4

Completing the Accounting Cycle



A Look Back

Chapter 3 explained the timing of reports. We described why adjusting accounts is key for recognizing revenues and expenses in the proper period. We prepared an adjusted trial balance and used it to prepare financial statements.



A Look at This Chapter

This chapter emphasizes the final steps in the accounting process and reviews the entire accounting cycle. We explain the closing process, including accounting procedures and the use of a post-closing trial balance. We show how a work sheet aids in preparing financial statements.



A Look Ahead

Chapter 5 looks at accounting for merchandising activities. We describe the sale and purchase of merchandise and their implications for preparing and analyzing financial statements.

Learning Objectives



CONCEPTUAL

- Explain why temporary accounts are closed each period. (p. 148)
- cycle. (p. 152)
- **C3** Explain and prepare a classified balance sheet. (p. 153)

ANALYTICAL

Compute the current ratio and describe what it reveals about a company's financial condition. (p. 156)

PROCEDURAL

- P1 Prepare a work sheet and explain its usefulness. (p. 144)
- P2 Describe and prepare closing entries. (p. 149)
- P3 Explain and prepare a post-closing trial balance. (p. 150)
- P4 Appendix 4A—Prepare reversing entries and explain their purpose. (p. 160)





Decision Insight

Harnessing the Creativity of Children

"With all the gadgets, . . . children have all become photocopies of each other."

-ELHAME BOURANI

Abu Dhabi—Elhame Bourani has always yearned to start her own business, combining this with an ambition to work with children. Aspiring to offer children something different to the usual sporting opportunities in Abu Dhabi, she explored the feasibility of establishing a fine arts center for children, who due to the weather spend lots of time indoors.

Elhame said she had the intention of "... doing something for me that I would enjoy ... and something where children can evolve and not just through sports." Moreover, she also sought to develop a business to prise children away from their electronic games. This resulted in *The Bulb Fine Arts Center*, where children can openly express their creative drawing, cartooning, clay modelling and dance talents.

However, getting the business up and running hasn't been an easy road; the cost has been Dh250,000, including Dh8,000 for a trade licence and Dh9,000 per employee, but excludes rent and operational costs. During the initial struggles to start a business such as Elhame's, part of the important financial work that must take place is the monitoring and minimizing of costs and dealing with the consistent challenge of properly applying the accounting cycle. Hence, including a more formal accounting system into

Elhame's new business, which traces costs and marries these up with revenues received from parents for the various Center activities could prove to be very helpful.

As part of this process, Elhame could benefit from using a worksheet to record her various business transactions, to help her prepare financial accounts and minimize errors. Furthermore, due to the challenges with becoming profitable, an effort to compile temporary accounts from discrete accounting periods and how these are closed at the end of the period would be valuable.

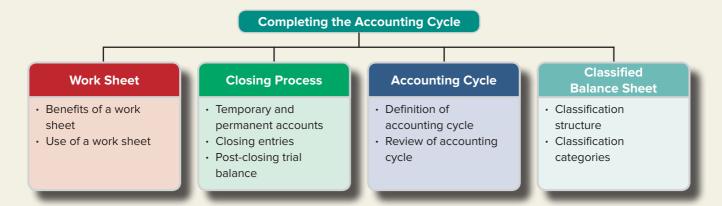
Additionally, Elhame's ability to understand the importance of permanent accounts for her Center activities associated with future accounting periods would be advantageous. To develop the sound financial footing for a sustainable creative business, Elhame must develop an understanding of items such as assets, liabilities, and equity needed to formulate a classified balance sheet.

[Source: The National, October 2016, www.thenational.ae, accessed November 2016]

Chapter Preview

Many of the important steps leading to financial statements were explained in earlier chapters. We described how transactions and events are analyzed, journalized, and posted. This chapter explains the closing process that readies revenue, expense, and withdrawal accounts for the next reporting period and updates the

capital account. A work sheet is shown to be a useful tool for these final steps and in preparing financial statements. It also explains how accounts are classified on a balance sheet to increase their usefulness to decision makers.



WORK SHEET AS A TOOL

Information preparers use various analyses and internal documents when organizing information for internal and external decision makers. Internal documents are often called **working papers.** One widely used working paper is the **work sheet,** which is a useful tool for preparers in working with accounting information. It is usually not available to external decision makers.

Benefits of a Work Sheet

P1

Prepare a work sheet and explain its usefulness.

A work sheet is not a required report, yet using a manual or electronic work sheet has several potential benefits. Specifically, a work sheet

- aids the preparation of financial statements;
- reduces the possibility of errors when working with many accounts and adjustments;
- links accounts and adjustments to their impacts in financial statements;
- assists in planning and organizing an audit of financial statements—as it can be used to reflect any adjustments necessary;
- helps in preparing interim (monthly and quarterly) financial statements when the journalizing and posting of adjusting entries are postponed until year-end;
- shows the effects of proposed or "what-if" transactions.

Decision Insight



High-Tech Work Sheet An electronic work sheet using spreadsheet software such as Excel allows us to easily change numbers, assess the impact of alternative strategies, and quickly prepare financial statements at less cost. It can also increase the available time for analysis and interpretation. ■

Use of a Work Sheet

When a work sheet is used to prepare financial statements, it is constructed at the end of a period before the adjusting process. The complete work sheet includes a list of the accounts, their balances and adjustments, and their sorting into financial statement columns. It provides two columns each for the unadjusted trial balance, the adjustments, the adjusted trial balance, the income statement, and the balance sheet (including the statement of owner's equity).

Point: Since a work sheet is *not* a required report or an accounting record, its format is flexible and can be modified by its user to fit his/her preferences.

145

To describe and interpret the work sheet, we use the information from FastForward. Preparing the work sheet has five important steps. Each step, 1 through 5, is color-coded and explained with reference to Exhibits 4.1 and 4.2.

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1 Step 1. Enter Unadjusted Trial Balance

Refer to Exhibit 4.1. The first step in preparing a work sheet is to list the title of every account and its account number that is expected to appear on its financial statements. This includes all accounts in the ledger plus any new ones from adjusting entries. Most adjusting entries including expenses from salaries, supplies, depreciation, and insurance—are predictable and recurring. The unadjusted balance for each account is then entered in the appropriate Debit or Credit column of the unadjusted trial balance columns. The totals of these two columns must be equal. Sometimes blank lines are left on the work sheet based on past experience to indicate where lines will be needed for adjustments to certain accounts. Exhibit 4.1 shows Consulting Revenue as one example. An alternative is to squeeze adjustments on one line or to combine the effects of two or more adjustments in one amount. In the unusual case when an account is not predicted, we can add a new line for such an account following the *Totals* line.

2 Step 2. Enter Adjustments

The second step in preparing a work sheet is to enter adjustments in the Adjustments columns. The adjustments shown are the same ones shown in Exhibit 3.13. An identifying letter links the debit and credit of each adjusting entry. This is called *keying* the adjustments. After preparing a work sheet, adjusting entries must still be entered in the journal and posted to the ledger. The Adjustments columns provide the information for those entries.

Point: A recordkeeper often can complete the procedural task of journalizing and posting adjusting entries by using a work sheet and the guidance that keying provides.



3 Step 3. Prepare Adjusted Trial Balance

The adjusted trial balance is prepared by combining the adjustments with the unadjusted balances for each account. As an example, the Prepaid Insurance account has a \$2,400 debit balance in the Unadjusted Trial Balance columns. This \$2,400 debit is combined with the \$100 credit in the Adjustments columns to give Prepaid Insurance a \$2,300 debit in the Adjusted Trial Balance columns. The totals of the Adjusted Trial Balance columns confirm the equality of debits and credits.

Point: To avoid omitting the transfer of an account balance, start with the first line (cash) and continue in account order.

4 Step 4. Sort Adjusted Trial Balance Amounts to Financial Statements

This step involves sorting account balances from the adjusted trial balance to their proper financial statement columns. Expenses go to the Income Statement Debit column and revenues to the Income Statement Credit column. Assets and withdrawals go to the Balance Sheet & Statement of Owner's Equity Debit column. Liabilities and owner's capital go to the Balance Sheet & Statement of Owner's Equity Credit column.

5 Step 5. Total Statement Columns, Compute Income or Loss, and Balance Columns

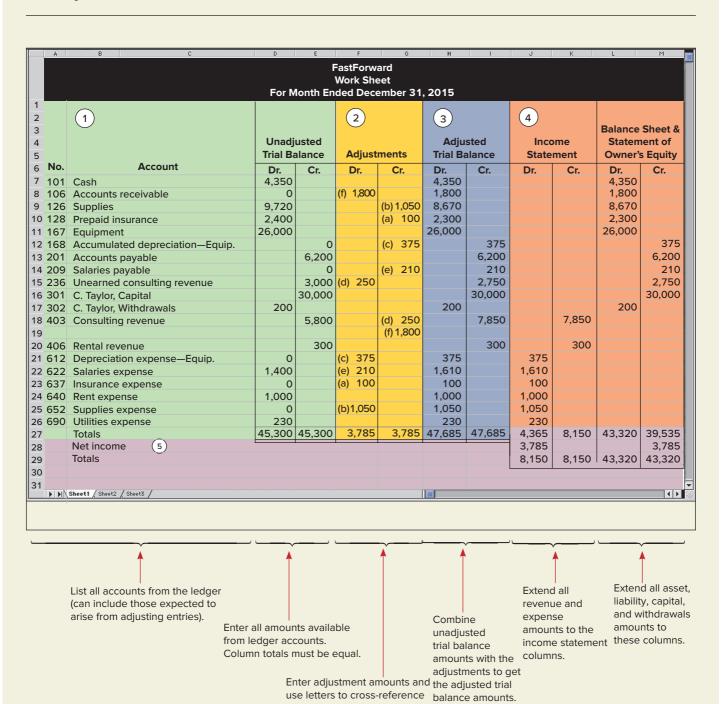
Each financial statement column (from Step 4) is totaled. The difference between the totals of the Income Statement columns is net income or net loss. This occurs because revenues are entered in the Credit column and expenses in the Debit column. If the Credit total exceeds the Debit total, there is net income. If the Debit total exceeds the Credit total, there is a net loss. For FastForward, the Credit total exceeds the Debit total, giving a \$3,785 net income.

[continued on p. 148]

EXHIBIT 4.1

Trial Balance

A work sheet collects and summarizes information used to prepare adjusting entries, financial statements, and closing entries.



debit and credit adjustments. Column totals must

Column totals must be equal. be equal.

These column totals differ by the amount of

net income or loss.

FASTFORWARD Income Statement For Month Ended December 31, 2015

EXHIBIT 4.2

Financial Statements Prepared from the Work Sheet

Revenues		
Consulting revenue	\$ 7,850	
Rental revenue	300	
Total revenues		\$ 8,150
Expenses		
Depreciation expense—Equipment	375	
Salaries expense	1,610	
Insurance expense	100	
Rent expense	1,000	
Supplies expense	1,050	
Utilities expense	230	
Total expenses		4,365
Net income		\$ 3,785

FASTFORWARD Statement of Owner's Equity For Month Ended December 31, 2015

C. Taylor, Capital, December 1	\$ 0	
Add: Investment by owner	\$30,000	
Net income	3,785 33,785	
	33,785	
Less: Withdrawals by owner	200	
C. Taylor, Capital, December 31	\$33,585 -	

FASTFORWARD Balance Sheet

December 31, 2015										
Assets										
Cash		\$ 4,350								
Accounts receivable		1,800								
Supplies		8,670								
Prepaid insurance		2,300								
Equipment	\$26,000									
Accumulated depreciation—Equipment	(375)	25,625								
Total assets		\$42,745								
Liabilities										
Accounts payable		\$ 6,200								
Salaries payable		210								
Unearned consulting revenue		2,750								
Total liabilities		9,160								
Equity										

33,585

\$42,745

Total liabilities and equity

The net income from the Income Statement columns is then entered in the Balance Sheet & Statement of Owner's Equity Credit column. Adding net income to the last Credit column implies that it is to be added to owner's capital. If a loss occurs, it is added to the Debit column. This implies that it is to be subtracted from owner's capital. The ending balance of owner's capital does not appear in the last two columns as a single amount, but it is computed in the statement of owner's equity using these account balances. When net income or net loss is added to the proper Balance Sheet & Statement of Owner's Equity column, the totals of the last two columns must balance. If they do not, one or more errors have been made. The error can either be mathematical or involve sorting one or more amounts to incorrect columns.



