, who must predict whether a borrower can pay its current liabilities.

Investors, who know that a company that cannot pay its debts is not a good investment because it may go bankrupt.

Managers, who must have enough cash to pay the company's current liabilities.

There is no correct answer for this. It depends on the industry as well as the individual entity's ability to quickly generate cash from operations.

An entity with strong operating cash flow can operate successfully with a low amount of net working capital as long as cash comes in through operations at least as fast as accounts payable become due. A current ratio of, say, 1.10–1.20 is sometimes sufficient.

An entity with relatively slow cash flow from operations needs a higher current ratio of, say, 1.30–1.50.

Traditionally, a current ratio of 2.00 was considered ideal. Recently, acceptable values have decreased as companies have been able to operate more efficiently; today, a current ratio of 1.50 is considered strong. Although not ideal, cash-rich companies can operate with a current ratio below 1.0.

USING THE DEBT RATIO

Decision

How can you measure a company's ability to pay total liabilities?

Who uses the debt ratio for decision making?

What is a good debt ratio value?

Guidelines

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

Lenders and other creditors, who must predict whether a borrower can pay its debts.

Investors, who know that a company that cannot pay its debts is not a good investment because it may go bankrupt.

Managers, who must have enough assets to pay the company's debts.

Depends on the industry:

A company with strong cash flow can operate successfully with a high debt ratio of, say, 0.70–0.80.

A company with weak cash flow needs a lower debt ratio of, say, 0.50–0.60.

Traditionally, a debt ratio of 0.50 was considered ideal. Recently, values have increased as companies have been able to operate more efficiently; today, a normal value of the debt ratio is around 0.60–0.70.

SUMMARY OF CHAPTER 3

LEARNING OBJECTIVE

SUMMARY

1. **Explain** how accrual accounting differs from cash-basis accounting

When using the cash basis of accounting, we record only business transactions involving the receipt or payment of cash. All other business transactions are ignored.

In contrast, when using accrual accounting, *the receipt or payment of cash is irrelevant* to deciding whether a business transaction should be recorded. What matters is whether the business has acquired an asset, earned revenue, taken on a liability, or incurred an expense. If it has, the transaction is recorded in the accounting records.

2. **Apply** the revenue and expense recognition principles

According to the revenue recognition principle, a transaction must satisfy *all three* of these conditions before the business can recognize revenue:

1. The control and benefits of the goods have been transferred to the customer, or the services have been provided to the customer.
2. The amount of revenue can be reliably measured.
3. It is probable that the business will receive the economic benefits associated with the transaction, which usually come in the form of cash receipts.

The expense recognition principle sets out the two criteria that must be satisfied before an expense can be recognized:

1. There has been a decrease in future economic benefits caused by a decrease in an asset *or* an increase in a liability.
2. The expense can be reliably measured.

3. **Record** adjusting journal entries

Under accrual accounting, we must record adjusting journal entries at the end of each accounting period to ensure that all assets and liabilities have been recorded at period end, and that all revenues earned and expenses incurred during the period have been included in the accounts.

There are three main types of adjusting entries: deferrals, depreciation (amortization under ASPE), and accruals. Deferrals include adjustments related to transactions for which a business has received or paid cash in advance of delivering or receiving goods and services. Depreciation adjustments are made to expense the benefits of capital assets that have been used up during the period. Accruals include adjustments related to revenues earned or expenses incurred prior to any cash or invoices changing hands.

4. **Prepare** the financial statements

The financial statements can be prepared using the account balances from the adjusted trial balance. The income statement is prepared first, followed by the statement of retained earnings, and then the balance sheet.

A classified balance sheet reports current assets and liabilities separately from their non-current counterparts. A balance sheet prepared using a report format lists assets first, followed by liabilities, and then shareholders' equity. A balance sheet in account format lists assets on the left, and liabilities and shareholders' equity on the right.

A single-step income statement reports all revenue items together, followed by all expense items, whereas a multi-step income statement splits revenues and expenses into two or more categories to highlight important subtotals (e.g., gross profit, income from operations) useful to decision makers.

5. **Record** closing journal entries

At the end of each fiscal year we must record closing entries, which are journal entries that transfer the balances in all revenue, expense, and dividend accounts into the Retained Earnings account. After these entries, all the income statement and dividend accounts have zero balances, leaving them ready to begin tracking revenues, expenses, and dividends for the next fiscal year.

6. **Analyze** and **evaluate** a company's debt-paying ability

We can evaluate a company's debt-paying ability using net working capital, the current ratio, and the debt ratio. A business's net working capital equals its total current assets minus its total current liabilities, and this figure should be sufficiently in excess of zero for a company to avoid debt-paying troubles. The current ratio equals total current assets divided by total current liabilities, so a higher current ratio is correlated with a stronger debt-paying ability. The debt ratio is calculated by dividing total liabilities by total assets, so for this ratio, a lower ratio indicates a higher debt-paying ability.

END-OF-CHAPTER SUMMARY PROBLEM

This problem follows on the mid-chapter summary problem that begins on page 000.

Requirements

1. Make Goldsmith Inc.'s closing entries at December 31, 2014. Explain what the closing entries accomplish and why they are necessary.
2. Post the closing entries to Retained Earnings and compare Retained Earnings' ending balance with the amount reported on the balance sheet on page 000. The two amounts should be the same.
3. Prepare Goldsmith Inc.'s classified balance sheet to identify the company's current assets and current liabilities. (Goldsmith Inc. has no long-term liabilities.) Then compute the company's current ratio and debt ratio at December 31, 2014.
4. The top management of Goldsmith Inc. has asked you for a \$500,000 loan to expand the business. They propose to pay off the loan over a 10-year period. Recompute Goldsmith Inc.'s debt ratio assuming you make the loan. Use the company financial statements plus the ratio values to decide whether to grant the loan at an interest rate of 8%, 10%, or 12%. Goldsmith Inc.'s cash flow is strong. Give the reasoning underlying your decision.

Name: Goldsmith Inc.
Industry: Service corporation
Fiscal Period: Year ended December 31, 2014
Key Fact: Existing, ongoing business

ANSWERS

Requirement 1

To close revenue accounts, debit each revenue account for the amounts reported on the income statement, and credit Retained Earnings for the total of the debits.

To close expense accounts, credit each expense account for the amounts reported on the income statement, and debit Retained Earnings for the total of the credits.

To close the dividend accounts, credit each dividend account for the amounts reported on the statement of retained earnings, and debit Retained Earnings for the total of the credits.

2014	(in thousands)	
Dec. 31	Service Revenue 330	
	Retained Earnings.....	330
31	Retained Earnings.....	259
	Salary Expense	177
	Depreciation Expense—Furniture and Fixtures	20
	Depreciation Expense—Building	10
	Supplies Expense.....	4
	Income Tax Expense.....	35
	Miscellaneous Expense	13
31	Retained Earnings.....	65
	Dividends.....	65

Explanation of Closing Entries

The closing entries set the balance of each revenue, expense, and Dividends account back to zero for the start of the next accounting period. They also add the year's net income to and deduct any dividends declared from Retained Earnings, so this account accurately reflects the earnings that have been retained by the company.

Requirement 2

The balance in the Retained Earnings T-account should equal the Retained Earnings balance reported on the balance sheet.

Retained Earnings			
Clo.	259	Clo.	330
Clo.	65	Bal.	199

The balance in the Retained Earnings account agrees with the amount reported on the balance sheet, as it should.

Requirement 3

Goldsmith Inc.			
Balance Sheet			
As at December 31, 2014			
(amounts in thousands)			
Assets		Liabilities	
Current assets		Current liabilities	
Cash	\$198	Accounts payable	\$380
Accounts receivable	382	Salary payable	5
Supplies.....	<u>2</u>	Unearned service revenue	13
Total current assets	582	Income tax payable	<u>35</u>
Capital assets		Total current liabilities	<u>433</u>
Furniture and fixtures	\$100		
Less Accumulated depreciation.....	<u>(60)</u> 40	Shareholders' Equity	
Building.....	\$250	Common shares	100
Less Accumulated depreciation.....	(140) <u>110</u>	Retained earnings.....	<u>199</u>
Total assets	<u>\$732</u>	Total shareholders' equity.....	<u>299</u>
		Total liabilities and shareholders' equity	<u>\$732</u>

$$\text{Current ratio} = \frac{\$582}{\$433} = 1.34 \quad \text{Debt ratio} = \frac{\$433}{\$732} = 0.59$$

Requirement 4

$$\text{Debt ratio assuming the loan is made} = \frac{\$433 + \$500}{\$732 + \$500} = \frac{\$933}{\$1,232} = 0.76$$

Decision: Make the loan at 10%.

Reasoning: Prior to the loan, the company's financial position and cash flow are strong. The current ratio is in a middle range, and the debt ratio is not too high. Net income (from the income statement) is high in relation to total revenue. Therefore, the company should be able to repay the loan.

The loan will increase the company's debt ratio from 59% to 76%, which is more risky than the company's financial position at present. On this basis, a midrange interest rate appears reasonable—at least as the starting point for the negotiation between Goldsmith Inc. and the bank.

The title must include the name of the company, "Balance Sheet," and the date of the balance sheet. It shows the financial position on one specific date.

The classified balance sheet uses the same accounts and balances as those on page 000. However, segregate current assets (assets expected to be converted to cash within one year) from capital assets, and segregate current liabilities (liabilities expected to be paid or settled within one year) from other liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

You must add \$500,000 to the current liabilities and total assets to account for the additional \$500,000 loan. Factors to consider:

- The debt ratio increase: Creditors prefer a low debt ratio because it means creditors' claims are only a small percentage of total assets.
- Effect on future cash flows: More debt leads to greater debt repayments and greater interest payments in the future.