Entrepreneur You make a printout of the electronic work sheet used to prepare financial statements. There is no depreciation adjustment, yet you own a large amount of equipment. Does the absence of depreciation adjustment concern you?

Work Sheet Applications and Analysis

A work sheet does not substitute for financial statements. It is a tool we can use at the end of an accounting period to help organize data and prepare financial statements. FastForward's financial statements are shown in Exhibit 4.2. Its income statement amounts are taken from the Income Statement columns of the work sheet. Similarly, amounts for its balance sheet and its statement of owner's equity are taken from the Balance Sheet and Statement of Owner's Equity columns of the work sheet.

Information from the Adjustments columns of a work sheet can be used to journalize adjusting entries. It is important to remember that a work sheet is not a journal. This means that even when a work sheet is prepared, it is necessary to both journalize adjustments and post them to the ledger.

Work sheets are also useful in analyzing the effects of proposed, or what-if, transactions. This is done by entering financial statement amounts in the Unadjusted (what-if) columns. Proposed transactions are then entered in the Adjustments columns. We then compute "adjusted" amounts from these proposed transactions. The extended amounts in the financial statement columns show the effects of these proposed transactions. These financial statement columns yield **pro forma financial statements** because they show the statements *as if* the proposed transactions occurred.

Quick Check

Answers — p. 162



- 1. Where do we get the amounts to enter in the Unadjusted Trial Balance columns of a work sheet?
- 2. What are the advantages of using a work sheet to help prepare adjusting entries?
- 3. What are the overall benefits of a work sheet?

CLOSING PROCESS



Explain why temporary accounts are closed each period.

The **closing process** is an important step at the end of an accounting period *after* financial statements have been completed. It prepares accounts for recording the transactions and the events of the *next* period. In the closing process we must (1) identify accounts for closing, (2) record and post the closing entries, and (3) prepare a post-closing trial balance. The purpose of the closing process is twofold. First, it resets revenue, expense, and withdrawals account balances to zero at the end of each period. This is done so that these accounts can properly measure income and withdrawals for the next period. Second, it helps in summarizing a period's revenues and expenses. This section explains the closing process.

Temporary and Permanent Accounts

Temporary (or *nominal*) **accounts** accumulate data related to one accounting period. They include all income statement accounts, the withdrawals account, and the Income Summary account. They are temporary because the accounts are opened at the beginning of a period, used to record transactions and events for that period, and then closed at the end of the period. *The closing process applies*

only to temporary accounts. **Permanent** (or *real*) **accounts** report on activities related to one or more future accounting periods. They carry their ending balances into the next period and generally consist of all balance sheet accounts. These asset, liability, and equity accounts are not closed.

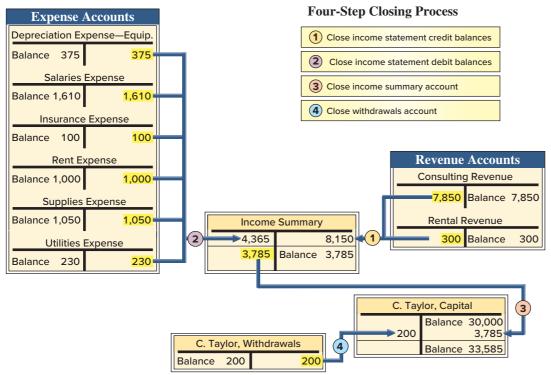
Recording Closing Entries

To record and post **closing entries** is to transfer the end-of-period balances in revenue, expense, and withdrawals accounts to the permanent capital account. Closing entries are necessary at the end of each period after financial statements are prepared because

- Revenue, expense, and withdrawals accounts must begin each period with zero balances.
- Owner's capital must reflect prior periods' revenues, expenses, and withdrawals.

An income statement aims to report revenues and expenses for a *specific accounting period*. The statement of owner's equity reports similar information, including withdrawals. Since revenue, expense, and withdrawals accounts must accumulate information separately for each period, they must start each period with zero balances. To close these accounts, we transfer their balances first to an account called *Income Summary*. **Income Summary** is a temporary account (only used for the closing process) that contains a credit for the sum of all revenues (and gains) and a debit for the sum of all expenses (and losses). Its balance equals net income or net loss and it is transferred to the capital account. Next the withdrawals account balance is transferred to the capital account. After these closing entries are posted, the revenue, expense, withdrawals, and Income Summary accounts have zero balances. These accounts are then said to be *closed* or *cleared*.

Exhibit 4.3 uses the adjusted account balances of FastForward (from the Adjusted Trial Balance columns of Exhibit 4.1 or from the left side of Exhibit 4.4) to show the four steps necessary to close its temporary accounts. We explain each step.



Step 1: Close Credit Balances in Revenue Accounts to Income Summary

The first closing entry transfers credit balances in revenue (and gain) accounts to the Income Summary account. We bring accounts with credit balances to zero by debiting them. For Fast-Forward, this journal entry is step 1 in Exhibit 4.4. This entry closes revenue accounts and leaves them with zero balances. The accounts are now ready to record revenues when they occur in the next period. The \$8,150 credit entry to Income Summary equals total revenues for the period.

Step 2: Close Debit Balances in Expense Accounts to Income Summary

The second closing entry transfers debit balances in expense (and loss) accounts to the Income Summary account. We bring expense accounts' debit balances to zero by crediting them.



Point: To understand the closing process, focus on its *outcomes—updating* the capital account balance to its proper ending balance, and getting *temporary accounts* to show *zero balances* for purposes of accumulating data for the next period.

EXHIBIT 4.3

Four-Step Closing Process

Point: C. Taylor, Capital is the only permanent account in Exhibit 4.3.



Point: It is possible to close revenue and expense accounts directly to owner's capital. Computerized accounting systems do this.

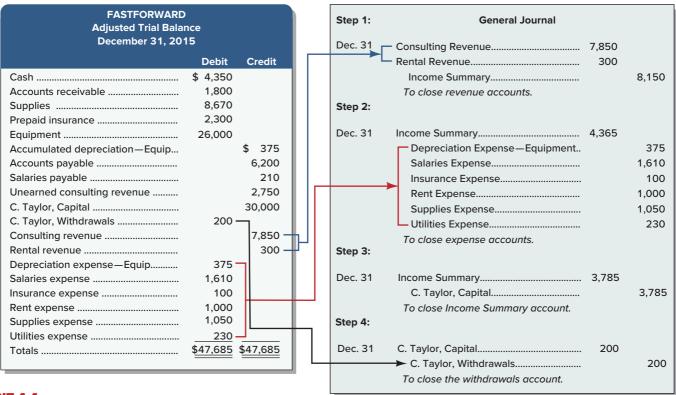


EXHIBIT 4.4

Preparing Closing Entries

With a balance of zero, these accounts are ready to accumulate a record of expenses for the next period. This second closing entry for FastForward is step 2 in Exhibit 4.4. Exhibit 4.3 shows that posting this entry gives each expense account a zero balance.

Step 3: Close Income Summary to Owner's Capital

After steps 1 and 2, the balance of Income Summary is equal to December's net income of \$3,785 (\$8,150 credit less \$4,365 debit). The third closing entry transfers the balance of the Income Summary account to the capital account. This entry closes the Income Summary account—see step 3 in Exhibit 4.4. The Income Summary account has a zero balance after posting this entry. It continues to have a zero balance until the closing process again occurs at the end of the next period. (If a net loss occurred because expenses exceeded revenues, the third entry is reversed: debit Owner Capital and credit Income Summary.)

Step 4: Close Withdrawals Account to Owner's Capital

The fourth closing entry transfers any debit balance in the withdrawals account to the owner's capital account—see step 4 in Exhibit 4.4. This entry gives the withdrawals account a zero balance, and the account is now ready to accumulate next period's withdrawals. This entry also reduces the capital account balance to the \$33,585 amount reported on the balance sheet.

We could also have selected the accounts and amounts needing to be closed by identifying individual revenue, expense, and withdrawals accounts in the ledger. This is illustrated in Exhibit 4.4 where we prepare closing entries using the adjusted trial balance. (Information for closing entries is also in the financial statement columns of a work sheet.)

Post-Closing Trial Balance

Exhibit 4.5 shows the entire ledger of FastForward as of December 31 after adjusting and closing entries are posted. (The transaction and adjusting entries are in Chapters 2 and 3.) The temporary accounts (revenues, expenses, and withdrawals) have ending balances equal to zero.

¹ The closing process has focused on proprietorships. It is identical for partnerships with the exception that each owner has separate capital and withdrawals accounts (for steps 3 and 4). The closing process for a corporation is similar with the exception that it uses a Retained Earnings account instead of a Capital account, and a Dividend account instead of a Withdrawals account.

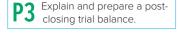


EXHIBIT 4.5

General Ledger after the Closing Process for FastForward

		Cá	ash	Acct.	No. 101
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 1	(1)	G1	30,000		30,000
2	(2)	G1		2,500	27,500
3	(3)	G1		26,000	1,500
5	(5)	G1	4,200		5,700
6	(13)	G1		2,400	3,300
12	(6)	G1		1,000	2,300
12	(7)	G1		700	1,600
22	(9)	G1	1,900		3,500
24	(10)	G1		900	2,600
24	(11)	G1		200	2,400
26	(12)	G1	3,000		5,400
26	(14)	G1		120	5,280
26	(15)	G1		230	5,050
26	(16)	G1		700	4,350

		,	iccount		
	Accounts	Red	ceivable	Acct.	No. 106
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 12	(8)	G1	1,900		1,900
22	(9)	G1		1,900	0
23	Adj.(f)	G1	1,800		1,800
	9	Supp	lies	Acct.	No. 126
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 2	(2)	G1	2,500		2,500
6	(4)	G1	7,100		9,600
26	(14)	G1	120		9,720
31	Adj.(b)	G1		1,050	8,670

Asset Accounts

		Prepaid	d Ins	urance	Acct.	No. 128
Date		Explan.	PR	Debit	Credit	Balance
2015	5					
Dec.	6	(13)	G1	2,400		2,400
:	31	Adj.(a)	G1		100	2,300
		Ec	uipn	nent	Acct.	No. 167
Date		Explan.	PR	Debit	Credit	Balance
2015	;					
Dec.	3	(3)	G1	26,000		26,000
	A	ccumulate	ed D	eprecia	tion—	
		E	quip	ment	Acct.	No. 168
Date		Explan.	PR	Debit	Credit	Balance
2015	;					
Dec.	31	Adj.(c)	G1		375	375

Accounts Payable Acct. No. 201 Date Explan. PR Debit Credit Balance 2015 7,100 7,100 Dec. 6 (4) G1 (10) G1 900 24 6,200 Salaries Payable Acct. No. 209 Explan. PR Debit Credit Balance Date 2015 Dec. 31 Adj.(e) G1 210 210

Consulting Revenue Acct. No. 403

Unearned Consulting						
		F	Reve	nue	Acct.	No. 236
Date		Explan.	PR	Debit	Credit	Balance
201!	_					
Dec.	26	(12) Adj.(d)	G1		3,000	
	31	Adj.(d)	G1	250		2,750

Liability and Equity Accounts

Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 1	(1)	G1		30,000	30,000
31	Clos.(3)	G1		3,785	33,785
31	Clos.(4)	G1	200		33,785
(C.Taylor, V	Vithd	Irawals	Acct.	No. 302
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 24	(11)	G1	200		200
31	Clos.(4)	G1		200	0

C. Taylor, Capital Acct. No. 301

Revenue and Expense Accounts (Including Income Summary)

	Date	Explan.	PR	Debit	Credit	Balance
	2015					
	Dec. 5	(5)	G1		4,200	4,200
	12	(8)	G1		1,600	5,800
	31	Adj.(b)	G1		250	6,050
	31	Adj.(f)	G1		1,800	7,850
	31	Clos.(1)	G1	7,850		0
		Renta	al Re	venue	Acct. I	No. 406
	Date	Explan.	PR	Debit	Credit	Balance
ľ	2015					
	Dec. 12	(8)	G1		300	300
	31	Clos.(1)	G1	300		0
		Depred	ciatio	n Expe	nse—	
				nent		No. 612
	Date	Explan.	PR	Debit	Credit	Balance
Ī	2015					
	Dec. 31	Adj.(c)	G1	375		375
	31	Clos.(2)	G1		375	0

	Saları	es E	xpense	Acct.	No. 622
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 12	(7)	G1	700		700
26	(16)	G1	700		1,400
31	Adj.(e)	G1	210		1,610
31	Clos.(2)	G1		1,610	0
	Insurar	ice E	xpense	Acct.	No. 637
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 31	Adj.(a)	G1	100		100
31	Clos.(2)	G1		100	0
	Rei	nt Ex	pense	Acct. I	No. 640
Date	Explan.	PR	Debit	Credit	Balance
2015					
Dec. 12	(6)	G1	1,000		1,000
31	Clos.(2)	G1		1,000	0

		Supplie	s Ex	pense	Acct.	No. 652
Date	,	Explan.	PR	Debit	Credit	Balance
201	5					
Dec.	31	Adj.(b)	G1	1,050		1,050
	31	Clos.(2)	G1		1,050	0
		Utilitie	es Ex	pense	Acct.	No. 690
Date	è	Explan.	PR	Debit	Credit	Balance
201	5					
Dec.	26	(15)	G1	230		230
	31	Clos.(2)	G1		230	0
		Income	e Sur	nmary	Acct.	No. 901
Date	,	Explan.	PR	Debit	Credit	Balance
201	5					
Dec.	31	Clos.(1)	G1		8,150	8,150
	31	Clos.(2)	G1	4,365		3,785
	31	Clos.(3)	G1	3,785		0

A **post-closing trial balance** is a list of permanent accounts and their balances from the ledger after all closing entries have been journalized and posted. It lists the balances for all accounts not closed. These accounts comprise a company's assets, liabilities, and equity, which are identical to those in the balance sheet. The aim of a post-closing trial balance is to verify that (1) total debits equal total credits for permanent accounts and (2) all temporary accounts have zero balances. FastForward's post-closing trial balance is shown in Exhibit 4.6. The post-closing trial balance usually is the last step in the accounting process.

EXHIBIT 4.6

Post-Closing Trial Balance

FASTFORWARD Post-Closing Trial Balance December 31, 2015			
	Debit	Credit	
Cash	\$ 4,350		
Accounts receivable	1,800		
Supplies	8,670		
Prepaid insurance	2,300		
Equipment	26,000		
Accumulated depreciation—Equipment		\$ 375	
Accounts payable		6,200	
Salaries payable		210	
Unearned consulting revenue		2,750	
C. Taylor, Capital		33,585	
Totals	\$43,120	\$43,120	

ACCOUNTING CYCLE



Identify steps in the accounting cycle.

The term **accounting cycle** refers to the steps in preparing financial statements. It is called a *cycle* because the steps are repeated each reporting period. Exhibit 4.7 shows the 10 steps in the cycle, beginning with analyzing transactions and ending with a post-closing trial balance or

EXHIBIT 4.7

Steps in the Accounting Cycle*



Explanations

- 1. Analyze transactions
- 2. Journalize
- 3. Post
- 4. Prepare unadjusted trial balance
- 5. Adjust
- 6. Prepare adjusted trial balance
- 7. Prepare statements
- 8. Close
- 9. Prepare post-closing trial balance
- 10. Reverse (optional)

- Analyze transactions to prepare for journalizing.
- Record accounts, including debits and credits, in a journal.
- Transfer debits and credits from the journal to the ledger.
- Summarize unadjusted ledger accounts and amounts.
- Record adjustments to bring account balances up to date; journalize and post adjustments.
- Summarize adjusted ledger accounts and amounts.
- Use adjusted trial balance to prepare financial statements.
- Journalize and post entries to close temporary accounts.
- Test clerical accuracy of the closing procedures.
- Reverse certain adjustments in the next period—optional step; see Appendix 4A.

^{*} Steps 4, 6, and 9 can be done on a work sheet. A work sheet is useful in planning adjustments, but adjustments (step 5) must always be journalized and posted. Steps 3, 4, 6, and 9 are automatic with a computerized system.

reversing entries. Steps 1 through 3 usually occur regularly as a company enters into transactions. Steps 4 through 9 are done at the end of a period. *Reversing entries* in step 10 are optional and are explained in Appendix 4A.

Quick Check

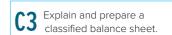
Answers — p. 162



- 4. What are the major steps in preparing closing entries?
- 5. Why are revenue and expense accounts called temporary? Identify and list the types of temporary accounts.
- 6. What accounts are listed on the post-closing trial balance?

CLASSIFIED BALANCE SHEET

Our discussion to this point has been limited to unclassified financial statements. This section describes a classified balance sheet. The next chapter describes a classified income statement. An **unclassified balance sheet** is one whose items are broadly grouped into assets, liabilities, and equity. One example is FastForward's balance sheet in Exhibit 4.2 A **classified balance sheet** organizes assets and liabilities into important subgroups that provide more information to decision makers.



Classification Structure

A classified balance sheet has no required layout, but it usually contains the categories in Exhibit 4.8. One of the more important classifications is the separation between current and noncurrent items for both assets and liabilities. Current items are those expected to come due (either collected or owed) within one year or the company's operating cycle, whichever is longer. The **operating cycle** is the time span from when *cash is used* to acquire goods and services until *cash is received* from the sale of goods and services. "Operating" refers to company operations and "cycle" refers to the circular flow of cash used for company inputs and then cash received from its outputs. The length of a company's operating cycle depends on its activities. For a service company, the operating cycle is the time span between (1) paying employees who perform the services and (2) receiving cash from customers. For a merchandiser selling products, the operating cycle is the time span between (1) paying suppliers for merchandise and (2) receiving cash from customers.

Assets	Liabilities and Equity
Current assets	Current liabilities
Noncurrent assets	Noncurrent liabilities
Long-term investments	Equity
Plant assets	
Intangible assets	

Most operating cycles are less than one year. This means most companies use a one-year period in deciding which assets and liabilities are current. A few companies have an operating cycle longer than one year. For instance, producers of certain beverages (wine) and products (ginseng) that require aging for several years have operating cycles longer than one year. A balance sheet lists current assets before noncurrent assets and current liabilities before noncurrent liabilities. This consistency in presentation allows users to quickly identify current assets that are most easily converted to cash and current liabilities that are shortly coming due. Items in current assets and current liabilities are listed in the order of how quickly they will be converted to, or paid in, cash.

EXHIBIT 4.8

Typical Categories in a Classified Balance Sheet

Classification Categories

This section describes the most common categories in a classified balance sheet. The balance sheet for Snowboarding Components in Exhibit 4.9A shows the typical categories. Its assets are classified as either current or noncurrent. Its noncurrent assets include three main categories: long-term investments, plant assets, and intangible assets. Its liabilities are classified as either current or long-term. Not all companies use the same categories of assets and liabilities for their balance sheets. The balance sheet of the Egyptian company ABC in Exhibit 4.9B, contains the same categories as Snowboarding Components, but also includes a line to show a figure for working capital. This is achieved by showing current assets directly above current liabilities. The user can then quickly determine working capital by subtracting current liabilities from current assets. This, in turn, allows the user to also determine the degree of liquidity of the company. The Egyptian presentation also shows invested capital which is equal to long-term

EXHIBIT 4.9A

Example of a Classified Balance Sheet

SNOWBOARDING COMPONENTS **Balance Sheet** January 31, 2015 **Assets Current assets** \$ 6,500 2,100 Accounts receivable, net 4 400 27,500 2,400 Total current assets \$ 42,900 Long-term investments 1.500 Notes receivable Investments in stocks and bonds 18,000 48.000 Land held for future expansion 67,500 **Plant assets** Equipment and buildings 203,200 53.000 Equipment and buildings, net 150,200 73,200 223,400 Total plant assets 10,000 \$343,800 Total assets Liabilities **Current liabilities** \$ 15,300 Accounts payable Wages payable 3 200 3,000 Current portion of long-term liabilities..... 7,500 Total current liabilities \$ 29,000 Long-term liabilities (net of current portion). 150,000 Total liabilities 179,000 Equity T. Hawk, Capital 164,800 Total liabilities and equity \$343,800

EXHIBIT 4.9B

Example of an Egyptian Balance Sheet Presentation

ABC COMPANY Balance Sheet December 21, 2015						
Assets						
Long Term Assets						
Plant assets (fixed assets)						
Equipments and buildings L.E	. 203,200					
Less accumulated depreciation	53,000	150,200				
Land		73,200				
Total plant assets (fixed assets)A	L.I	E.223,400				
Intangible assets	l	E.10,000				
Long Term investments						
Notes receivable	1,500					
Investments in stocks and bonds	18,000					
Land held for future expansions	48,000					
Total Long-term investments		67,500				
Total long-term assets D=(A+B+C)		300,900				
Current Assets						
Cash	6,500					
Short terms investments	2,100					
Accounts receivable, net	4,400					
Merchandise inventory	27,500					
Prepaid expenses	2,400					
Total current assets	l	E. <u>42,900</u>				
Current Liabilities						
Accounts payableL	.E.15,300					
Wages payable	3,200					
Notes payable	3,000					
Current portion of long-term liabilities	7,500					
Total current liabilities	L	.E. 29,000				
Working capital G= (E-F)	I	L.E. <u>13,900</u>				
Invested capital	L.I	E. 314,800				
To be Financed through:						
Equity		164 900				
Capital		164,800				
Long Term Liabilities		150.000				
Loan net of current portion	1	150,000				
Total financing	L.	E.314,800				

assets plus working capital. This points to the investment activities of the company. These activities are then financed through equity financing and debt financing which are also shown in the balance sheet.

Current Assets Current assets are cash and other resources that are expected to be sold, collected, or used within one year or the company's operating cycle, whichever is longer. Examples are cash, short-term investments, accounts receivable, short-term notes receivable, goods for sale (called *merchandise* or *inventory*), and prepaid expenses. The individual prepaid expenses of a company are usually small in amount compared to many other assets and are often combined and shown as a single item. The prepaid expenses in Exhibits 4.9A and 4.9B likely include items such as prepaid insurance, prepaid rent, office supplies, and store supplies. Prepaid expenses are usually listed last because they will not be converted to cash (instead, they are used).

Long-Term Investments A second major balance sheet classification is **long-term** (or *noncurrent*) investments. Notes receivable and investments in stocks and bonds are long-term assets when they are expected to be held for more than the longer of one year or the operating cycle. Land held for future expansion is a long-term investment because it is *not* used in operations.

Plant Assets Plant assets are tangible assets that are both *long-lived* and *used to produce* or *sell products and services*. Examples are equipment, machinery, buildings, and land that are used to produce or sell products and services. The order listing for plant assets is usually from most liquid to least liquid such as equipment and machinery to buildings and land.

Intangible Assets Intangible assets are long-term resources that benefit business operations, usually lack physical form, and have uncertain benefits. Examples are patents, trademarks, copyrights, franchises, and goodwill. Their value comes from the privileges or rights granted to or held by the owner. **K2**, Inc. reported intangible assets of \$228 million, which is nearly 20% of its total assets. Its intangibles included trademarks, patents, and licensing agreements.

Current Liabilities Current liabilities are obligations due to be paid or settled within one year or the operating cycle, whichever is longer. They are usually settled by paying out current assets such as cash. Current liabilities often include accounts payable, notes payable, wages payable, taxes payable, interest payable, and unearned revenues. Also, any portion of a long-term liability due to be paid within one year or the operating cycle, whichever is longer, is a current liability. Unearned revenues are current liabilities when they will be settled by delivering products or services within one year or the operating cycle, whichever is longer. Current liabilities are reported in the order of those to be settled first.