STOP + THINK (3-1)	ANSWERS	
	<p>1. No, Windsor Group has yet to perform any services, so it cannot recognize revenue. It can begin to recognize revenue as it performs the services the customer has paid for.</p>	<p>2. No, Windsor group has not experienced a decrease in future economic benefits, so it has not incurred an expense. This transaction results in prepaid rent, an asset that will benefit the company over the next three months.</p>

STOP + THINK (3-2)	ANSWERS						
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Supplies Expense (\$5,000 + \$7,000 – \$3,000)</td> <td style="width: 10%; text-align: right;">9,000</td> <td style="width: 10%;"></td> </tr> <tr> <td>Supplies.....</td> <td></td> <td style="text-align: right;">9,000</td> </tr> </table> <p>To adjust supplies at period end. The ending balance in the Supplies account is \$3,000, the value of supplies on hand at the end of the month.</p>		Supplies Expense (\$5,000 + \$7,000 – \$3,000)	9,000		Supplies.....	
Supplies Expense (\$5,000 + \$7,000 – \$3,000)	9,000						
Supplies.....		9,000					

STOP + THINK (3-3)	ANSWERS	
	<p>$\\$16,500 - \\$275 - \\$275 = \\$15,950.$</p>	

STOP + THINK (3-4)	ANSWERS						
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Interest Receivable</td> <td style="width: 10%; text-align: right;">125</td> <td style="width: 10%;"></td> </tr> <tr> <td>Interest Revenue</td> <td></td> <td style="text-align: right;">125</td> </tr> </table> <p>To accrue interest revenue.</p>		Interest Receivable	125		Interest Revenue	
Interest Receivable	125						
Interest Revenue		125					

Review Accrual Accounting and Income

QUICK CHECK (ANSWERS ARE GIVEN ON PAGE 000.)

- On September 1, LostForest Apartments Ltd. received \$3,600 from a tenant for three months' rent. The receipt was credited to Unearned Rent Revenue. What adjusting entry is needed on September 30?
 - Unearned Rent Revenue 2,400
Rent Revenue..... 2,400
 - Rent Revenue 1,200
Unearned Rent Revenue 1,200
 - Unearned Rent Revenue 1,200
Rent Revenue..... 1,200
 - Cash..... 1,200
Rent Revenue..... 1,200
- The following normal balances appear on the *adjusted* trial balance of Ojibway Industries:

Equipment	\$90,000
Accumulated depreciation, equipment	15,000
Depreciation expense, equipment.....	5,000

The carrying amount of the equipment is

- \$85,000
 - \$70,000
 - \$75,000
 - \$60,000
- Jones Company Ltd. purchased supplies for \$1,000 during 2014. At year-end Jones had \$300 of supplies left. The company had no supplies at the beginning of the year. The adjusting entry should
 - debit Supplies, \$700
 - debit Supplies Expense, \$700
 - credit Supplies, \$300
 - debit Supplies, \$300
 - The accountant for Moreau Ltd. failed to make the adjusting entry to record depreciation for the current year. The effect of this error is
 - assets are overstated; shareholders' equity and net income are understated.
 - assets and expenses are understated, and net income is understated.
 - net income is overstated, and liabilities are understated.
 - assets, net income, and shareholders' equity are all overstated.
 - Interest due on a loan payable at December 31 equals \$125. What adjusting entry is required to accrue this expense?
 - Dr. Interest Payable for \$125, Cr. Interest Expense for \$125
 - Dr. Interest Expense for \$125, Cr. Cash for \$125
 - Dr. Interest Receivable for \$125, Cr. Interest Revenue for \$125
 - Dr. Interest Expense for \$125, Cr. Interest Payable for \$125
 - If a real estate company fails to accrue commission revenue,
 - liabilities are overstated, and owners' equity is understated.
 - assets are understated, and net income is understated.
 - net income is understated, and shareholders' equity is overstated.
 - revenues are understated, and net income is overstated.
 - All of the following statements are true except one. Which statement is false?
 - Adjusting entries are required for a business that uses the cash basis.
 - Accrual accounting produces better information than cash-basis accounting.
 - Expenses are identified and recorded as they are incurred and deducted from revenue earned during the same period.
 - A fiscal year does not have to end on December 31.

Accounting Vocabulary

- account format** a balance sheet format that lists assets on the left side and liabilities above shareholders' equity on the right side. (p. 000)
- accrual** An adjustment related to revenues earned or expenses incurred prior to any cash or invoice changing hands. (p. 000)
- accrual accounting** A basis of accounting that records transactions based on whether a business has acquired an asset, earned revenue, taken on a liability, or incurred an expense, regardless of whether cash is involved. (p. 000)
- accrued expense** An expense that has been incurred but not yet paid or invoiced. (p. 000)
- accrued revenue** A revenue that has been earned but not yet collected or invoiced. (p. 000)
- accumulated depreciation** The account showing the cumulative sum of all depreciation expense from the date of acquiring a capital asset. (p. 000)
- adjusted trial balance** A list of all the ledger accounts with their adjusted balances. (p. 000)
- carrying amount (of a capital asset)** The asset's cost minus accumulated depreciation. (p. 000)
- cash-basis accounting** Accounting that records only transactions in which cash is received or paid. (p. 000)
- classified balance sheet** A balance sheet that shows current assets separate from long-term assets, and current liabilities separate from long-term liabilities. (p. 000)
- closing entries** Entries that transfer the revenue, expense, and dividend balances from these respective accounts to the Retained Earnings account. (p. 000)
- contra account** An account that always has a companion account and whose normal balance is opposite that of the companion account. (p. 000)
- current ratio** Current assets divided by current liabilities. Measures a company's ability to pay current liabilities with current assets. (p. 000)
- debt ratio** Ratio of total liabilities to total assets. States the proportion of a company's assets that is financed with debt. (p. 000)
- deferral** An adjustment related to a transaction for which a business has received or paid cash in advance of delivering or receiving goods or services. (p. 000)
- depreciation** Allocation of the cost of a capital asset over its useful life. (p. 000)
- liquidity** Measure of how quickly an item can be converted to cash. (p. 000)
- long-term liability** A liability that is not a current liability. (p. 000)
- multi-step income statement** An income statement that contains subtotals to highlight important relationships between revenues and expenses. (p. 000)
- net working capital** [definition to come]
- permanent accounts** Assets, liabilities, and shareholders' equity. (p. 000)
- report format** A balance sheet format that lists assets at the top, followed by liabilities and then shareholders' equity. (p. 000)
- single-step income statement** Lists all revenues together and all expenses together; there is only one step in arriving at net income. (p. 000)
- temporary accounts** Revenue and expenses related to a limited period. (p. 000)
- unearned revenue** A liability that arises when a business receives cash from a customer prior to providing the related goods or services. (p. 000)

Assess Your Progress

MyAccountingLab

Make the grade with MyAccountingLab: The exercises and problems in this chapter can be found on MyAccountingLab at www.myaccountinglab.com. You can practise them as often as you want, and they feature step-by-step guided solutions to help you find the right answer.

SHORT EXERCISES

LEARNING OBJECTIVE 1

Explaining how accrual accounting differs from cash-basis accounting

S3-1 Marquis Inc. made sales of \$700 million during 2014. Of this amount, Marquis Inc. collected cash for all but \$30 million. The company's cost of goods sold was \$300 million, and all other expenses for the year totalled \$350 million. Also during 2014, Marquis Inc. paid \$400 million for its inventory and \$280 million for everything else. Beginning cash was \$100 million. Marquis Inc.'s top management is interviewing you for a job and you are asked two questions:

- How much was Marquis Inc.'s net income for 2014?
- How much was Marquis Inc.'s cash balance at the end of 2014?

LEARNING OBJECTIVE 1

Explaining how accrual accounting differs from cash-basis accounting

S3-2 Great Sporting Goods Inc. began 2014 owing notes payable of \$4.0 million. During 2014, the company borrowed \$2.6 million on notes payable and paid off \$2.5 million of notes payable from prior years. Interest expense for the year was \$1.0 million, including \$0.2 million of interest payable accrued at December 31, 2014. Show what Great Sporting Goods Inc. should report for these facts on the following financial statements:

- | | |
|--------------------|------------------|
| • Income Statement | • Balance Sheet |
| Interest expense | Notes payable |
| | Interest payable |

LEARNING OBJECTIVE 2

Applying the revenue and expense recognition principles

S3-3 Ford Canada sells large fleets of vehicles to auto rental companies, such as Budget and Avis. Suppose Budget is negotiating with Ford to purchase 1,000 Explorers. Write a short paragraph to explain to Ford when the company should, and should not, record this sales revenue and the related cost of goods sold.

LEARNING OBJECTIVE 3

Recording journal entry adjustments

S3-4 Answer the following questions about prepaid expenses:

- On November 1, World Travel Ltd. prepaid \$6,000 for three months' rent. Give the adjusting entry to record rent expense at December 31. Include the date of the entry and an explanation. Then post all amounts to the two accounts involved, and show their balances at December 31. World Travel adjusts the accounts only at December 31.
- On December 1, World Travel paid \$800 for supplies. At December 31, World Travel has \$500 of supplies on hand. Make the required journal entry at December 31. Post all accounts to the accounts and show their balances at December 31.

LEARNING OBJECTIVE 1 3

Recording depreciation; cash flows

S3-5 Suppose that on January 1, Roots Ltd. paid cash of \$30,000 for computers that are expected to remain useful for three years. At the end of three years, the computers' values are expected to be zero.

- Make journal entries to record (a) the purchase of the computers on January 1, and (b) the annual depreciation on December 31. Include dates and explanations, and use the following accounts: Computer Equipment; Accumulated Depreciation—Computer Equipment; and Depreciation Expense—Computer Equipment.
- Post to the accounts and show their balances at December 31.
- What is the computers' carrying amount at December 31?
- Which account(s) will Roots report on the income statement for the year? Which accounts will appear on the balance sheet of December 31? Show the amount to report for each item on both financial statements.

LEARNING OBJECTIVE 2

Applying the revenue and expense recognition principles

S3-6 During 2014, Many Miles Trucking paid salary expense of \$40 million. At December 31, Many Miles accrued salary expense of \$2 million. Many Miles paid \$1.9 million to its employees on January 3, 2015, the company's next payday after the end of the 2014 year. For this sequence of transactions, show what Many Miles would include on its 2014 income statement and its balance sheet at the end of 2014.

LEARNING OBJECTIVE 1

Accruing and paying interest expense

S3-7 Schwartz & Associates Inc. borrowed \$100,000 on October 1 by signing a note payable to Scotiabank. The interest expense for each month is \$500. The loan agreement requires Schwartz & Associates Inc. to pay interest on December 31.

- Make Schwartz & Associates Inc.'s adjusting entry to accrue interest expense and interest payable at October 31, at November 30, and at December 31. Date each entry and include its explanation.
- Post all three entries to the Interest Payable account. You need not take the balance of the account at the end of each month.
- Record the payment of three months' interest at December 31.

LEARNING OBJECTIVE 3

Accruing and receiving cash from interest revenue

S3-8 Return to the situation in S3-7. Here you are accounting for the same transactions on the books of Scotiabank, which lent the money to Schwartz & Associates Inc. Perform all three steps in S3-7 for Scotiabank using the bank's own accounts.