Long-Term Liabilities Long-term liabilities are obligations *not* due within one year or the operating cycle, whichever is longer. Notes payable, mortgages payable, bonds payable, and lease obligations are common long-term liabilities. If a company has both short- and long-term items in each of these categories, they are commonly separated into two accounts in the ledger.

Equity Equity is the owner's claim on assets. For a proprietorship, this claim is reported in the equity section with an owner's capital account. (For a partnership, the equity section reports a capital account for each partner. For a corporation, the equity section is divided into two main subsections, common stock and retained earnings.)

Quick Check Answers — p. 162



- 7. Classify the following assets as (1) current assets, (2) plant assets, or (3) intangible assets: (a) land used in operations, (b) office supplies, (c) receivables from customers due in 10 months, (d) insurance protection for the next 9 months, (e) trucks used to provide services to customers, (f) trademarks.
- 8. Cite at least two examples of assets classified as investments on the balance sheet.
- 9. Explain the operating cycle for a service company.

Point: Current is also called *short-term*, and noncurrent is also called *long-term*.

Point: Plant assets are also called *fixed* assets; property, plant and equipment; orlong-lived assets.

Point: Many financial ratios are distorted if accounts are not classified correctly.

Point: Only assets and liabilities are classified as current or noncurrent.



GLOBAL VIEW

We explained that accounting under U.S. GAAP is similar, but not identical, to that under IFRS. This section discusses differences in the closing process and in reporting assets and liabilities on a balance sheet.

Closing Process The closing process is identical under U.S. GAAP and IFRS. Although unique accounts can arise under either system, the closing process remains the same.

Reporting Assets and Liabilities The definition of an asset is similar under U.S. GAAP and IFRS and involves three basic criteria: (1) the company owns or controls the right to use the item, (2) the right arises from a past transaction or event, and (3) the item can be reliably measured. Both systems define the initial asset value as historical cost for nearly all assets. After acquisition, one of two asset measurement systems is applied: historical cost or fair value. Generally, U.S. GAAP defines fair value as the amount to be received in an orderly sale. IFRS defines fair value as *exchange value*—either replacement cost or selling price. We describe these differences, and the assets to which they apply, in later chapters.

The definition of a liability is similar under U.S. GAAP and IFRS and involves three basic criteria: (1) the item is a *present* obligation requiring a probable future resource outlay, (2) the obligation arises from a past transaction or event, and (3) the obligation can be reliably measured. As with assets, both systems apply one of two measurement systems to liabilities: historical cost or fair value. Later chapters discuss specific differences.



Decision Analysis



Current Ratio



EXHIBIT 4.10

Current Ratio

An important use of financial statements is to help assess a company's ability to pay its debts in the near future. Such analysis affects decisions by suppliers when allowing a company to buy on credit. It also affects decisions by creditors when lending money to a company, including loan terms such as interest rate, due date, and collateral requirements. It can also affect a manager's decisions about using cash to pay debts when they come due. The **current ratio** is one measure of a company's ability to pay its short-term obligations. It is defined in Exhibit 4.10 as current assets divided by current liabilities.

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

Using financial information from Limited Brands, Inc., we compute its current ratio for the recent six-year period. The results are in Exhibit 4.11.

EXHIBIT 4.11



\$ in millions	2013	2012	2011	2010	2009	2008
Current assets	\$2,205	\$2,368	\$2,592	\$3,250	\$2,867	\$2,919
Current liabilities	\$1,538	\$1,526	\$1,504	\$1,322	\$1,255	\$1,374
Current ratio	1.4	1.6	1.7	2.5	2.3	2.1
Industry current ratio	1.5	1.6	1.7	1.9	2.0	2.1

Limited Brands' current ratio averaged 1.9 for its fiscal years 2008 through 2013. The current ratio for each of these years suggests that the company's short-term obligations can be covered with its short-term assets. However, if its ratio would approach 1.0, Limited would expect to face challenges in covering liabilities. If the ratio were less than 1.0, current liabilities would exceed current assets, and the company's ability to pay short-term obligations could be in doubt. Limited Brands' liquidity, as evidenced by its current ratio, declined in 2011, 2012, and 2013, which roughly matches the industry decline.

Decision Maker

Answer — p. 162



Analyst You are analyzing the financial condition of a company to assess its ability to meet upcoming loan payments. You compute its current ratio as 1.2. You also find that a major portion of accounts receivable is due from one client who has not made any payments in the past 12 months. Removing this receivable from current assets lowers the current ratio to 0.7. What do you conclude? ■

DEMONSTRATION PROBLEM

The partial work sheet of Midtown Repair Company at December 31, 2015, follows.

	Adjusted Trial Balance			ome ement	Stater	Sheet and nent of 's Equity
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	95,600					
Notes receivable (current)	50,000					
Prepaid insurance	16,000					
Prepaid rent	4,000					
Equipment	170,000					
Accumulated depreciation—Equipment		57,000				
Accounts payable		52,000				
Long-term notes payable		63,000				
C. Trout, Capital		178,500				
C. Trout, Withdrawals	30,000					
Repair services revenue		180,800				
Interest revenue		7,500				
Depreciation expense—Equipment	28,500					
Wages expense	85,000					
Rent expense	48,000					
Insurance expense	6,000					
Interest expense	5,700					
Totals	538,800	538,800				

Required

- 1. Complete the work sheet by extending the adjusted trial balance totals to the appropriate financial statement columns.
- **2.** Prepare closing entries for Midtown Repair Company.
- **3.** Set up the Income Summary and the C. Trout, Capital account in the general ledger (in balance column format) and post the closing entries to these accounts.
- **4.** Determine the balance of the C. Trout, Capital account to be reported on the December 31, 2015, balance sheet.
- **5.** Prepare an income statement, statement of owner's equity, and classified balance sheet (in report form) as of December 31, 2015.

PLANNING THE SOLUTION

- Extend the adjusted trial balance account balances to the appropriate financial statement columns.
- Prepare entries to close the revenue accounts to Income Summary, to close the expense accounts to Income Summary, to close Income Summary to the capital account, and to close the withdrawals account to the capital account.

- Post the first and second closing entries to the Income Summary account. Examine the balance of income summary and verify that it agrees with the net income shown on the work sheet.
- Post the third and fourth closing entries to the capital account.

Use the work sheet's two right-most columns and your answer in part 4 to prepare the classified balance sheet.

SOLUTION TO DEMONSTRATION PROBLEM

1. Completing the work sheet.

	Adjusted Trial Balance		Income Statement		Balance Sheet and Statement of Owner's Equity	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	95,600				95,600	
Notes receivable (current)	50,000				50,000	
Prepaid insurance	16,000				16,000	
Prepaid rent	4,000				4,000	
Equipment	170,000				170,000	
Accumulated depreciation—Equipment		57,000				57,000
Accounts payable		52,000				52,000
Long-term notes payable		63,000				63,000
C. Trout, Capital		178,500				178,500
C. Trout, Withdrawals	30,000				30,000	
Repair services revenue		180,800		180,800		
Interest revenue		7,500		7,500		
Depreciation expense—Equipment	28,500		28,500			
Wages expense	85,000		85,000			
Rent expense	48,000		48,000			
Insurance expense	6,000		6,000			
Interest expense	5,700		5,700			
Totals	538,800	538,800	173,200	188,300	365,600	350,500
Net income			15,100			15,100
Totals			188,300	188,300	365,600	365,600

2. Closing entries.

Dec. 31	Repair Services Revenue	180,800	
	Interest Revenue	7,500	
	Income Summary		188,300
	To close revenue accounts.		
Dec. 31	Income Summary	173,200	
	Depreciation Expense—Equipment		28,500
	Wages Expense		85,000
	Rent Expense		48,000
	Insurance Expense		6,000
	Interest Expense		5,700
	To close expense accounts.		
Dec. 31	Income Summary	15,100	
	C. Trout, Capital		15,100
	To close the Income Summary account.		
Dec. 31	C. Trout, Capital	30,000	
	C. Trout, Withdrawals	30,000	
	To close the withdrawals account.		

3. Set up the Income Summary and the capital ledger accounts and post the closing entries.

	Income Summary					
Date	Explanation PR Debit			Credit	Balance	
2015						
Jan. 1	Beginning balance				0	
Dec. 31	Close revenue accounts			188,300	188,300	
31	Close expense accounts		173,200		15,100	
31	Close income summary		15,100		0	

	C. Trout, Capital				
Date	Explanation	PR	Debit	Credit	Balance
2015					
Jan. 1	Beginning balance				178,500
Dec. 31	Close Income Summary			15,100	193,600
31	Close C. Trout, Withdrawals		30,000		163,600

4. The final capital balance of \$163,600 (from part 3) will be reported on the December 31, 2015, balance sheet. The final capital balance reflects the increase due to the net income earned during the year and the decrease for the owner's withdrawals during the year.

5.

MIDTOWN REPAIR COMPANY Income Statement For Year Ended December 31, 2015				
Revenues				
Repair services revenue	\$180,800			
Interest revenue	7,500			
Total revenues		\$188,300		
Expenses				
Depreciation expense—Equipment	28,500			
Wages expense	85,000			
Rent expense	48,000			
Insurance expense	6,000			
Interest expense	5,700			
Total expenses		173,200		
Net income		\$ 15,100		

MIDTOWN REPAIR COMPANY Statement of Owner's Equity For Year Ended December 31, 20		
C. Trout, Capital, December 31, 2014 Add: Investment by owner Net income	\$ 0 	\$178,500
Less: Withdrawals by owner C. Trout, Capital, December 31, 2015		30,000 \$163,600

MIDTOWN REPAIR COMPANY Balance Sheet December 31, 2015	
Assets	
Current assets	
Cash	\$ 95,600
Notes receivable	50,000
Prepaid insurance	16,000
Prepaid rent	4,000
Total current assets	165,600
Plant assets	
Equipment	\$170,000
Less: Accumulated depreciation—Equipment	(57,000)
Total plant assets	113,000
Total assets	<u>\$278,600</u>
Liabilities	
Current liabilities	
Accounts payable	\$ 52,000
Long-term liabilities	
Long-term notes payable	63,000
Total liabilities	115,000
Equity	
C. Trout, Capital	_163,600
Total liabilities and equity	\$278,600

APPENDIX

4A

Reversing Entries

Reversing entries are optional. They are recorded in response to accrued assets and accrued liabilities that were created by adjusting entries at the end of a reporting period. The purpose of reversing entries is to simplify a company's recordkeeping. Exhibit 4A.1 shows an example of FastForward's reversing entries. The top of the exhibit shows the adjusting entry FastForward recorded on December 31 for its employee's earned but unpaid salary. The entry recorded three days' salary of \$210, which increased December's total salary expense to \$1,610. The entry also recognized a liability of \$210. The expense is reported on December's income statement. The expense account is then closed. The ledger on January 1, 2016, shows a \$210 liability and a zero balance in the Salaries Expense account. At this point, the choice is made between using or not using reversing entries.

Point: As a general rule, adjusting entries that create new asset or liability accounts are likely candidates for reversing.

Accounting without Reversing Entries The path down the left side of Exhibit 4A.1 is described in the chapter. To summarize here, when the next payday occurs on January 9, we record payment with a compound entry that debits both the expense and liability accounts and credits Cash. Posting that entry creates a \$490 balance in the expense account and reduces the liability account balance to zero because the debt has been settled. The disadvantage of this approach is the slightly more complex entry required on January 9. Paying the accrued liability means that this entry differs from the routine entries made on all other paydays. To construct the proper entry on January 9, we must recall the effect of the December 31 adjusting entry. Reversing entries overcome this disadvantage.

Accounting with Reversing Entries The right side of Exhibit 4A.1 shows how a reversing entry on January 1 overcomes the disadvantage of the January 9 entry when not using reversing entries. A reversing entry is the exact opposite of an adjusting entry. For FastForward, the Salaries Payable liability account is debited for \$210, meaning that this account now has a zero balance after the entry is posted. The Salaries Payable account temporarily understates the liability, but this is not a problem since financial

Accrue salaries expense on December 31, 2015 Salaries Expense Salaries Payable 210 Salaries Expense Date Expl. Debit Credit Balance 2015 700 700 Dec. 12 (7)26 (16)700 1,400 31 (e) 210 1,610 Salaries Payable Date Expl. Debit | Credit | Balance 2015 Dec. 31 210 210 (e) **WITHOUT Reversing Entries WITH Reversing Entries** OR Reversing entry recorded on No reversing entry recorded on January 1, 2016 **NO ENTRY** Salaries Expense

Debit Credit Balance

Debit Credit Balance

210

210

EXHIBIT 4A.1

Reversing Entries for an Accrued Expense

January 1, 2016					
Salaries Payable210					
Salaries Expense					
Salaries Expense*					
Date	Expl.	Debit	Credit	Balance	
²⁰¹⁶ Jan. 1			210	210	
	Sala	ries Pa	yable		
Date	Expl.	Debit	Credit	Balance	
2015 Dec. 31	(e)		210	210	

210

2016 Jan.

	Po	ay the a	ccrued	and curre	nt salaries on January	9, the first	t payda	y in 20	16
Salaries E	Expense	e	4	90		Salaries Expense			
Salaries F	Payable		2	10		Cash			
Cas	sh			700			Salar	ies Exp	ens
	Salaı	ries Exp	ense			Date	Expl.	Debit	Cr
Date	Expl.	Debit	Credit	Balance		2016			
2016						Jan. 1			2
Jan. 9		490		490		Jan. 9		700	
	Sala	ries Pa	yable				Sala	ries Pay	yab
Date	Expl.	Debit	Credit	Balance		Date	Expl.	Debit	Cr
2015						2015			
Dec. 31	(e)		210	210		Dec. 31	(e)		2
2016						2016		210	
Jan. 9		210		0		Jan. 1	l	210	

Date

2016

Date

2015 Dec. 31

2016

Expl.

Expl.

(e)

Salaries Payable

Salaries Expense 700									
Cash 700									
Salaries Expense*									
Date	Expl.	Debit	Credit	Balance					
2016 Jan. 1 Jan. 9		700	210	210 490					
	Sala	ries Pay	able						
Date	Expl.	Debit	Credit	Balance					
2015 Dec. 31 2016	(e)		210	210					
Jan. 1		210		0					

Under both approaches, the expense and liability accounts have identical balances after the cash payment on January 9.

Salaries Expense	 \$4	90	
Salaries Payable	 \$	0	

^{*}Circled numbers in the Balance column indicate abnormal balances

statements are not prepared before the liability is settled on January 9. The credit to the Salaries Expense account is unusual because it gives the account an abnormal credit balance. We highlight an abnormal balance by circling it. Because of the reversing entry, the January 9 entry to record payment is straightforward. This entry debits the Salaries Expense account and credits Cash for the full \$700 paid. It is the same as all other entries made to record 10 days' salary for the employee. Notice that after the payment entry is posted, the Salaries Expense account has a \$490 balance that reflects seven days' salary of \$70 per day (see the lower right side of Exhibit 4A.1). The zero balance in the Salaries Payable account is now correct. The lower section of Exhibit 4A.1 shows that the expense and liability accounts have exactly the same balances whether reversing entries are used or not. This means that both approaches yield identical results.

Summary

Explain why temporary accounts are closed each period.

Temporary accounts are closed at the end of each accounting period for two main reasons. First, the closing process updates the capital account to include the effects of all transactions and events recorded for the period. Second, it prepares revenue, expense, and withdrawals accounts for the next reporting period by giving them zero balances.

- **C2 Identify steps in the accounting cycle.** The accounting cycle consists of 10 steps: (1) analyze transactions, (2) journalize,
- (3) post, (4) prepare an unadjusted trial balance, (5) adjust accounts,
- (6) prepare an adjusted trial balance, (7) prepare statements,
- (8) close, (9) prepare a post-closing trial balance, and (10) prepare (optional) reversing entries.

Explain and prepare a classified balance sheet. Classified balance sheets report assets and liabilities in two categories: current and noncurrent. Noncurrent assets often include long-term investments, plant assets, and intangible assets. Owner's equity for proprietorships (and partnerships) report the capital account balance. A corporation separates equity into common stock and retained earnings.

A1 Compute the current ratio and describe what it reveals about a company's financial condition. A company's current ratio is defined as current assets divided by current liabilities. We use it to evaluate a company's ability to pay its current liabilities out of current assets.

Prepare a work sheet and explain its usefulness. A work sheet can be a useful tool in preparing and analyzing financial statements. It is helpful at the end of a period in preparing adjusting entries, an adjusted trial balance, and financial statements. A work sheet usually contains five pairs of columns: Unadjusted Trial Balance, Adjustments, Adjusted Trial Balance, Income Statement, and Balance Sheet & Statement of Owner's Equity.

P2 Describe and prepare closing entries. Closing entries involve four steps: (1) close credit balances in revenue (and gain) accounts to Income Summary, (2) close debit balances in expense (and loss) accounts to Income Summary, (3) close Income Summary to the capital account, and (4) close withdrawals account to owner's capital.

P3 Explain and prepare a post-closing trial balance. A post-closing trial balance is a list of permanent accounts and their balances after all closing entries have been journalized and posted. Its purpose is to verify that (1) total debits equal total credits for permanent accounts and (2) all temporary accounts have zero balances.

P4A Prepare reversing entries and explain their purpose.
Reversing entries are an optional step. They are applied to accrued expenses and revenues. The purpose of reversing entries is to simplify subsequent journal entries. Financial statements are unaffected by the choice to use or not use reversing entries.

Guidance Answers to Decision Maker and Decision Ethics



Entrepreneur Yes, you are concerned about the absence of a depreciation adjustment. Equipment does depreciate, and financial statements must recognize this occurrence. Its absence suggests an error or a misrepresentation (there is also the possibility that equipment is fully depreciated).

Analyst A current ratio of 1.2 suggests that current assets are sufficient to cover current liabilities, but it implies a minimal buffer in case of errors in measuring current assets or current liabilities. Removing the past due receivable reduces the current ratio to 0.7. Your assessment is that the company will have some difficulty meeting its loan payments.

Guidance Answers to Quick Checks



- Amounts in the Unadjusted Trial Balance columns are taken from current account balances in the ledger. The balances for new accounts expected to arise from adjusted entries can be left blank or set at zero.
- **2.** A work sheet offers the advantage of listing on one page all necessary information to make adjusting entries.
- **3.** A work sheet can help in (a) accounting efficiency and avoiding errors, (b) linking transactions and events to their effects in financial statements, (c) showing adjustments for audit purposes, (d) preparing interim financial statements, and (e) showing effects from proposed, or what-if, transactions.
- **4.** The major steps in preparing closing entries are to close (1) credit balances in revenue accounts to Income Summary, (2) debit balances in expense accounts to Income Summary, (3) Income Summary to owner's capital, and (4) any withdrawals account to owner's capital.

- **5.** Revenue (and gain) and expense (and loss) accounts are called *temporary* because they are opened and closed each period. The Income Summary and owner's withdrawals accounts are also temporary.
- **6.** Permanent accounts make up the post-closing trial balance, which consist of asset, liability, and equity accounts.
- **7.** Current assets: (*b*), (*c*), (*d*). Plant assets: (*a*), (*e*). Item (*f*) is an intangible asset.
- **8.** Investment in common stock, investment in bonds, and land held for future expansion.
- **9.** For a service company, the operating cycle is the usual time between (1) paying employees who do the services and (2) receiving cash from customers for services provided.

Key Terms

Accounting cycle (p. 152)

Classified balance sheet (p. 153)

Closing entries (p. 149)

Closing process (p. 148)

Current assets (p. 155)

Current liabilities (p. 155)

Current ratio (p. 156)

Income summary (p. 149)

Intangible assets (p. 155)

Long-term investments (p. 155)

Long-term liabilities (p. 155)

Operating cycle (p. 153)

Permanent accounts (p. 149)

Post-closing trial balance (p. 152)

Pro forma financial statements (p. 148)

Reversing entries (p. 160)

Temporary accounts (p. 148)

Unclassified balance sheet (p. 153)

Working papers (p. 144)

Work sheet (p. 144)

Multiple Choice Quiz

Answers on p. 185

Additional Quiz Questions are available in the Student Resources in Connect.

1. O. Zaky owner of Zaky Services, withdrew \$25,000 from the business during the current year. The entry to close the withdrawals account at the end of the year is:

a.	O. Zaky, Withdrawals	25,000
	O. Zaky, Capital	25,000
b.	Income Summary	25,000
	O. Zaky, Capital	25,000
c.	O. Zaky, Withdrawals	25,000
	Cash	25,000
d.	O. Zaky, Capital	25,000
	Salary Expense	25,000
e.	O. Zaky, Capital	25,000
	O. Zaky, Withdrawals	25,000

2. The following information is available for the R. Hakim Company before closing the accounts. After all of the closing entries are made, what will be the balance in the R. Hakim, Capital account?

Total revenues	\$300,000
Total expenses	195,000
R. Hakim, Capital	100,000
R. Hakim, Withdrawals	45,000

- **a.** \$360,000 **d.** \$150,000
- **b.** \$250,000 **e.** \$60,000
- **c.** \$160,000
- **3.** Which of the following errors would cause the Balance Sheet and Statement of Owner's Equity columns of a work sheet to be out of balance?
 - **a.** Entering a revenue amount in the Balance Sheet and Statement of Owner's Equity Debit column.

- **b.** Entering a liability amount in the Balance Sheet and Statement of Owner's Equity Credit column.
- **c.** Entering an expense account in the Balance Sheet and Statement of Owner's Equity Debit column.
- **d.** Entering an asset account in the Income Statement Debit column.
- **e.** Entering a liability amount in the Income Statement Credit column.
- **4.** The temporary account used only in the closing process to hold the amounts of revenues and expenses before the net difference is added or subtracted from the owner's capital account is called the
 - a. Closing account.
 - **b.** Nominal account.
 - c. Income Summary account.
 - d. Balance Column account.
 - e. Contra account.
- **5.** Based on the following information from Rafeek Company's balance sheet, what is Rafeek Company's current ratio?

Current assets	\$ 75,000
Investments	30,000
Plant assets	300,000
Current liabilities	50,000
Long-term liabilities	60,000
Rafeek, Capital	295.000

- **a.** 2.10
- **d.** 0.95 **e.** 0.67
- **b.** 1.50
- **c.** 1.00

- A Superscript letter A denotes assignments based on Appendix 4A.
- Icon denotes assignments that involve decision making.

Discussion Questions

- **1.** What are the steps in recording closing entries?
- **2.** What accounts are affected by closing entries? What accounts are not affected?
- **3.** What two purposes are accomplished by recording closing entries?
- **4.** What is the purpose of the Income Summary account?
- **5. (I** Explain whether an error has occurred if a post-closing trial balance includes a Depreciation Expense account.
- **6.** What tasks are aided by a work sheet?
- **7.** Why are the debit and credit entries in the Adjustments columns of the work sheet identified with letters?
- **8.** What is a company's operating cycle?
- **9.** What classes of assets and liabilities are shown on a typical classified balance sheet?
- **10.** How is unearned revenue classified on the balance sheet?
- **11.** What are the characteristics of plant assets?
- **12.** How do reversing entries simplify recordkeeping?
- **13.** If a company recorded accrued salaries expense of \$500 at the end of its fiscal year, what reversing entry could be made? When would it be made?