LEARNING OBJECTIVE 3

Explaining unearned revenues

S3-9 Write a paragraph explaining why unearned revenues are liabilities instead of revenues. In your explanation, use the following actual example: *Maclean's* magazine collects cash from

subscribers in advance and later delivers magazines to subscribers over a one-year period. Explain what happens to the unearned subscription revenue over the course of a year as *Maclean's* delivers magazines to subscribers. Into what account does the unearned subscription revenue go as *Maclean's* delivers magazines?

Give the journal entries that *Maclean's* would make to:

- a. Collect \$40,000 of subscription revenue in advance.
- b. Record earning \$10,000 of subscription revenue.

Include an explanation for each entry, as illustrated in the chapter.

S3-10 Birdie Golf Ltd. prepaid three months' rent (\$6,000) on January 1. At March 31, Birdie prepared a trial balance and made the necessary adjusting entry at the end of the quarter. Birdie adjusts its accounts every quarter of the fiscal year, which ends December 31.

What amount appears for Prepaid Rent on

- a. Birdie's unadjusted trial balance at March 31?
- b. Birdie's adjusted trial balance at March 31?

What amount appears for Rent Expense on

- a. Birdie's unadjusted trial balance at March 31?
- b. Birdie's adjusted trial balance at March 31?

S3-11 Josie Inc. collects cash from customers two ways:

1. **Accrued Revenue.** Some customers pay Josie after Josie has performed service for the customer. During 2014, Josie made sales of \$50,000 on account and later received cash of \$40,000 on account from these customers.
2. **Unearned Revenue.** A few customers pay Josie in advance, and Josie later performs service for the customer. During 2014, Josie collected \$7,000 cash in advance and later earned \$6,000 of this amount.

Journalize the following for Josie:

- a. Earning service revenue of \$50,000 on account and then collecting \$40,000 on account
- b. Receiving \$7,000 in advance and then earning \$6,000 as service revenue

Explanations are not required.

S3-12 Entertainment Centre Ltd. reported the following data at March 31, 2013, with amounts adapted and in thousands:

Retained earnings, March 31, 2013.....	\$ 1,300	Cost of goods sold.....	\$126,000
Accounts receivable.....	27,700	Cash.....	900
Net revenues.....	174,500	Property and equipment, net....	7,200
Total current liabilities.....	53,600	Common shares.....	26,000
All other expenses.....	45,000	Inventories.....	33,000
Other current assets.....	4,800	Long-term liabilities.....	13,500
Other assets.....	24,300	Dividends.....	0

You are the CFO responsible for reporting Entertainment Centre Ltd. (ECL) results. Use these data to prepare ECL's income statement for the year ended March 31, 2013, the statement of retained earnings for the year ended March 31, 2013, and the classified balance sheet at March 31, 2013. Use the report format for the balance sheet. Draw arrows linking the three statements to explain the information flows between the statements.

S3-13 Use the Entertainment Centre Ltd. data in S3-12 to make the company's closing entries at March 31, 2014. Then set up a T-account for Retained Earnings and post to that account. Compare Retained Earnings' ending balance to the amount reported on ECL's statement of retained earnings and balance sheet. What do you find? Why is this important?

LEARNING OBJECTIVE 4

Reporting prepaid expenses

LEARNING OBJECTIVE 3

Updating the accounts

LEARNING OBJECTIVE 4

Preparing the financial statements

LEARNING OBJECTIVE 6

Using the financial statements in decision making

LEARNING OBJECTIVE 6

Using the financial statements

S3-14 Use the Entertainment Centre Ltd. data in S3-12 to compute ECI's

- a. Current ratio
- b. Debt ratio

Round to two decimal places. Report to the CEO whether these values look strong, weak, or middle-of-the-road.

LEARNING OBJECTIVE 6

Using the financial statements

S3-15 Use the Entertainment Centre Ltd. data in S3-12 to answer the following questions.

1. Was the net revenue high enough to cover all of ECI's cost?
2. What could you do to improve this situation?

EXERCISES

LEARNING OBJECTIVE 1

Relating accrual accounting and cash flows

E3-16 During 2014, Organic Foods Inc. made sales of \$4,000 (assume all on account) and collected cash of \$4,100 from customers. Operating expenses totalled \$800, all paid in cash. At December 31, 2014, Organic Foods' customers owed the company \$400. Organic Foods owed creditors \$700 on account. All amounts are in millions.

1. For these facts, show what Organic Foods Inc. would report on the following 2014 financial statements:
 - Income statement
 - Balance sheet
2. Suppose Organic Foods had used cash-basis accounting. What would Organic Foods Ltd. have reported for these facts?

LEARNING OBJECTIVE 1

Relating accrual accounting and cash flows

E3-17 During 2014, Valley Sales Inc. earned revenues of \$500,000 on account. Valley Sales collected \$410,000 from customers during the year. Expenses totalled \$420,000, and the related cash payments were \$400,000. Show what Valley Sales would report on its 2014 income statement under the

- a. Cash basis
- b. Accrual basis

Compute net income under both bases of accounting. Which basis measures net income more appropriately? Explain your answer.

LEARNING OBJECTIVE 1 2

Recognizing revenue and recording expenses under accrual basis of accounting

E3-18 During 2014, Dish Networks Inc. earned revenues of \$700 million. Expenses totalled \$540 million. Dish collected all but \$20 million of the revenues and paid \$530 million on its expenses. Dish's top managers are evaluating the year, and they ask you the following questions:

- a. Under accrual accounting, what amount of revenue should the company report for 2014? Is the \$700 million revenue earned or is it the amount of cash actually collected?
- b. Under accrual accounting, what amount of total expense should Dish report for the year—\$540 million or \$530 million?
- c. Which financial statement reports revenues and expenses? Which statement reports cash receipts and cash payments?

LEARNING OBJECTIVE 2

Recognizing revenue and recording expenses

E3-19 Write a short paragraph to explain in your own words the concept of depreciation as used in accounting.

LEARNING OBJECTIVE 2

Recognizing revenue and recording expenses

E3-20 Answer each of the following questions.

- a. \$20,000 during the current month, but were not paid until the following month. Should the employer record any expenses at the end of the current month?
- b. The current year has been a poor one, so the business is planning to delay the recording of some expenses until they are paid early the following year. Is this acceptable?

- c. A dentist performs a surgical operation and bills the patient's insurance company. It may take three months to collect from the insurance company. Should the dentist record revenue now or wait until cash is collected?
- d. A construction company is building a highway system, and construction will take three years. How do you think it should record the revenue it earns—over the year or over three years?
- e. A utility bill is received on December 30 and will be paid next year. When should the company record utility expense?

E3-21 An accountant made the following adjustments at December 31, the end of the accounting period:

- a. Prepaid insurance, beginning, \$700. Payments for insurance during the period, \$2,100. Prepaid insurance, ending, \$800.
- b. Interest revenue accrued, \$900.
- c. Unearned service revenue, beginning, \$800. Unearned service revenue, ending, \$300.
- d. Depreciation, \$6,200.
- e. Employees' salaries owed for three days of a five-day work week; weekly payroll, \$9,000.
- f. Income before income tax expense, \$20,000. Income tax rate is 25%.

Required

- 1. Journalize the adjusting entries.
- 2. Suppose the adjustments were not made. Compute the overall overstatement or understatement of net income as a result of the omission of these adjustments.

E3-22 Green Leaf Fertilizer Ltd. experienced four situations for its supplies. Compute the amounts indicated by question marks for each situation. For situations 1 and 2, journalize the needed transaction. Consider each situation separately.

	Situation			
	1	2	3	4
Beginning supplies	\$ 500	\$1,000	\$ 300	\$ 900
Payments for supplies during the year	?	3,100	?	1,100
Total amount to account for	\$1,300	?	?	2,000
Ending supplies.....	400	500	700	?
Supplies expense.....	\$ 900	\$?	\$ 700	\$1,400

E3-23 Clark Motors Ltd. faced the following situations. Journalize the adjusting entry needed at year-end (December 31, 2014) for each situation. Consider each fact separately.

- a. The business has interest expense of \$9,000 early in January 2015.
- b. Interest revenue of \$3,000 has been earned but not yet received.
- c. When the business collected \$12,000 in advance three months ago, the accountant debited Cash and credited Unearned Revenue. The client was paying for two cars, one delivered in December, the other to be delivered in February 2015.
- d. Salary expense is \$1,000 per day—Monday through Friday—and the business pays employees each Friday. For example purposes, assume that this year, December 31 falls on a Tuesday.
- e. The unadjusted balance of the Supplies account is \$3,100. The total cost of supplies on hand is \$800.
- f. Equipment was purchased at the beginning of this year at a cost of \$60,000. The equipment's useful life is five years. Record the depreciation for this year and then determine the equipment's carrying amount.

E3-24 The accounting records of Lalonde Ltée include the following unadjusted balances at May 31: Accounts Receivable, \$1,300; Supplies, \$900; Salary Payable, \$0; Unearned Service

LEARNING OBJECTIVE 1 3

Journalizing adjusting entries and analyzing their effects on net income; accrual versus cash basis

LEARNING OBJECTIVE 2 3

Allocating supplies cost to the asset and the expenses, adjusting the accounts

LEARNING OBJECTIVE 3

Journalizing adjusting entries

LEARNING OBJECTIVE 3

Making adjustments in T-accounts

Revenue, \$800; Service Revenue, \$14,400; Salary Expense, \$4,200; Supplies Expense, \$0. As Lalonde’s accountant you have developed the following data for the May 31 adjusting entries:

- a. Supplies on hand, \$300
- b. Salary owed to employees, \$2,000
- c. Service revenue accrued, \$600
- d. Unearned service revenue that has been earned, \$700

Open the foregoing T-accounts with their beginning balances. Then record the adjustments directly in the accounts, keying each adjustment amount by letter. Show each account’s adjusted balance. Journal entries are not required.

LEARNING OBJECTIVE 4
Preparing the financial statements

E3-25 The adjusted trial balance of Honeybee Hams Inc. follows.

Honeybee Hams Inc.		
Adjusted Trial Balance		
December 31, 2014		
(in thousands)	Adjusted Trial Balance	
	Debit	Credit
Cash	\$ 3,300	
Accounts receivable	1,800	
Inventories	1,100	
Prepaid expenses	1,900	
Capital assets	6,600	
Accumulated depreciation		\$ 2,400
Other assets	9,900	
Accounts payable		7,700
Income tax payable		600
Other liabilities		2,200
Common shares		4,900
Retained earnings (December 31, 2013)		4,500
Dividends	1,700	
Sales revenue		41,000
Cost of goods sold	25,000	
Selling, administrative, and general expense	10,000	
Income tax expense	2,000	
	\$63,300	\$63,300

Required

Prepare Honeybee Hams’ income statement and statement of retained earnings for the year ended December 31, 2014, and its balance sheet on that date. Draw arrows linking the three statements.

LEARNING OBJECTIVE 3
Measuring financial statement amounts

E3-26 The adjusted trial balances of Tower Development Inc. for March 31, 2013, and March 31, 2014, include these amounts (in millions):

	2014	2013
Receivables	\$300	\$200
Prepaid insurance	180	110
Accrued liabilities (for other operating expenses)	700	600

Tower Development completed these transactions during the year ended March 31, 2014.

Collections from customers	\$20,800
Payment of prepaid insurance	400
Cash payments for other operating expenses	4,100

Compute the amount of sales revenue, insurance expense, and other operating expense to report on the income statement for the year ended March 31, 2014.

E3-27 This question deals with the items and the amounts that two entities, Mountain Services Inc. (Mountain) and City of Squamish (Squamish), should report in their financial statements.

- On March 31, 2014, Mountain collected \$12,000 in advance from Squamish, a client. Under the contract, Mountain is obligated to provide consulting services for Squamish evenly during the year ended March 31, 2014. Assume you are Mountain.

Mountain's income statement for the year ended December 31, 2014, will report _____ of \$_____.

Mountain's balance sheet at December 31, 2014, will report _____ of \$_____.

- Assume that you are Squamish. Squamish's income statement for the year ended December 31, will report _____ of \$_____.

Squamish's balance sheet at December 31, 2014, will report _____ of \$_____.

E3-28 This exercise builds from a simple situation to a slightly more complex situation. Rogers, a wireless phone service provider, collects cash in advance from customers. All amounts are in millions.

Assume Rogers collected \$400 in advance during 2014 and at year-end still owed customers phone service worth \$90.

Required

- Show what Rogers will report for 2014 on its
 - Income statement
 - Balance sheet
- Use the same facts for Rogers as in Requirement 1. Further, assume Rogers reported unearned service revenue of \$80 at the end of 2013. Show what Rogers will report for 2014 on the same financial statements. Explain why your answer differs from your answer to Requirement 1.

E3-29 Prepare the required closing entries for the following selected accounts from the records of SouthWest Transport Inc. at December 31, 2014 (amounts in thousands):

Cost of services sold	\$11,600	Service revenue.....	\$23,600
Accumulated depreciation	17,800	Depreciation expense.....	4,100
Selling, general, and administrative expense	6,900	Other revenue	600
Retained earnings, December 31, 2010.....	1,900	Income tax expense	400
		Dividends.....	400
		Income tax payable.....	300

How much net income did SouthWest Transport Inc. earn during the year ended December 31, 2014? Prepare a T-account for Retained Earnings to show the December 31, 2014, balance of Retained Earnings.

LEARNING OBJECTIVE 4

Reporting on the financial statements

LEARNING OBJECTIVE 1 3

Relating deferrals and cash flows

LEARNING OBJECTIVE 5

Closing the accounts

LEARNING OBJECTIVE 3 5

Identifying and recording adjusting and closing entries

E3-30 The unadjusted trial balance and income statement amounts from the December 31, 2014, adjusted trial balance of Yosaf Portraits Ltd. are given below.

Yosaf Portraits Ltd. Trial Balance December 31, 2014				
Account Title	Unadjusted Trial Balance		From the Adjusted Trial Balance	
Cash	10,200			
Prepaid rent	1,100			
Equipment	32,100			
Accumulated depreciation		3,800		
Accounts payable		4,600		
Salary payable				
Unearned service revenue		8,400		
Income tax payable				
Note payable, long term		10,000		
Common shares		8,700		
Retained earnings		1,300		
Dividends	1,000			
Service revenue		12,800		19,500
Salary expense	4,000		4,900	
Rent expense	1,200		1,400	
Depreciation expense			300	
Income tax expense			1,600	
	<u>49,600</u>	<u>49,600</u>	<u>8,200</u>	<u>19,500</u>
Net income			<u>11,300</u>	<u>19,500</u>
			<u>19,500</u>	<u>19,500</u>

Required

Journalize the adjusting and closing entries of Yosaf Portraits Ltd. at December 31, 2014. There was only one adjustment to Service Revenue.

LEARNING OBJECTIVE 4 6

Preparing a classified balance sheet and using the financial statements

E3-31 Refer to exercise E3-30.

Required

- After solving E3-30, use the data in that exercise to prepare Yosaf Portraits Ltd.'s classified balance sheet at December 31, 2014. Use the report format. First you must compute the adjusted balance for several balance sheet accounts.
- Compute Yosaf Portraits Ltd.'s current ratio and debt ratio at December 31, 2014. A year ago, the current ratio was 1.55 and the debt ratio was 0.45. Indicate whether the company's ability to pay its debts—both current and total—improved or deteriorated during the current year.

LEARNING OBJECTIVE 6

Using the financial statements

E3-32 Le Gasse Inc. reported this information at December 31:

	2014	2013	2012
Current assets	\$ 20	\$ 15	\$ 8
Total assets	50	57	35
Current liabilities	10	8	6
Total liabilities	20	20	10
Sales revenue	204	190	175
Net income	28	20	25

Required

- Using this information, calculate the current ratio and the debt ratio for 2014, 2013, and 2012.
- Explain whether each ratio improved or deteriorated over the three years. In each case, what does your answer indicate?

SERIAL EXERCISE

Exercise E3-33 continues the Web Marketing Services Inc. situation begun in exercise E2-25 of Chapter 2 (p. 000) .

E3-33

Refer to exercise E2-25 of Chapter 2. Start from the trial balance and the posted T-accounts prepared at January 18, 2014. Later in January, the business completed these transactions:

LEARNING OBJECTIVE **3 4 5 6**

Adjusting the accounts, preparing the financial statements, closing the accounts, and using financial statements to evaluate the business

2014		
Jan.	21	Received \$900 in advance for marketing work to be performed evenly over the next 30 days
	21	Hired a secretary to be paid on the 15th day of each month
	26	Paid \$900 on account
	28	Collected \$600 on account
	31	Declared and paid dividends of \$1,000

Required

- Open these T-accounts: Accumulated Depreciation—Equipment, Accumulated Depreciation—Furniture, Salary Payable, Unearned Service Revenue, Retained Earnings, Depreciation Expense—Equipment, Depreciation Expense—Furniture, and Supplies Expense. Also, use the T-accounts opened for exercise E2-25.
- Journalize the transactions of January 21 through 31.
- Post the January 21 to January 31 transactions to the T-accounts, keying all items by date. Denote account balances as Bal.
- Prepare a trial balance at January 31. Also, set up columns for the adjustments and for the adjusted trial balance, as illustrated in Exhibit 3-43, on page 000.
- At January 31, the following information is gathered for the adjusting entries:
 - Accrued service revenue, \$1,000
 - Earned \$300 of the service revenue collected in advance on January 21
 - Supplies on hand, \$300
 - Depreciation expense—equipment, \$100; furniture, \$200
 - Accrued expense for secretary's salary, \$1,000

Make these adjustments directly in the adjustments columns and complete the adjusted trial balance at January 31, 2014.

- Journalize and post the adjusting entries. Denote each adjusting amount as Adj. and an account balance as Bal.
- Prepare the income statement and statement of retained earnings of Web Marketing Services Inc. for the month ended January 31, 2014, and the classified balance sheet at that date. Draw arrows to link the financial statements.
- Journalize and post the closing entries at January 31, 2014. Denote each closing amount as Clo. and an account balance as Bal.
- Using the information you have prepared, compute the current ratio and the debt ratio of Web Marketing Services Inc. (to two decimals) and evaluate these ratio values as indicative of a strong or weak financial position.

CHALLENGE EXERCISES

LEARNING OBJECTIVE 3 4 6

Computing financial statement amounts, using the financial statements

E3-34 Valley Bleu Ltée reported the following current accounts at December 31, 2013 (amounts in thousands):

a. Cash	\$1,700
b. Receivables.....	5,600
c. Inventory.....	1,800
d. Prepaid expenses.....	800
e. Accounts payable.....	2,400
f. Unearned revenue.....	1,200
g. Accrued expenses payable	1,700

During 2014, Valley Bleu completes these transactions:

- Used inventory of \$3,800
- Sold services on account, \$6,500
- Depreciation expense, \$400
- Paid for accrued expenses, \$500
- Collected from customers on account, \$7,500
- Accrued expenses, \$1,300
- Purchased inventory of \$3,500 on account
- Paid on account, \$5,000
- Used up prepaid expenses, \$600

Compute Valley Bleu’s current ratio at December 31, 2013, and again at December 31, 2014. Did the current ratio improve or deteriorate during 2014? Comment on the company’s current ratio.

LEARNING OBJECTIVE 3 4

Computing financial statement amounts

E3-35 The accounts of Maritime Specialists Ltd. prior to the year-end adjustments are given below.

Cash.....	\$ 4,000	Common shares	\$ 10,000
Accounts receivable	7,000	Retained earnings	43,000
Supplies	4,000	Dividends.....	16,000
Prepaid insurance.....	3,000	Service revenue	155,000
Building	107,000	Salary expense.....	32,000
Accumulated depreciation—building.....	14,000	Depreciation expense—building..	
Land.....	51,000	Supplies expense	
Accounts payable	6,000	Insurance expense	
Salary payable		Advertising expense.....	7,000
Unearned service revenue.....	5,000	Utilities expense	2,000

Adjusting data at the end of the year include:

- a. Unearned service revenue that has been earned, \$1,000
- b. Accrued service revenue, \$2,000
- c. Supplies used in operations, \$3,000
- d. Accrued salary expense, \$3,000
- e. Prepaid insurance expired, \$1,000
- f. Depreciation expense, building, \$2,000

Jon Whale, the principal shareholder, has received an offer to sell Maritime Specialists. He needs to know the following information within one hour:

- a. Net income for the year covered by these data
- b. Total assets
- c. Total liabilities

- d. Total shareholders' equity
 e. Proof that Total assets = Total liabilities + Total shareholders' equity, after all items are updated

Required

Without opening any accounts, making any journal entries, or using a worksheet, provide Whale with the requested information. The business is not subject to income tax. Show all computations.

QUIZ

Test your understanding of accrual accounting by answering the following questions. Select the best choice from among the possible answers given.