- **14.** Access **Telecom Egypt**'s IFRS financial **TELECOM EGYPT** statements from its website (www.te.eg) and refer to the balance sheet for the fiscal year ended December 31, 2015. What main non-current asset categories are used on its classified balance sheet?
- **15.** Access **Etisalat**'s financial statements from its website (<u>www.etisalat.com</u>) and refer to the balance sheet for the fiscal year ended December 31, 2015. Identify and list its current assets.
- **16.** Access **Etisalat**'s financial statements from its **Etisalat** website (**www.etisalat.com**) and refer to the balance sheet for the fiscal year ended December 31, 2015. Identify the accounts listed as current liabilities.
- **17.** Access **Telecom Egypt**'s IFRS financial **TELECOM EGYPT** statements from its website (**www.te.eg**) for the fiscal year ended December 31, 2015. What journal entry was likely recorded as of December 31, 2015, to close its Income Summary account?

king



QUICK STUDY	work sheet in their proper order by writing numbers 1–5 in the							
QS 4-1	Total the statement columns, compute net income (loss), and complete work sheet.Extend adjusted balances to appropriate financial statement columns.							
Ordering work sheet steps								
P1	c. Prepare an unadjusted trial b	alance on the work sheet.						
••	d. Prepare an adjusted trial bala	ance on the work sheet.						
	e Enter adjustments data on the	e work sheet.						
QS 4-2	In preparing a work sheet, indicate the fi	nancial statement Debit column to which a normal balance in the						
Applying a work sheet	following accounts should be extended.	Use IS for the Income Statement Debit column and BS for the						
P1	Balance Sheet and Statement of Owner's	s Equity Debit column.						
	a. Equipment	d. Depreciation Expense—Equipment						
	b. Owner, Withdrawals	e. Accounts Receivable						
	c. Prepaid Rent	f. Insurance Expense						

QS 4-3

Interpreting a work sheet

P1

The following selected information is taken from the work sheet for Wasiem Company as of December 31, 2015. Using this information, determine the amount for K. Wasiem, Capital, that should be reported on its December 31, 2015, balance sheet.

		ome ement	Balance Sheet and Statement of Owner's Equity		
:	Dr.	Cr.	Dr.	Cr.	
K. Wayman, Capital			39,000	72,000	
: Totals	122,000	181,000			

The ledger of Shahir Company includes the following unadjusted normal balances: Prepaid Rent \$1,000, Services Revenue \$55,600, and Wages Expense \$5,000. Adjusting entries are required for (a) prepaid rent expired, \$200; (b) accrued services revenue \$900; and (c) accrued wages expense \$700. Enter these unadjusted balances and the necessary adjustments on a work sheet and complete the work sheet for these accounts. Note: Also include the following accounts: Accounts Receivable, Wages Payable, and Rent Expense.

QS 4-4

Preparing a partial work sheet

Explaining temporary and

permanent accounts

QS 4-5

C1

Choose from the following list of terms/phrases to best complete the statements below.

- a. Temporary
- **b.** Permanent

- f. Income Summary c. One or more
- **1.** ______ accounts generally consist of all balance sheet accounts, and these accounts are not closed.
- 2. Permanent accounts report on activities related to ______ future accounting periods, and they carry their ending balances into the next period.

d. One

e. Zero balances

- **3.** Temporary accounts accumulate data related to ____ ___ accounting period.
- _ accounts include all income statement accounts, the withdrawals account, and the Income Summary account.

The ledger of Mai Company includes the following accounts with normal balances: D. Mai, Capital \$9,000; D. Mai, Withdrawals \$800; Services Revenue \$13,000; Wages Expense \$8,400; and Rent Expense \$1,600. Prepare the necessary closing entries from the available information at December 31.

QS 4-6

Prepare closing entries from the ledger

P2

Identify which of the following accounts would be included in a post-closing trial balance.

- 1. Accounts Receivable
- 2. Salaries Expense
- 3. Goodwill

- **5.** Income Tax Expense
- **6.** Salaries Payable

QS 4-7

Identify post-closing accounts

P3

List the following steps of the accounting cycle in their proper order.

- **a.** Posting the journal entries.
- **b.** Journalizing and posting adjusting entries.
- **c.** Preparing the adjusted trial balance.
- **d.** Journalizing and posting closing entries.
- e. Analyzing transactions and events.
- **f.** Preparing the financial statements.
- **g.** Preparing the unadjusted trial balance.
- **h.** Journalizing transactions and events.
- i. Preparing the post-closing trial balance.

QS 4-8

Identifying the accounting cycle

C2

The following are common categories on a classified balance sheet.

- A. Current assets
- **B.** Long-term investments
- **C.** Plant assets

- **D.** Intangible assets
- **E.** Current liabilities
- **F.** Long-term liabilities

For each of the following items, select the letter that identifies the balance sheet category where the item

- **1.** Land not currently used in operations
- **2.** Notes payable (due in five years)
- 3. Accounts receivable

typically would appear.

4. Trademarks

- **5.** Accounts payable
- 6. Store equipment
- 7. Wages payable
- 8. Cash

QS 4-9

Classifying balance sheet items

C3

Answer each of the following questions related to international accounting standards.

- **a.** Explain how the closing process is different between accounting under IFRS versus U.S. GAAP.
- b. What basic principle do U.S. GAAP and IFRS rely upon in recording the initial acquisition value for nearly all assets?

QS 4-10

International accounting standards



QS 4-11

Identifying current accounts and computing the current ratio

Compute Dalida Company's current ratio using the following information.

Accounts receivable	\$18,000	Long-term notes payable	\$21,000
Accounts payable	11,000	Office supplies	2,800
Buildings	45,000	Prepaid insurance	3,560
Cash	7,000	Unearned services revenue	3,000

QS 4-12A

Reversing entries

P4

On December 31, 2014, Dalia Co. prepared an adjusting entry for \$12,000 of earned but unrecorded management fees. On January 16, 2015, Dalia received \$26,700 cash in management fees, which included the accrued fees earned in 2014. Assuming the company uses reversing entries, prepare the January 1, 2015, reversing entry and the January 16, 2015, cash receipt entry.



Icon denotes assignments that involve decision making.



EXERCISES

Exercise 4-1

Extending adjusted account balances on a work sheet

P1

These 16 accounts are from the Adjusted Trial Balance columns of a company's 10-column work sheet. In the blank space beside each account, write the letter of the appropriate financial statement column (A, B, C, or D) to which a normal account balance is extended.

- **A.** Debit column for the Income Statement columns.
- **B.** Credit column for the Income Statement columns.
- **C.** Debit column for the Balance Sheet and Statement of Owner's Equity columns.
- **D.** Credit column for the Balance Sheet and Statement of Owner's Equity columns.

1. Interest Revenue	9. Accounts Receivable
2. Machinery	10. Accumulated Depreciation
3. Owner, Withdrawals	11. Office Supplies
4. Depreciation Expense	12. Insurance Expense
5. Accounts Payable	13. Interest Receivable
6. Service Fees Revenue	14. Cash
7. Owner, Capital	15. Rent Expense
8. Interest Expense	16. Wages Payable

Exercise 4-2

Extending accounts in a work sheet

The Adjusted Trial Balance columns of a 10-column work sheet for Khaled Adnan Company follow. Complete the work sheet by extending the account balances into the appropriate financial statement columns and by entering the amount of net income for the reporting period.

Check Net income, \$17.800

et inc	ome,	\$17,800											
	Α	В	С	D	Е	F	G	Н	- 1	J	K	L	
1											Balance S	Sheet and	
2			Unac	ljusted			Adj	usted	Inc	ome	Staten	Statement of	
3			Trial E	Balance	Adjus	tments	Trial	Balance	Statement		Owner's Equity		
4	No.	Account Title	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	
5 1	101	Cash					\$ 7,000						
6 1	106	Accounts receivable					27,200						
7 1	153	Trucks					42,000						
8 1	154	Accumulated depreciation—Trucks						\$ 17,500					
9 1	183	Land					32,000						
10 2	201	Accounts payable						15,000					
11 2	209	Salaries payable						4,200					
12 2	233	Unearned fees						3,600					
13 3	301	Khaled Adnan, Capital						65,500					
		Khaled Adnan, Withdrawals					15,400						
15 4	101	Plumbing fees earned						84,000					
16 6		<u> </u>					6,500						
17 6	522	Salaries expense					38,000						
18 6	540	Rent expense					13,000						
19 6	577	Miscellaneous expenses					8,700						
20		Totals					\$189,800	\$189,800					
21													
22													

Use the following information from the Adjustments columns of a 10-column work sheet to prepare the necessary adjusting journal entries A through E.

Exercise 4-3

Preparing adjusting entries from a work sheet **P1**

А	В	С	D	Е	F		G	H	1	- 1	J	К	L		
1												Balanc	e Sheet		
2		Unad	justed					Adjus	sted	Income		and Statement of			
3		Trial B	alance		Adjust	ments		Trial Ba	Trial Balance S		ial Balance Stateme		ment Owner's Equit		s Equity
4 No.	Account Title	Dr.	Cr.	Dı	:	C	r.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.		
5 109	Interest receivable			(d) \$	880										
6 124	Office supplies					(b) \$	1,750								
7 128	Prepaid insurance					(a)	900								
8 164	Accumulated depreciation—Office equipment					(c)	2,200								
9 209	Salaries payable					(e)	560								
10 409	Interest revenue					(d)	880								
11 612	Depreciation expense—Office equipment			(c) 2	,200										
12 620	Office salaries expense			(e)	560										
13 636	Insurance expense—Office equipment			(a)	332										
14 637	Insurance expense—Store equipment			(a)	568										
15 650	Office supplies expense			(b) 1	,750										
16	Totals			\$6	,290	\$	6,290								
17							·								

The following data are taken from the unadjusted trial balance of the EastTobacco Company at December 31, 2015. Each account carries a normal balance and the accounts are shown here in alphabetical order.

Exercise 4-4

Completing a worksheet

P1

Accounts Receivable

- **1.** Use the data above to prepare a work sheet. Enter the accounts in proper order and enter their balances in the correct Debit or Credit column.
- **2.** Use the following adjustment information to complete the work sheet.
 - **a.** Depreciation on equipment, \$3
 - **b.** Accrued salaries, \$6
 - c. The \$12 of unearned revenue has been earned
 - d. Supplies available at December 31, 2015, \$15
 - e. Expired insurance, \$15

Kamal Company began the current period with a \$20,000 credit balance in the G. Kamal, Capital account. At the end of the period, the company's adjusted account balances include the following temporary accounts with normal balances.

Exercise 4-5

Determining effects of closing entries





Service fees earned	\$70,000
Interest revenue	\$7,000
Salaries expense	38,000
G. Kamal, Withdrawals	12,000
Depreciation expense	8,000

Utilities expense.....

After closing the revenue and expense accounts, what will be the balance of the Income Summary account? After all closing entries are journalized and posted, what will be the balance of the G. Kamal, Capital account?

Exercise 4-6

Completing the income statement columns and preparing closing entries

P1 P2

These partially completed Income Statement columns from a 10-column work sheet are for Adel's Bike Rental Company. (1) Use the information to determine the amount that should be entered on the net income line of the work sheet. (2) Prepare the company's closing entries. The owner, S. Adel, did not make any withdrawals this period.

Account Title	Debit	Credit
Rent earned		120,000
Salaries expense	46,300	
Insurance expense	7,400	
Office supplies expense	16,000	
Bike repair expense	4,200	
Depreciation expense—Bikes	20,500	
Totals		
Net income		
Totals		

Check Net income, \$25,600

Exercise 4-7

Preparing a work sheet and recording closing entries

P1 P2

The following unadjusted trial balance contains the accounts and balances of Hassan Mourad Delivery Company as of December 31, 2015.

- **1.** Use the following information about the company's adjustments to complete a 10-column work sheet.
 - **a.** Unrecorded depreciation on the trucks at the end of the year is \$40,000.
 - **b.** The total amount of accrued interest expense at year-end is \$6,000.
 - **c.** The cost of unused office supplies still available at year-end is \$2,000.
- **2.** Prepare the year-end closing entries for this company, and determine the capital amount to be reported on its year-end balance sheet.

	A	В	С		
1		Unadjusted Trial Balance			
2	Account Title	Debit	Credit		
3	Cash	\$ 16,000			
4	Accounts receivable	34,000			
5	Office supplies	5,000			
6	Trucks	350,000			
7	Accumulated depreciation—Trucks		\$ 80,000		
8	Land	160,000			
9	Accounts payable		24,000		
10	Interest payable		5,000		
11	Long-term notes payable		100,000		
12	Hassan Mourad, Capital		307,000		
13	Hassan Mourad, Withdrawals	34,000			
14	Delivery fees earned		263,000		
15	Depreciation expense—Truck	40,000			
16	Salaries expense	110,000			
17	Office supplies expense	15,000			
18	Interest expense	5,000			
19	Repairs expense—Trucks	10,000			
20	Totals	\$779,000	\$779,000		
21					

Check Adj. trial balance totals, \$820,000; Net income, \$39,000

Use the May 31 fiscal year-end information from the following ledger accounts (assume that all accounts have normal balances) to prepare closing journal entries and then post those entries to the appropriate ledger accounts.