Questions 36 through 38 are based on the following facts:

Freddie Handel began a music business in July 2014. Handel prepares monthly financial statements and uses the accrual basis of accounting. The following transactions are Handel Company's only activities during July through October:

July 14	Bought music on account for \$10, with payment to the supplier due in 90 days
Aug. 3	Performed a job on account for Joey Bach for \$25, collectible from Bach in 30 days. Used up all the music purchased on July 14
Sept. 16	Collected the \$25 receivable from Bach
Oct. 22	Paid the \$10 owed to the supplier from the July 14 transaction

Q3-36 In which month should Handel record the cost of the music as an expense?

- a. July
 b. August
 c. September
 d. October

Q3-37 In which month should Handel report the \$25 revenue on its income statement?

- a. July
 b. August
 c. September
 d. October

Q3-38 If Handel Company uses the *cash* basis of accounting instead of the accrual basis, in what month will Handel report revenue and in what month will it report expense?

- | Revenue | Expense |
|--------------|---------|
| a. September | October |
| b. September | July |
| c. August | October |
| d. September | August |

Q3-39 In which month should revenue be recorded?

- a. in the month that goods are ordered by the customer
 b. in the month that goods are shipped to the customer
 c. in the month that the invoice is mailed to the customer
 d. in the month that cash is collected from the customer

Q3-40 On January 1 of the current year, Aladdin Company paid \$600 rent to cover six months (January through June). Aladdin recorded this transaction as follows:

Prepaid Rent	600	
Cash		600

Aladdin adjusts the accounts at the end of each month. Based on these facts, the adjusting entry at the end of January should include

- a. a credit to Prepaid Rent for \$500.
- b. a debit to Prepaid Rent for \$500.
- c. a debit to Prepaid Rent for \$100.
- d. a credit to Prepaid Rent for \$100.

Q3-41 Assume the same facts as in the previous problem. Aladdin’s adjusting entry at the end of February should include a debit to Rent Expense in the amount of

- a. \$0
- b. \$500
- c. \$200
- d. \$100

Q3-42 What effect does the adjusting entry in Question 3-41 have on Aladdin’s net income for February?

- a. increase by \$100
- b. increase by \$200
- c. decrease by \$100
- d. decrease by \$200

Q3-43 An adjusting entry recorded March salary expense that will be paid in April. Which statement best describes the effect of this adjusting entry on the company’s accounting equation at the end of March?

- a. Assets are not affected, liabilities are decreased, and shareholders’ equity is decreased.
- b. Assets are decreased, liabilities are increased, and shareholders’ equity is decreased.
- c. Assets are not affected, liabilities are increased, and shareholders’ equity is decreased.
- d. Assets are decreased, liabilities are not affected, and shareholders’ equity is decreased.

Q3-44 On April 1, 2014, Metro Insurance Company sold a one-year insurance policy covering the year ended April 1, 2015. Metro collected the full \$1,200 on April 1, 2014. Metro made the following journal entry to record the receipt of cash in advance:

Cash	1,200	
Unearned Revenue		1,200

Nine months have passed, and Metro has made no adjusting entries. Based on these facts, the adjusting entry needed by Metro at December 31, 2014, is

- a.

Unearned Revenue	300	
Insurance Revenue		300
- b.

Insurance Revenue	300	
Unearned Revenue		300
- c.

Unearned Revenue	900	
Insurance Revenue		900
- d.

Insurance Revenue	900	
Unearned Revenue		900

Q3-45 The Unearned Revenue account of Dean Incorporated began 2014 with a normal balance of \$5,000 and ended 2014 with a normal balance of \$12,000. During 2014, the Unearned Revenue account was credited for \$19,000 that Dean will earn later. Based on these facts, how much revenue did Dean earn in 2014?

- a. \$5,000
- b. \$19,000
- c. \$24,000
- d. \$12,000

Q3-46 What is the effect on the financial statements of *recording* depreciation on equipment?

- a. Assets are decreased, but net income and shareholders’ equity are not affected.
- b. Net income, assets, and shareholders’ equity are all decreased.
- c. Net income and assets are decreased, but shareholders’ equity is not affected.
- d. Net income is not affected, but assets and shareholders’ equity are decreased.

Q3-47 For 2014, Monterrey Company had revenues in excess of expenses. Which statement describes Monterrey's closing entries at the end of 2014?

- Revenues will be debited, expenses will be credited, and retained earnings will be debited.
- Revenues will be credited, expenses will be debited, and retained earnings will be debited.
- Revenues will be debited, expenses will be credited, and retained earnings will be credited.
- Revenues will be credited, expenses will be debited, and retained earnings will be credited.

Q3-48 Which of the following accounts would *not* be included in the closing entries?

- Accumulated Depreciation
- Service Revenue
- Depreciation Expense
- Retained Earnings

Q3-49 A major purpose of preparing closing entries is to

- zero out the liability accounts.
- close out the Supplies account.
- adjust the asset accounts to their correct current balances.
- update the Retained Earnings account.

Q3-50 Selected data for Austin Company follow:

Current assets.....	\$50,000	Current liabilities.....	\$40,000
Capital assets.....	70,000	Long-term liabilities.....	35,000
Total revenues.....	30,000	Total expenses.....	20,000

Based on these facts, what are Austin's ratios?

- | Current ratio | Debt ratio |
|----------------------|-------------------|
| a. 2 to 1 | 0.5 to 1 |
| b. 0.83 to 1 | 0.5 to 1 |
| c. 1.25 to 1 | 0.625 to 1 |
| d. 2 to 1 | 0.633 to 1 |

PROBLEMS

(Group A)

P3-51A Lewitas Ltd. earned revenues of \$35 million during 2014 and ended the year with income of \$8 million. During 2014, Lewitas Ltd. collected \$33 million from customers and paid cash for all of its expenses plus an additional \$1 million for accounts payable. Answer these questions about Lewitas's operating results, financial position, and cash flows during 2014:

Required

- How much were the company's total expenses? Show your work.
- Identify all the items that Lewitas will report on its 2014 income statement. Show each amount.
- Lewitas began 2014 with receivables of \$4 million. All sales were on account. What was the company's receivables balance at the end of 2014? Identify the appropriate financial statement, and show how Lewitas will report ending receivables in the 2014 annual report.
- Lewitas began 2014 owing accounts payable totalling \$9 million. How much in accounts payable did the company owe at the end of the year? Identify the appropriate financial statement, and show how Lewitas will report these accounts payable in its 2014 annual report.

LEARNING OBJECTIVE 1

Relating accrual accounting and cash flows

LEARNING OBJECTIVE 1

Explaining cash basis versus accrual basis

P3-52A Prairies Consultants Inc. had the following selected transactions in August 2014:

Aug. 1	Prepaid insurance for August through December, \$1,000
4	Purchased software for cash, \$800
5	Performed service and received cash, \$900
8	Paid advertising expense, \$300
11	Performed service on account, \$3,000
19	Purchased computer on account, \$1,600
24	Collected for the August 11 service
26	Paid account payable from August 19
29	Paid salary expense, \$900
31	Adjusted for August insurance expense (see Aug. 1)
31	Earned revenue of \$800 that was collected in advance in July

Required

1. Show how each transaction would be handled using the cash basis and the accrual basis. Under each column, give the amount of revenue or expense for August. Journal entries are not required. Use the following format for your answer, and show your computations. Assume depreciation expense of \$30 for software and \$30 for the computer.

Prairies Consultants Inc.		
Amount of Revenue (Expense) for August 2014		
Date	Cash Basis	Accrual Basis

2. Compute August income (loss) before tax under each accounting method.
3. Indicate which measure of net income or net loss is preferable. Use the transactions on August 11 and 24 to explain.

LEARNING OBJECTIVE 1 2

Applying accounting principles

P3-53A Write a memo to explain to a new employee the difference between the cash basis of accounting and the accrual basis. Mention the basis on which revenues and expenses are recorded under each method.

LEARNING OBJECTIVE 3

Relating accrual accounting and cash flows, recognizing revenue and recording expenses

P3-54A Journalize the adjusting entry needed on December 31, 2014, the end of the current accounting period, for each of the following independent cases affecting Callaway Corp. Include an explanation for each entry.

- a. Details of Prepaid Insurance are shown in the account:

Prepaid Insurance			
Jan. 1	Bal.	400	
Mar. 31		3,600	

Callaway prepays insurance on March 31 each year. At December 31, \$900 is still prepaid.

- b. Callaway pays employees each Friday. The amount of the weekly payroll is \$6,000 for a five-day work week. The current accounting period ends on Wednesday.
- c. Callaway has a note receivable. During the current year, the company has earned accrued interest revenue of \$500 that it will receive next year.
- d. The beginning balance of Supplies was \$2,600. During the year, Callaway purchased supplies costing \$6,100, and at December 31 the cost of supplies on hand is \$2,100.
- e. Callaway is providing financial services for Manatawabi Investments Inc., and the owner of Manatawabi paid Callaway \$12,000 for its annual service fee. Callaway recorded this amount as Unearned Service Revenue. Callaway estimates that it has earned one-third of the total fee during the current year.
- f. Depreciation for the current year includes Office Furniture, \$1,000, and Equipment, \$2,700. Make a compound entry.

P3-55A The unadjusted trial balance of The Rock Industries Ltd. at January 31, 2014, appears below.

LEARNING OBJECTIVE 3 4

Preparing an adjusted trial balance and the financial statements

The Rock Industries Ltd. Trial Balance January 31, 2014		
Cash	\$ 8,000	
Accounts receivable	10,000	
Prepaid rent	3,000	
Supplies	2,000	
Furniture	36,000	
Accumulated depreciation		\$ 3,000
Accounts payable		10,000
Salary payable		
Common shares		26,000
Retained earnings (December 31, 2010)		13,000
Dividends	4,000	
Service revenue		14,000
Salary expense	2,000	
Rent expense		
Utilities expense	1,000	
Depreciation expense		
Supplies expense		
Total	\$66,000	\$66,000

Adjustment data:

- a. Accrued service revenue at January 31, \$2,000
- b. Prepaid rent expired during the month. The unadjusted prepaid balance of \$3,000 relates to the period January through March.
- c. Supplies used during January, \$2,000
- d. Depreciation on furniture for the month. The estimated useful life of the furniture is three years.
- e. Accrued salary expense at January 31 for Monday, Tuesday, and Wednesday. The five-day weekly payroll of \$5,000 will be paid on Friday, February 2.

Required

1. Using Exhibit 3-4, page 000, as an example, prepare the adjusted trial balance of The Rock Industries Ltd. at January 31, 2014. Key each adjusting entry by letter.
2. Prepare the income statement, the statement of retained earnings, and the classified balance sheet. Draw arrows linking the three financial statements.

LEARNING OBJECTIVE 3

Analyzing and recording adjustments

P3-56A Sundance Apartments Inc.'s unadjusted and adjusted trial balance at April 30, 2014, follow:

Sundance Apartments Inc.				
Adjusted Trial Balance				
April 30, 2014				
Account Title	Trial Balance		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Cash.....	\$ 8,300		\$ 8,300	
Accounts receivable.....	6,300		6,800	
Interest receivable.....			300	
Note receivable.....	4,100		4,100	
Supplies.....	900		200	
Prepaid insurance.....	2,400		700	
Building.....	66,400		66,400	
Accumulated depreciation.....		\$16,000		\$18,200
Accounts payable.....		6,900		6,900
Wages payable.....				400
Unearned rental revenue.....		600		100
Common shares.....		18,000		18,000
Retained earnings.....		42,700		42,700
Dividends.....	3,600		3,600	
Rental revenue.....		9,900		10,900
Interest revenue.....				300
Wages expense.....	1,600		2,000	
Insurance expense.....			1,700	
Depreciation expense.....			2,200	
Property tax expense.....	300		300	
Supplies expense.....			700	
Utilities expense.....	200		200	
	<u>\$94,100</u>	<u>\$94,100</u>	<u>\$97,500</u>	<u>\$97,500</u>

Required

1. Make the adjusting entries that account for the differences between the two trial balances.
2. Compute Sundance Apartments Inc.'s total assets, total liabilities, total equity, and net income. Prove your answer with the accounting equation.

LEARNING OBJECTIVE 4 6

Preparing and using the financial statements to evaluate a business

P3-57A The adjusted trial balance of Marshall Ltd. at December 31, 2014, is given on page 000.

Required

1. Prepare Marshall Ltd.'s 2014 income statement, statement of retained earnings, and balance sheet. List expenses (except for income tax) in decreasing order on the income statement, and show total liabilities on the balance sheet. Draw arrows linking the three financial statements.
2. Marshall Ltd.'s lenders require that the company maintain a debt ratio no higher than 0.50. Compute Marshall Ltd.'s debt ratio at December 31, 2014, to determine whether the company is in compliance with this debt restriction. If not, suggest a way that Marshall Ltd. could have avoided this difficult situation.

Marshall Ltd.
Adjusted Trial Balance
December 31, 2014

Cash	\$ 1,400	
Accounts receivable	8,900	
Supplies.....	2,300	
Prepaid rent.....	1,600	
Equipment	37,100	
Accumulated depreciation		\$ 4,300
Accounts payable.....		3,700
Interest payable		800
Unearned service revenue.....		600
Income tax payable.....		2,100
Note payable		18,600
Common shares.....		5,000
Retained earnings		1,000
Dividends	24,000	
Service revenue.....		107,900
Depreciation expense.....	1,600	
Salary expense	39,900	
Rent expense	10,300	
Interest expense.....	3,100	
Insurance expense	3,800	
Supplies expense	2,900	
Income tax expense	7,100	
Total	<u>\$144,000</u>	<u>\$144,000</u>

P3-58A The accounts of Marciano Services Ltd. at March 31, 2014, are listed in alphabetical order.

Accounts payable.....	\$14,700	Insurance expense	600
Accounts receivable	16,500	Note payable, long term	6,200
Accumulated depreciation— equipment	7,100	Other assets.....	14,100
Advertising expense.....	10,900	Prepaid expenses	5,300
Depreciation expense.....	1,900	Retained earnings, March 31, 2010.....	20,200
Cash	7,500	Salary expense	17,800
Common shares.....	9,100	Salary payable.....	2,400
Current portion of note payable	800	Service revenue.....	94,100
Dividends	31,200	Supplies.....	3,800
Equipment	43,200	Supplies expense	4,600
		Unearned service revenue.....	2,800

Required

- All adjustments have been journalized and posted, but the closing entries have not been made. Journalize Marciano Ltd.'s closing entries at March 31, 2014.
- Set up a T-account for Retained Earnings and post to that account. Compute Marciano's net income for the year ended March 31, 2014. What is the ending balance of Retained Earnings?
- Did retained earnings increase or decrease during the year? What caused the increase or the decrease?

P3-59A Refer to problem P3-58A.

- Use the Marciano Ltd. data in problem P3-58A to prepare the company's classified balance sheet at March 31, 2014. Show captions for total assets, total liabilities, and total liabilities and shareholders' equity.

LEARNING OBJECTIVE 5

Closing the books and evaluating retained earnings

LEARNING OBJECTIVE 4 6

Preparing a classified balance sheet and using the financial statements to evaluate the business

2. Evaluate Marciano's debt position as strong or weak, giving your reason. Assess whether Marciano's ability to pay both current and total debts improved or deteriorated during 2014. In order to complete your evaluation, compute Marciano's current and debt ratios at March 31, 2014, rounding to two decimal places. At March 31, 2014, the current ratio was 1.30 and the debt ratio was 0.30.

LEARNING OBJECTIVE 6

Using the financial statements to evaluate a business

P3-60A The balance sheet at December 31, 2012, 2013, and 2014 and income statement for the years ended December 31, 2012, 2013, and 2014 for Ojibway Inc. include the following data:

Ojibway Inc. Balance Sheet As at December 31 (in thousands)			
	2014	2013	2012
Assets			
Current assets			
Cash	\$ 3.0	\$ 1.0	\$ 0.5
Accounts receivable	8.0	5.0	3.5
Total current assets	11.0	6.0	4.0
Furniture and equipment, net	16.0	9.5	3.0
Total assets	<u>\$ 27.0</u>	<u>15.5</u>	<u>\$ 7.0</u>
Liabilities			
Current liabilities			
Accounts payable	\$ 5.0	\$ 4.5	\$ 3.0
Salaries payable	1.5	1.0	0.5
Total current liabilities	6.5	5.5	3.5
Notes payable	9.0	5.0	3.5
Total liabilities	15.5	10.5	7.0
Shareholders' equity			
Shareholders' equity	11.5	5.0	0.0
Total liabilities and shareholders' equity	<u>\$ 27.0</u>	<u>\$ 15.5</u>	<u>\$ 7.0</u>
Ojibway Inc. Income Statement For the year ended December 31 (in thousands)			
	2014	2013	2012
Revenue			
Service revenue	\$100.0	\$ 90.0	\$ 64.0
Expenses			
Salary	60.0	57.5	46.0
Rent	18.0	16.0	12.0
Supplies	4.0	3.0	2.0
Utilities	4.5	4.0	2.0
Depreciation	5.0	3.0	2.0
Total expenses	91.5	83.5	64.0
Income before taxes	8.5	6.5	0.0
Income tax expense	2.0	1.5	0.0
Net income	<u>\$ 6.5</u>	<u>\$ 5.0</u>	<u>\$ 0.0</u>

Required

Use the years of data to answer the following:

1. Calculate the current ratio for 2012, 2013, and 2014.
2. Calculate the debt ratio for 2012, 2013, and 2014.

- Evaluate each ratio and determine if the ratio has improved or deteriorated over the three years. Explain what the changes mean.

(Group B)

P3-61B During 2014, Schubert Inc. earned revenues of \$19 million from the sale of its products. Schubert ended the year with net income of \$4 million. Schubert collected cash of \$20 million from customers.

Answer these questions about Schubert’s operating results, financial position, and cash flows during 2014:

- How much were Schubert’s total expenses? Show your work.
- Identify all the items that Schubert will report on its income statement for 2014. Show each amount.
- Schubert began 2014 with receivables of \$6 million. All sales are on account. What was Schubert’s receivables balance at the end of 2014? Identify the appropriate financial statement and show how Schubert will report its ending receivables balance in the company’s 2014 annual report.
- Schubert began 2014 owing accounts payable of \$9 million. Schubert incurs all expenses on account. During 2014, Schubert paid \$18 million on account. How much in accounts payable did Schubert owe at the end of 2014? Identify the appropriate financial statement and show how Schubert will report these accounts payable in its 2014 annual report.

P3-62B Fred’s Catering Ltd. had the following selected transactions during May 2014:

May	1	Received \$800 in advance for a banquet to be served later
	5	Paid electricity expenses, \$700
	9	Received cash for the day’s sales, \$2,000
	14	Purchased two food warmers, \$1,800
	23	Served a banquet, receiving a note receivable, \$700
	31	Accrued salary expense, \$900
	31	Prepaid \$3,000 building rent for June and July

Required

- Show how each transaction would be handled using the cash basis and the accrual basis. Under each column, give the amount of revenue or expense for May. Journal entries are not required. Use the following format for your answer, and show your computations. Ignore depreciation expense.

Fred’s Catering Ltd.		
Amount of Revenue (Expense) for May 2014		
Date	Cash Basis	Accrual Basis

- Compute income (loss) before tax for May under the two accounting methods.
- Which method better measures income and assets? Use the last transaction to explain.

P3-63B As the controller of Stuart Enterprises Inc. you have hired a new employee, whom you must train. She objects to making an adjusting entry for accrued utilities at the end of the period. She reasons, “We will pay the utilities soon. Why not wait until payment to record the expense? In the end, the result will be the same.” Write a reply to explain to the employee why the adjusting entry is needed for accrued utility expense.

LEARNING OBJECTIVE 1

Relating accrual accounting and cash flows

LEARNING OBJECTIVE 1

Explaining cash basis versus accrual basis

LEARNING OBJECTIVE 1 2

Relating accrual accounting and cash flows, recognizing revenue, and recording expenses

LEARNING OBJECTIVE 3

Making accounting adjustments

P3-64B Journalize the adjusting entry needed on December 31, 2014, the end of the current accounting period, for each of the following independent cases affecting Lee Computer Systems Inc. (LCSI). Include explanations for each entry.

- a. Each Friday, LCSI pays employees for the current week's work. The amount of the payroll is \$5,000 for a five-day work week. The current accounting period ends on Tuesday.
- b. LCSI has received notes receivable from some clients for services. During the current year, LCSI has earned accrued interest revenue of \$1,100, which will be received next year.
- c. The beginning balance of Supplies was \$1,800. During the year, LCSI purchased supplies costing \$12,500, and at December 31 the inventory of supplies on hand is \$2,900.
- d. LCSI is developing software for a client and the client paid LCSI \$20,000 at the start of the project. LCSI recorded this amount as Unearned Service Revenue. The software development will take several months to complete. LCSI executives estimate that the company has earned three-quarters of the total fee during the current year.
- e. Depreciation for the current year includes Computer Equipment, \$6,300, and Building, \$3,700. Make a compound entry.
- f. Details of Prepaid Insurance are shown in the Prepaid Insurance account. LCSI pays the annual insurance premium (the payment for insurance coverage is called a premium) on September 30 each year. At December 31, nine months of insurance is still prepaid.