Exercise 4-8

Preparing and posting closing entries

P2

General Ledger										
M. Hammad	M. Hammad, Capital Acct. No. 301					Salaries Exp	ense		ı	Acct. No. 622
Date	PR	Debit	Credit	Balance		Date	PR	Debit	Credit	Balance
May 31	G2			40,000		May 31	G2			20,000
M. Hammad	, Withdi	awals	Α	Acct. No. 302		Insurance E	xpense		1	Acct. No. 637
Date	PR	Debit	Credit	Balance		Date	PR	Debit	Credit	Balance
May 31	G2			22,000		May 31	G2			4,400
Services Rev	enue/		ı	Acct. No. 401		Rent Expens	se		ı	Acct. No. 640
Date	PR	Debit	Credit	Balance		Date	PR	Debit	Credit	Balance
May 31	G2			76,000		May 31	G2			8,400
Depreciation	1 Expen	se	A	Acct. No. 603		Income Sum	nmary			Acct. No. 901
Date	PR	Debit	Credit	Balance		Date	PR	Debit	Credit	Balance
May 31	G2			15,000						

Check M. Hammad, Capital (ending balance), \$46,200

The following adjusted trial balance contains the accounts and balances of Zein Company as of December 31, 2015, the end of its fiscal year. (1) Prepare the December 31, 2015, closing entries for Zein Company. Assume the account number for Income Summary is 901. (2) Prepare the December 31, 2015, post-closing trial balance for Zein Company.

Exercise 4-9

Preparing closing entries and a post-closing trial balance

P2 P3

No.	Account Title	Debit	Credit
101	Cash	\$19,000	
126	Supplies	13,000	
128	Prepaid insurance	3,000	
167	Equipment	24,000	
168	Accumulated depreciation—Equipment		\$ 7,500
301	R. Zein, Capital		47,600
302	R. Zein, Withdrawals	7,000	
404	Services revenue		44,000
612	Depreciation expense—Equipment	3,000	
622	Salaries expense	22,000	
637	Insurance expense	2,500	
640	Rent expense	3,400	
652	Supplies expense	2,200	
	Totals	\$99,100	\$99,100

Check (2) R. Zein, Capital (ending), \$51,500; Total debits, \$59,000

Exercise 4-10

Preparing closing entries and a post-closing trial balance

P2 P3

No.	Account Title	Adjusted Trial Balance		Closing Informa			Closing Jalance
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
101	Cash		\$ 9,200				
106	Accounts receivable		25,000				
153	Equipment		42,000				
154	Accumulated depreciation—Equipment			\$ 17,500			
193	Land		31,000				
201	Accounts payable			15,000			
209	Salaries payable			4,200			
233	Unearned fees			3,600			
301	H. Saleh, Capital			68,500			
302	H. Saleh, Withdrawals		15,400				
401	Marketing fees earned			80,000			
611	Depreciation expense—Equipment		12,000				
622	Salaries expense		32,500				
640	Rent expense		13,000				
677	Miscellaneous expenses		8,700				
901	Income summary						
	Totals		\$188,800	\$188,800			

Exercise 4-11

Preparing the financial statements **C2**

Use the following adjusted trial balance of Wagdy Trucking Company to prepare the (1) income statement and (2) statement of owner's equity for the year ended December 31, 2015. The K. Wagdy, Capital account balance is \$175,000 at December 31, 2014.

Check Total assets, \$249,500; K. Wagdy, Capital, \$180,500

Account Title	Debit	Credit
Cash	\$ 8,000	
Accounts receivable	17,500	
Office supplies	3,000	
Trucks	172,000	
Accumulated depreciation—Trucks		\$ 36,000
Land	85,000	
Accounts payable		12,000
Interest payable		4,000
Long-term notes payable		53,000
K. Wagdy, Capital		175,000
K. Wagdy, Withdrawals	20,000	
Trucking fees earned		130,000
Depreciation expense—Trucks	23,500	
Salaries expense	61,000	
Office supplies expense	8,000	
Repairs expense—Trucks	12,000	
Totals	\$410,000	\$410,000

Exercise 4-12

Preparing a classified balance sheet

Use the information in the adjusted trial balance reported in Exercise 4-11 to prepare Wagdy Trucking Company's classified balance sheet as of December 31, 2015.

Use the information in the adjusted trial balance reported in Exercise 4-11 to compute the current ratio as of the balance sheet date (round the ratio to two decimals). Interpret the current ratio for the Wagdy Trucking Company. (Assume that the industry average for the current ratio is 1.5.)

Exercise 4-13

Computing the current ratio



Following are **Nintendo**'s revenue and expense accounts for a recent calendar year (yen in millions). Prepare the company's closing entries for its revenues and its expenses.

Exel	cise	4-	14
_			

Preparing closing entries



¥1,014,345
626,379
96,359
213,986

Calculate the current ratio in each of the following separate cases (round the ratio to two decimals). Identify the company case with the strongest liquidity position. (These cases represent competing companies in the same industry.)

Exercise 4-15

Computing and analyzing the current ratio





	Current Assets	Current Liabilities
Case 1	\$ 79,040	\$32,000
Case 2	104,880	76,000
Case 3	45,080	49,000
Case 4	85,680	81,600
Case 5	61,000	100,000

Hady Company records prepaid assets and unearned revenues in balance sheet accounts. The following information was used to prepare adjusting entries for the company as of August 31, the end of the company's fiscal year.

Exercise 4-16^A

Preparing reversing entries

P4

- **a.** The company has earned \$6,000 in service fees that were not yet recorded at period-end.
- **b.** The expired portion of prepaid insurance is \$3,700.
- **c.** The company has earned \$2,900 of its Unearned Service Fees account balance.
- **d.** Depreciation expense for office equipment is \$3,300.
- **e.** Employees have earned but have not been paid salaries of \$3,400.

Prepare any necessary reversing entries for the accounting adjustments a through e assuming that the company uses reversing entries in its accounting system.

- **1.** The following two events occurred for Tamweel Co. on October 31, 2015, the end of its fiscal year. Tamweel rents a building from its owner for \$2,800 per month. By a prearrangement, the company delayed paying October's rent until November 5. On this date, the company paid the rent for both October and November.
- 2. Tamweel rents space in a building it owns to a tenant for \$850 per month. By prearrangement, the tenant delayed paying the October rent until November 8. On this date, the tenant paid the rent for both October and November.

Exercise 4-17^A

Preparing reversing entries

P4

Required

- **1.** Prepare adjusting entries that the company must record for these events as of October 31.
- **2.** Assuming Tamweel does *not* use reversing entries, prepare journal entries to record Taweel's payment of rent on November 5 and the collection of the tenant's rent on November 8.
- **3.** Assuming that the company uses reversing entries, prepare reversing entries on November 1 and the journal entries to record Tamweel's payment of rent on November 5 and the collection of the tenant's rent on November 8.



Icon denotes assignments that involve decision making.



PROBLEM SET A

Problem 4-1A

Applying the accounting cycle

C1 C2 P2 P3



On April 1, 2015, Dana Al-Waleed created a new travel agency, Adventure Travel. The following transactions occurred during the company's first month.

- Al-Waleed invested \$30,000 cash and computer equipment worth \$20,000 in the company.
 - The company rented furnished office space by paying \$1,800 cash for the first month's (April) rent.
 - 3 The company purchased \$1,000 of office supplies for cash.
 - 10 The company paid \$2,400 cash for the premium on a 12-month insurance policy. Coverage begins on April 11.
 - 14 The company paid \$1,600 cash for two weeks' salaries earned by employees.
 - 24 The company collected \$8,000 cash on commissions from airlines on tickets obtained for customers.
 - 28 The company paid \$1,600 cash for two weeks' salaries earned by employees.
 - 29 The company paid \$350 cash for minor repairs to the company's computer.
 - 30 The company paid \$750 cash for this month's telephone bill.
 - 30 Al Waleed withdrew \$1,500 cash from the company for personal use.

The company's chart of accounts follows:

101 106 124 128 167 168 209	Cash Accounts Receivable Office Supplies Prepaid Insurance Computer Equipment Accumulated Depreciation—Computer Equip. Salaries Payable	405 612 622 637 640 650 684	Commissions Earned Depreciation Expense—Computer Equip. Salaries Expense Insurance Expense Rent Expense Office Supplies Expense Repairs Expense
209	Salaries Payable	684	Repairs Expense
301	D. Al-Waleed, Capital	688	Telephone Expense
302	D. Al-Waleed, Withdrawals	901	Income Summary

Required

- 1. Use the balance column format to set up each ledger account listed in its chart of accounts.
- 2. Prepare journal entries to record the transactions for April and post them to the ledger accounts. The company records prepaid and unearned items in balance sheet accounts.
- **3.** Prepare an unadjusted trial balance as of April 30.
- **4.** Use the following information to journalize and post adjusting entries for the month:
 - **a.** Two-thirds (or \$133) of one month's insurance coverage has expired.
 - **b.** At the end of the month, \$600 of office supplies are still available.
 - **c.** This month's depreciation on the computer equipment is \$500.
 - **d.** Employees earned \$420 of unpaid and unrecorded salaries as of month-end.
 - **e.** The company earned \$1,750 of commissions that are not yet billed at month-end.
- **5.** Prepare the adjusted trial balance as of April 30. Prepare the income statement and the statement of owner's equity for the month of April and the balance sheet at April 30, 2015.
- **6.** Prepare journal entries to close the temporary accounts and post these entries to the ledger.
- **7.** Prepare a post-closing trial balance.

Problem 4-2A

\$51,617

\$58,000

Expense, \$133

Preparing a work sheet, adjusting and closing entries, and financial statements

Check (3) Unadj. trial balance totals,

(4a) Dr. Insurance

(5) Net income, \$2,197;

(7) P-C trial balance totals,

D. Al-Waleed, Capital (4/30/2015), \$50,697; Total assets, \$51,117



The following unadjusted trial balance is for Al Dar Construction Co. as of the end of its 2015 fiscal year. The June 30, 2014, credit balance of Mohamed Al Dar owner's capital account was \$53,660, and the owner invested \$35,000 cash in the company during the 2015 fiscal year.

	А	В	С	D		
1		AL DAR CONSTRUC	TION CO.			
2		Unadjusted Trial B	Balance			
3		June 30, 2015				
4	No.	Account Title	Debit	Credit		
5	101	Cash	\$ 18,500			
6	126	Supplies	9,900			
7	128	Prepaid insurance	7,200			
8	167	Equipment	132,000			
9	168	Accumulated depreciation—Equipment		\$ 26,250		
10	201	Accounts payable		6,800		
11	203	Interest payable		0		
12	208	Rent payable		0		
		Wages payable		0		
14	213	Property taxes payable		0		
		Long-term notes payable		25,000		
		Al Dar, Capital		88,660		
		Al Dar, Withdrawals	33,000			
		Construction fees earned		132,100		
19	612	Depreciation expense—Equipment	0			
20	623	Wages expense	46,860			
		Interest expense	2,750			
		Insurance expense	0			
		Rent expense	12,000			
		Supplies expense	0			
		Property taxes expense	7,800			
		Repairs expense	2,910			
27	690	Utilities expense	5,890			
28		Totals	\$278,810	\$278,810		
29						

Required

- **1.** Prepare and complete a 10-column work sheet for fiscal year 2015, starting with the unadjusted trial balance and including adjustments based on these additional facts.
 - **a.** The supplies available at the end of fiscal year 2015 had a cost of \$3,300.
 - **b.** The cost of expired insurance for the fiscal year is \$3,800.
 - **c.** Annual depreciation on equipment is \$8,400.
 - **d.** The June utilities expense of \$650 is not included in the unadjusted trial balance because the bill arrived after the trial balance was prepared. The \$650 amount owed needs to be recorded.
 - e. The company's employees have earned \$1,800 of accrued wages at fiscal year-end.
 - **f.** The rent expense incurred and not yet paid or recorded at fiscal year-end is \$500.
 - **g.** Additional property taxes of \$1,000 have been assessed for this fiscal year but have not been paid or recorded in the accounts.
 - **h.** The long-term note payable bears interest at 12% per year. The unadjusted Interest Expense account equals the amount paid for the first 11 months of the 2015 fiscal year. The \$250 accrued interest for June has not yet been paid or recorded. (The company is required to make a \$5,000 payment toward the note payable during the 2016 fiscal year.)
- **2.** Using information from the completed 10-column work sheet in part 1, journalize the adjusting entries and the closing entries.
- **3.** Prepare the income statement and the statement of owner's equity for the year ended June 30 and the classified balance sheet at June 30, 2015.