Prepaid Insurance		
Jan. 1	Bal.	1,800
Sept. 30		3,600

LEARNING OBJECTIVE 3 4 6

Preparing an adjusted trial balance and the financial statements; using the current ratio to evaluate the business

P3-65B Consider the unadjusted trial balance of Creative Advertising Ltd. at October 31, 2014, and the related month-end adjustment data.

Creative Advertising Ltd. Trial Balance October 31, 2014			
Cash	\$16,300		
Accounts receivable	7,000		
Prepaid rent	4,000		
Supplies	600		
Computers	36,000		
Accumulated depreciation		\$ 3,000	
Accounts payable		8,800	
Salary payable			
Common shares		15,000	
Retained earnings (September 30, 2013)		21,000	
Dividends	4,600		
Advertising revenue		25,400	
Salary expense	4,400		
Rent expense			
Utilities expense	300		
Depreciation expense			
Supplies expense			
Total	<u>\$73,200</u>	<u>\$73,200</u>	

Adjustment data:

- a. Accrued advertising revenue at October 31, \$2,900
- b. Prepaid rent expired during the month: The unadjusted prepaid balance of \$4,000 relates to the period October 2014 through January 2015.
- c. Supplies used during October, \$200

- d. Depreciation on computers for the month: The computers' expected useful life is three years.
- e. Accrued salary expense at October 31 for Monday through Thursday; the five-day weekly payroll is \$2,000.

Required

- Using Exhibit 3-4, page 000, as an example, prepare the adjusted trial balance of Creative Advertising Ltd. at October 31, 2014. Key each adjusting entry by letter.
- Prepare the income statement, the statement of retained earnings, and the classified balance sheet. Draw arrows linking the three financial statements.
- Compare the business's net income for October to the amount of dividends paid to the owners. Suppose this trend continues into November. What will be the effect on the business's financial position, as shown by its accounting equation?
 - Will the trend make it easier or more difficult for Creative Advertising Ltd. to borrow money if the business gets in a bind and needs cash? Why?
 - Does either the current ratio or the cash position suggest the need for immediate borrowing? Explain.

P3-66B Your Talent Agency Ltd.'s unadjusted and adjusted trial balances at December 31, 2014, are shown below.

LEARNING OBJECTIVE 3

Analyzing and recording adjustments

Your Talent Agency Ltd.
Adjusted Trial Balance
December 31, 2014

Account Title	Trial Balance		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Cash	\$ 4,100		\$ 4,100	
Accounts receivable	11,200		12,400	
Supplies.....	1,000		700	
Prepaid insurance	2,600		900	
Office furniture.....	21,600		21,600	
Accumulated depreciation		\$ 8,200		\$ 9,300
Accounts payable.....		6,300		6,300
Salary payable.....				900
Interest payable				400
Note payable		6,000		6,000
Unearned commission revenue.....		1,500		1,100
Common shares.....		5,000		5,000
Retained earnings		3,500		3,500
Dividends	18,300		18,300	
Commission revenue		72,800		74,400
Depreciation expense.....			1,100	
Supplies expense			300	
Utilities expense	4,900		4,900	
Salary expense	26,600		27,500	
Rent expense	12,200		12,200	
Interest expense.....	800		1,200	
Insurance expense			1,700	
	<u>\$103,300</u>	<u>\$103,300</u>	<u>\$106,900</u>	<u>\$106,900</u>

Required

1. Make the adjusting entries that account for the difference between the two trial balances.
2. Compute Your Talent Agency Ltd.'s total assets, total liabilities, total equity, and net income.
3. Prove your answer with the accounting equation.

LEARNING OBJECTIVE 4.6

Preparing the financial statements
and using the debt ratio

P3-67B The adjusted trial balance of Reid and Campbell Ltd. at December 31, 2014, appears below.

Reid and Campbell Ltd. Adjusted Trial Balance December 31, 2014			
Cash	\$ 11,600		
Accounts receivable	41,400		
Prepaid rent	1,300		
Store furnishings	67,600		
Accumulated depreciation		\$ 12,900	
Accounts payable		3,600	
Deposits		4,500	
Interest payable		2,100	
Salary payable		900	
Income tax payable		8,800	
Note payable		26,200	
Common shares		12,000	
Retained earnings, Dec. 31, 2013		20,300	
Dividends	48,000		
Sales		165,900	
Depreciation expense	11,300		
Salary expense	44,000		
Rent expense	12,000		
Interest expense	1,200		
Income tax expense	18,800		
Total	\$257,200	\$257,200	

Required

1. Prepare Reid and Campbell Ltd.'s 2014 income statement, statement of retained earnings, and balance sheet. List expenses in decreasing order on the income statement and show total liabilities on the balance sheet. Draw arrows linking the three financial statements.
2. Compute Reid and Campbell Ltd.'s debt ratio at December 31, 2014, rounding to two decimal places. Evaluate the company's debt ratio as strong or weak.

P3-68B The accounts of For You eTravel Inc. at December 31, 2014, are listed in alphabetical order.

Accounts payable.....	\$ 5,100	Note payable, long term.....	\$10,600
Accounts receivable	6,600	Other assets	3,600
Accumulated depreciation—furniture	11,600	Retained earnings,	
Advertising expense.....	2,200	December 31, 2013	5,300
Depreciation expense.....	1,300	Salary expense	24,600
Cash	7,300	Salary payable	3,900
Common shares.....	15,000	Service revenue	93,500
Dividends	47,400	Supplies	7,700
Furniture.....	41,400	Supplies expense.....	5,700
Interest expense.....	800	Unearned service revenue	3,600

Required

1. All adjustments have been journalized and posted, but the closing entries have not been made. Journalize For You eTravel Inc.'s closing entries at December 31, 2014.
2. Set up a T-account for Retained Earnings and post to that account. Compute For You's net income for the year ended December 31, 2014. What is the ending balance of Retained Earnings?
3. Did Retained Earnings increase or decrease during the year? What caused the increase or the decrease?

P3-69B Refer to Problem 3-68B.

1. Use the For You eTravel Inc. data in problem P3-68B to prepare the company's classified balance sheet at December 31, 2014. Show captions for total assets, total liabilities, and total liabilities and shareholders' equity.
2. Evaluate For You's debt position as strong or weak, giving your reason. Assess whether For You's ability to pay both current and total debts improved or deteriorated during 2014. In order to complete your evaluation, compute For You's current and debt ratios at December 31, 2014, rounding to two decimal places. At December 31, 2013, the current ratio was 1.50 and the debt ratio was 0.45.

P3-70B A company's balance sheet at December 31, 2012, 2013, and 2014 and income statement for the years ended December 31, 2012, 2013, and 2014 include the data on page 000.

Required

Use the years of data to answer the following:

1. Calculate the current ratio for 2012, 2013 and 2014
2. Calculate the debt ratio for 2012, 2013, and 2014
3. Evaluate each ratio and determine if the ratio has improved or deteriorated over the three years. Explain what the changes mean.

LEARNING OBJECTIVE 4 6

Preparing a classified balance sheet and using the ratios to evaluate the business

LEARNING OBJECTIVE 6

Closing the books and evaluating retained earnings

LEARNING OBJECTIVE 6

Using the financial statements to evaluate a business

Balance Sheet
As at December 31
(in thousands)

	2014	2013	2012
Assets			
Current assets			
Cash	\$ 6.0	\$ 4.0	\$ 3.5
Accounts receivable	11.0	8.0	6.5
Total current assets	<u>17.0</u>	<u>12.0</u>	<u>10.0</u>
Furniture and equipment, net	19.0	12.5	6.0
Total assets	<u>\$36.0</u>	<u>\$24.5</u>	<u>\$16.0</u>
Liabilities			
Current liabilities			
Accounts payable	\$ 8.0	\$ 7.0	\$ 6.0
Salaries payable	4.5	4.0	3.5
Total current liabilities	<u>12.5</u>	<u>11.0</u>	<u>9.5</u>
Notes payable	12.0	6.0	5.5
Total liabilities	<u>24.5</u>	<u>17.0</u>	<u>15.0</u>
Shareholders' equity			
Shareholders' equity	<u>11.5</u>	<u>7.5</u>	<u>1.0</u>
Total liabilities and shareholders' equity	<u>\$36.0</u>	<u>\$24.5</u>	<u>\$16.0</u>

Income Statement
For the year ended December 31
(in thousands)

	2014	2013	2012
Revenue			
Service revenue	\$110.0	\$99.0	\$75.0
Expenses			
Salary	65.0	59.0	48.0
Rent	20.0	18.0	17.0
Supplies	7.5	6.0	3.0
Utilities	6.0	4.5	3.5
Depreciation	6.0	3.0	2.0
Total expenses	<u>104.5</u>	<u>90.5</u>	<u>73.5</u>
Income before taxes	5.5	8.5	1.5
Income tax expense	1.5	2.0	.5
Net income	<u>\$ 4.0</u>	<u>\$ 6.5</u>	<u>\$ 1.0</u>

Apply Your Knowledge

Decision Cases

LEARNING OBJECTIVE 3.6

Adjusting and correcting the accounts; evaluating a business using financial statements

Case 1. On the next page is a list of accounts of Patel Consulting Ltd. at January 31, 2014. The unadjusted trial balance of Patel Consulting Ltd. at January 31, 2014, does not balance. In addition, the trial balance needs to be updated before the financial statements at January 31, 2014, can be prepared. The manager needs to know the current ratio of Patel Consulting Ltd.

Patel Consulting Ltd.
List of Accounts
January 31, 2014

Cash.....	\$ 6,000	
Accounts receivable.....	2,200	
Supplies	800	
Prepaid rent	12,000	
Land	41,000	
Accounts payable		10,000
Salary payable		0
Unearned service revenue		1,500
Note payable, due in three years		25,400
Common shares		15,000
Retained earnings.....		7,300
Service revenue		9,100
Salary expense.....	3,400	
Rent expense.....	0	
Advertising expense	900	
Supplies expense.....	0	
.....	<u> ?</u>	<u> ?</u>

Required

1. How much *out of balance* is the trial balance? The error is in the Land account.
2. Patel Consulting Ltd. needs to make the following adjustments at January 31:
 - a. Supplies of \$600 were used during January.
 - b. The balance of Prepaid Rent was paid on January 1 and covers the rest of 2014. No adjustment was made January 31.
 - c. At January 31, Patel Consulting owes employees \$400.
 - d. Unearned service revenue of \$800 was earned during January.

Prepare a corrected, adjusted trial balance. Give Land its correct balance.
3. After the error is corrected and after these adjustments are made, compute the current ratio of Patel Consulting Ltd. If your business had this current ratio, could you sleep at night?

Case 2. On October 1, Sue Skate opened a restaurant named Silver Skates Ltd. After the first month of operations, Skate is at a crossroads. The October financial statements paint a glowing picture of the business, and Skate has asked you whether she should expand Silver Skates. To expand the business, Sue Skate wants to be earning net income of \$10,000 per month and have total assets of \$35,000. Based on the financial information available to her, Skate believes she is meeting both goals.

To start the business, she invested \$20,000, not the \$10,000 amount reported as “Common shares” on the balance sheet. The bookkeeper plugged the \$10,000 “Common shares” amount into the balance sheet to make it come out even. The bookkeeper made other mistakes too. Skate shows you the following financial statements that the bookkeeper prepared.

LEARNING OBJECTIVE 3 4
Preparing financial statements; continue or close the business?

Silver Skates Ltd.
Income Statement
For the Month Ended October 31, 2014

Revenues:		
Investments by owner.....	\$20,000	
Unearned banquet sales revenue.....	<u>3,000</u>	\$23,000
Expenses:		
Wages expense	\$ 5,000	
Rent expense	4,000	
Dividends	3,000	
Depreciation expense—fixtures	<u>1,000</u>	<u>13,000</u>
Net income (Net loss).....		<u><u>\$10,000</u></u>

Silver Skates Ltd.
Balance Sheet
October 31, 2014

Assets:		Liabilities:	
Cash	\$ 6,000	Accounts payable	\$ 5,000
Prepaid insurance	1,000	Sales revenue.....	32,000
Insurance expense	1,000	Accumulated depreciation—	
Food inventory.....	3,000	fixtures	<u>1,000</u>
Cost of goods sold (expense)	14,000		38,000
Fixtures (tables, chairs, etc.)	19,000	Owners' equity:	
Dishes and silverware	<u>4,000</u>	Common shares	<u>10,000</u>
	<u>\$48,000</u>		<u>\$48,000</u>

Required

Prepare corrected financial statements for Silver Skates Ltd.: income statement, statement of retained earnings, and balance sheet. Then, based on your corrected statements, recommend to Sue Skate whether she should expand her business.

LEARNING OBJECTIVE 3 4

Valuing a business on the basis of its net income

Case 3. Walter Liu has owned and operated LW Media Inc. since its beginning 10 years ago. Recently, Liu mentioned that he would consider selling the company for the right price.

Assume that you are interested in buying this business. You obtain its most recent monthly trial balance, which follows. Revenues and expenses vary little from month to month, and June is a typical month. Your investigation reveals that the trial balance does not include the effects of monthly revenues of \$5,000 and expenses totalling \$1,100. If you were to buy LW Media Inc., you would hire a manager so you could devote your time to other duties. Assume that your manager would require a monthly salary of \$6,000.

Required

1. Assume that the most you would pay for the business is 20 times the monthly net income *you could expect to earn* from it. Compute this possible price.
2. Walter Liu states that the least he will take for the business is 1.5 times shareholders' equity on June 30, 2014. Compute this amount.
3. Under these conditions, how much should you offer Liu? Give your reason.

LW Media Inc. Trial Balance June 30, 2014		
Cash	\$ 10,000	
Accounts receivable	4,900	
Prepaid expenses	3,200	
Equipment	115,000	
Accumulated depreciation		\$ 76,500
Land	158,000	
Accounts payable		13,800
Salary payable		
Unearned revenue		56,700
Common shares		50,000
Retained earnings		88,000
Dividends	9,000	
Revenue		20,000
Rent expense		
Salary expense	4,000	
Utilities expense	900	
Depreciation expense		
Supplies expense		
Total	<u>\$305,000</u>	<u>\$305,000</u>

Ethical Issues

Issue 1. ARAS Inc. is in its third year of operations and the company has grown. To expand the business, ARAS borrowed \$1 million from Royal Bank of Canada. As a condition for making this loan, the bank required that ARAS maintain a current ratio of at least 1.50 and a debt ratio of no more than 0.50.

Business recently has been worse than expected. Expenses have brought the current ratio down to 1.47 and the debt ratio up to 0.51 at December 15. Shane Rollins, the general manager, is considering the implication of reporting this current ratio to the bank. Rollins is considering recording this year some revenue on account that ARAS will earn next year. The contract for this job has been signed, and ARAS will perform the service during January.

Required

1. Journalize the revenue transaction, omitting amounts, and indicate how recording this revenue in December would affect the current ratio and the debt ratio.
2. State whether it is ethical to record the revenue transaction in December. Identify the accounting principle relevant to this situation.
3. Propose to ARAS a course of action that is ethical.

Issue 2. The net income of Accent Photography Company Ltd. decreased sharply during 2014. Mark Smith, owner of the company, anticipates the need for a bank loan in 2015. Late in 2014, he instructed the accountant to record a \$20,000 sale of portraits to the Smith family, even though the photos will not be shot until January 2015. Smith also told the accountant *not* to make the following December 31, 2014, adjusting entries:

Salaries owed to employees	\$5,000
Prepaid insurance that has expired	1,000

Required

1. Compute the overall effect of these transactions on the company's reported income for 2014. Is income overstated or understated?
2. Why did Smith take these actions? Are they ethical? Give your reason, identifying the parties helped and the parties harmed by Smith's action.
3. As a personal friend, what advice would you give the accountant?

Focus on Financials

LEARNING OBJECTIVE 3 6

Tracing account balance to the financial statements

Like all other businesses, TELUS adjusts accounts prior to year-end to measure assets, liabilities, revenues, and expenses for the financial statements. Examine TELUS's balance sheet in Appendix A, and pay particular attention to (a) Prepaid Expenses and (b) Accounts Payable and Accrued Liabilities.

Required

1. Why aren't Prepaid Expenses "true" expenses?
2. Open T-accounts for the Prepaid Expenses account and the Accounts Payable and Accrued Liabilities account. Insert TELUS's balances (in millions) at December 31, 2010.
3. Journalize the following for the year ended December 31, 2011. Key entries by letter, and show accounts in millions. Explanations are not required.
 - a. Paid the beginning balance of Accounts Payable and Accrued Liabilities.
 - b. Allocated Prepaid Expenses of \$113 to Goods and Services Purchased.
 - c. Recorded Accounts Payable and Accrued Liabilities in the amount of \$1,419. Assume this relates to Goods and Services Purchased.
 - d. Recorded a prepayment of \$144 in services to Prepaid Expenses.
4. Post these entries and show that the balances in Prepaid Expenses and in Accounts Payable and Accrued Liabilities agree with the corresponding amounts reported in the December 31, 2011, balance sheet.
5. Compute the current ratios and debt ratios for TELUS at December 31, 2011, and at December 31, 2010. Did the ratio values improve, deteriorate, or hold steady during the year ended December 31, 2011? Do the ratio values indicate financial strength or weakness?

Focus on Analysis

LEARNING OBJECTIVE 3

Explaining accruals and deferrals

TELUS Corporation

During the fiscal year ended 2011, TELUS (Appendix A) had numerous accruals and deferrals. As a new member of TELUS's accounting and financial staff, it is your job to explain the effects of accruals and deferrals on TELUS's net income for 2011. The accrual and deferral data follow, along with questions that TELUS's shareholders have raised (all amounts in millions):

1. Beginning total receivables for 2011 were \$1,318. Ending receivables for 2011 are \$1,428. Which of these amounts did TELUS earn in 2010? Which amount did TELUS earn in 2011? Which amount is included in TELUS's revenue for 2011?
2. Accumulated depreciation on property, plant, and equipment stood at \$19,629 at December 31, 2010, and at \$20,347 as at December 31, 2011. Accumulated depreciation was reduced by \$253 for assets sold during the year. Calculate the depreciation expense for the year, and compare to the depreciation expense reported on the 2011 statement of income.
3. Certain income-statement accounts are directly linked to specific balance-sheet accounts other than cash. Examine TELUS's income statement in Appendix A. For each revenue and expense account that you can do so, identify the related balance sheet account(s) (other than cash).

Group Project

Matt Davis formed a lawn service company as a summer job. To start the business on May 1, he deposited \$1,000 in a new bank account in the name of the corporation. The \$1,000 consisted of an \$800 loan from his father and \$200 of his own money. The corporation issued 200 common shares to Davis.

Davis rented lawn equipment, purchased supplies, and hired high-school students to mow and trim his customers' lawns. At the end of each month, Davis mailed bills to his customers. On August 31, Davis was ready to dissolve the business and return to Simon Fraser University for the fall semester. Because he had been so busy, he had kept few records other than his chequebook and a list of amounts owed by customers.

At August 31, Davis's chequebook shows a balance of \$1,390, and his customers still owe him \$560. During the summer, he collected \$5,150 from customers. His chequebook lists payments for supplies totalling \$400, and he still has gasoline, weed whacker cord, and other supplies that cost a total of \$50. He paid his employees wages of \$1,900, and he still owes them \$200 for the final week of the summer.

Davis rented some equipment from Ludwig Tool Company. On May 1, he signed a six-month lease on mowers and paid \$600 for the full lease period. Ludwig will refund the unused portion of the prepayment if the equipment is in good shape. To get the refund, Davis has kept the mowers in excellent condition. In fact, he had to pay \$300 to repair a mower that ran over a hidden tree stump.

To transport equipment to jobs, Davis used a trailer that he bought for \$300. He figures that the summer's work used up one-third of the trailer's service potential. The business chequebook lists an expenditure of \$460 for dividends paid to Davis during the summer. Also, Davis paid his father back during the summer.

Required

1. Prepare the income statement of Davis Lawn Service Inc. for the four months May through August. The business is not subject to income tax.
2. Prepare the classified balance sheet of Davis Lawn Service Inc. at August 31.

Quick Check Answers

- | | | | |
|-------------|-------------|--------------|--------------|
| 1. <i>c</i> | 5. <i>d</i> | 9. <i>d</i> | 13. <i>a</i> |
| 2. <i>c</i> | 6. <i>b</i> | 10. <i>a</i> | 14. <i>c</i> |
| 3. <i>b</i> | 7. <i>a</i> | 11. <i>b</i> | 15. <i>a</i> |
| 4. <i>d</i> | 8. <i>d</i> | 12. <i>d</i> | 16. <i>b</i> |