Analysis Component

- **4.** Analyze the following separate errors and describe how each would affect the 10-column work sheet. Explain whether the error is likely to be discovered in completing the work sheet and, if not, the effect of the error on the financial statements.
 - **a.** Assume that the adjustment for supplies used consisted of a credit to Supplies and a debit to Supplies Expense for \$3,300, when the correct amount was \$6,600.
 - **b.** When the adjusted trial balance in the work sheet is completed, assume that the \$18,500 Cash balance is incorrectly entered in the Credit column.

Check (3) Total assets, \$122,550; Current liabilities, \$16,000; Net income, \$30,890

Problem 4-3A

Determining balance sheet classifications

C3

In the blank space beside each numbered balance sheet item, enter the letter of its balance sheet classification. If the item should not appear on the balance sheet, enter a Z in the blank.

A.	Current assets	E.	Current liabilities
В.	Long-term investments	F.	Long-term liabilities
C.	Plant assets	G.	Equity
D.	Intangible assets		

C. Pla	int assets G. Equity		
D. Int	angible assets		
	1. Long-term investment in stock	11.	Unearned services revenue
	2. Depreciation expense—Building	12.	Accumulated depreciation—Trucks
	3. Prepaid rent	13.	Cash
	4. Interest receivable	14.	Buildings
	5. Taxes payable	15.	Store supplies
	6. Automobiles	16.	Office equipment
	7. Notes payable (due in 3 years)	17.	Land (used in operations)
	8. Accounts payable	18.	Repairs expense
	9. Prepaid insurance	19.	Office supplies
	10. Owner, Capital	20.	Current portion of long-term note payable

Problem 4-4A

Preparing closing entries, financial statements, and ratios

C3 A1 P2

The adjusted trial balance for Sharjah Construction as of December 31, 2015, follows.

	SHARJAH CONSTRUCTION Adjusted Trial Balance December 31, 2015		
No.	Account Title	Debit	Credit
101	Cash	\$ 5,000	
104	Short-term investments	23,000	
126	Supplies	8,100	
128	Prepaid insurance	7,000	
167	Equipment	40,000	
168	Accumulated depreciation—Equipment		\$ 20,000
173	Building	150,000	
174	Accumulated depreciation—Building		50,000
183	Land	55,000	
201	Accounts payable		16,500
203	Interest payable		2,500
208	Rent payable		3,500
210	Wages payable		2,500
213	Property taxes payable		900
233	Unearned professional fees		7,500
251	Long-term notes payable		67,000
301	O. Sharjah, Capital		126,400
302	O. Sharjah, Withdrawals	13,000	
401	Professional fees earned		97,000
406	Rent earned		14,000
407	Dividends earned		2,000
409	Interest earned		2,100
606	Depreciation expense—Building	11,000	
612	Depreciation expense—Equipment	65,000	
623	Wages expense	32,000	
633	Interest expense	5,100	
637	Insurance expense	10,000	
640	Rent expense	13,400	
652	Supplies expense	7,400	
682	Postage expense	4,200	
683	Property taxes expense	5,000	
684	Repairs expense	8,900	
688	Telephone expense	3,200	
690	Utilities expense	4,600	
	Totals	\$411,900	\$411,900

O. Sharjah invested \$5,000 cash in the business during year 2015 (the December 31, 2014, credit balance of the O. Sharjah, Capital account was \$121,400). Sharjah Construction is required to make a \$7,000 payment on its long-term notes payable during 2016.

Required

- **1.** Prepare the income statement and the statement of owner's equity for the calendar year 2015 and the classified balance sheet at December 31, 2015.
- **2.** Prepare the necessary closing entries at December 31, 2015.
- **3.** Use the information in the financial statements to compute these ratios: (a) return on assets (total assets at December 31, 2014, was \$200,000), (b) debt ratio, (c) profit margin ratio (use total revenues as the denominator), and (d) current ratio. Round ratios to three decimals for parts (a) and (c), and to two decimals for parts (b) and (d).

Check (1) Total assets (12/31/2015), \$218,100; Net income, \$4,300

The adjusted trial balance of El Makrezy Repairs on December 31, 2015, follows.

	EL MAKREZY REPAIRS Adjusted Trial Balance December 31, 2015		
No.	Account Title	Debit	Credit
101	Cash	\$ 14,000	
124	Office supplies	1,300	
128	Prepaid insurance	2,050	
167	Equipment	50,000	
168	Accumulated depreciation—Equipment		\$ 5,000
201	Accounts payable		14,000
210	Wages payable		600
301	C. El Makrezy, Capital		33,000
302	C. El Makrezy, Withdrawals	16,000	
401	Repair fees earned		90,950
612	Depreciation expense—Equipment	5,000	
623	Wages expense	37,500	
637	Insurance expense	800	
640	Rent expense	10,600	
650	Office supplies expense	3,600	
690	Utilities expense	2,700	
	Totals	\$143,550	\$143,550

Problem 4-5A

Preparing trial balances, closing entries, and financial statements

C3 P2 P3



Required

- **1.** Prepare an income statement and a statement of owner's equity for the year 2015, and a classified balance sheet at December 31, 2015. There are no owner investments in 2015.
- **2.** Enter the adjusted trial balance in the first two columns of a six-column table. Use columns three and four for closing entry information and the last two columns for a post-closing trial balance. Insert an Income Summary account as the last item in the trial balance.
- 3. Enter closing entry information in the six-column table and prepare journal entries for it.

Analysis Component

- **1.** Assume for this part only that
 - **a.** None of the \$800 insurance expense had expired during the year. Instead, assume it is a prepayment of the next period's insurance protection.
 - **b.** There are no earned and unpaid wages at the end of the year. (Hint: Reverse the \$600 wages payable accrual.)

Describe the financial statement changes that would result from these two assumptions.

Check (1) Ending capital balance, \$47,750; net income, \$30,750 (2) P-C trial balance totals, \$67,350

Problem 4-6A^A

Preparing adjusting, reversing, and next period entries

P4

The following six-column table for Nabeel Tawfik includes the unadjusted trial balance as of December 31, 2015.

	А	В	С	D	Е	F	G
1		NABEEL TAV	VFIK				
2	D	ecember 31,	2015				
3		Unad	justed			Adjusted	
4		Trial B	alance	Adjus	tments	Trial Balance	
5	Account Title	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
6	Cash	\$ 14,000					
7	Accounts receivable	0					
8	Supplies	6,500					
9	Equipment	135,000					
10	Accumulated depreciation—Equipment		\$ 30,000				
11	Interest payable		0				
12	Salaries payable		0				
13	Unearned member fees		15,000				
14	Notes payable		75,000				
15	Nabeel Tawfik, Capital		50,250				
16	Nabeel Tawfik, Withdrawals	21,125					
17	Member fees earned		42,000				
18	Depreciation expense—Equipment	0					
19	Salaries expense	30,000					
20	Interest expense	5,625					
21	Supplies expense	0					
22	Totals	\$212,250	\$212,250				
23							

Required

Check (1) Adjusted trial balance totals, \$239,625

- **1.** Complete the six-column table by entering adjustments that reflect the following information.
 - **a.** As of December 31, 2015, employees had earned \$1,200 of unpaid and unrecorded salaries. The next payday is January 4, at which time \$1,500 of salaries will be paid.
 - **b.** The cost of supplies still available at December 31, 2015, is \$3,000.
 - **c.** The notes payable requires an interest payment to be made every three months. The amount of unrecorded accrued interest at December 31, 2015, is \$1,875. The next interest payment, at an amount of \$2,250, is due on January 15, 2016.
 - **d.** Analysis of the unearned member fees account shows \$5,800 remaining unearned at December 31, 2015.
 - **e.** In addition to the member fees included in the revenue account balance, the company has earned another \$9,300 in unrecorded fees that will be collected on January 31, 2016. The company is also expected to collect \$10,000 on that same day for new fees earned in January 2016.
 - **f.** Depreciation expense for the year is \$15,000.
- **2.** Prepare journal entries for the adjustments entered in the six-column table for part 1.
- **3.** Prepare journal entries to reverse the effects of the adjusting entries that involve accruals.
- **4.** Prepare journal entries to record the cash payments and cash collections described for January.



PROBLEM SET B

Problem 4-1B

Applying the accounting cycle

C1 C2 P2 P3



On July 1, 2015, El Foutaim created a new self-storage business, Safe Storage Co. The following transactions occurred during the company's first month.

- July 1 El Foutaim invested \$30,000 cash and buildings worth \$150,000 in the company.
 - 2 The company rented equipment by paying \$2,000 cash for the first month's (July) rent.
 - 5 The company purchased \$2,400 of office supplies for cash.
 - 10 The company paid \$7,200 cash for the premium on a 12-month insurance policy. Coverage begins on July 11.
 - 14 The company paid an employee \$1,000 cash for two weeks' salary earned.
 - 24 The company collected \$9,800 cash for storage fees from customers.
 - 28 The company paid \$1,000 cash for two weeks' salary earned by an employee.
 - 29 The company paid \$950 cash for minor repairs to a leaking roof.
 - 30 The company paid \$400 cash for this month's telephone bill.
 - 31 El Foutaim withdrew \$2,000 cash from the company for personal use.

The company's chart of accounts follows:

101	Cash	401	Storage Fees Earned
106	Accounts Receivable	606	Depreciation Expense—Buildings
			' '
124	Office Supplies	622	Salaries Expense
128	Prepaid Insurance	637	Insurance Expense
173	Buildings	640	Rent Expense
174	Accumulated Depreciation—Buildings	650	Office Supplies Expense
209	Salaries Payable	684	Repairs Expense
301	El Foutaim, Capital	688	Telephone Expense
302	El Foutaim, Withdrawals	901	Income Summary

Required

- 1. Use the balance column format to set up each ledger account listed in its chart of accounts.
- 2. Prepare journal entries to record the transactions for July and post them to the ledger accounts. Record prepaid and unearned items in balance sheet accounts.
- **3.** Prepare an unadjusted trial balance as of July 31.
- **4.** Use the following information to journalize and post adjusting entries for the month:
 - a. Two-thirds of one month's insurance coverage has expired.
 - **b.** At the end of the month, \$1,525 of office supplies are still available.
 - **c.** This month's depreciation on the buildings is \$1,500.
 - **d.** An employee earned \$100 of unpaid and unrecorded salary as of month-end.
 - **e.** An employee earned \$100 of unpaid and unrecorded salary as of month-end.
- **5.** Prepare the adjusted trial balance as of July 31. Prepare the income statement and the statement of owner's equity for the month of July and the balance sheet at July 31, 2015.
- **6.** Prepare journal entries to close the temporary accounts and post these entries to the ledger.
- **7.** Prepare a post-closing trial balance.

Check (3) Unadj. trial balance totals, \$189,800

(4a) Dr. Insurance Expense,

\$400

(5) Net income, \$2,725; El Foutaim, Capital (7/31/2015), \$180,725; Total assets, \$180,825

(7) P-C trial balance totals, \$182,325

The following unadjusted trial balance is for Nour Nabil Demolition Company as of the end of its April 30, the

e following unadjusted trial balance is for Nour Nabil Demontion Company as of the end of its April
, 2015, fiscal year. The April 30, 2014, credit balance of the owner's capital account was \$46,900, and
owner invested \$40,000 cash in the company during the 2015 fiscal year.

	Α	В				
1		NOUR NABIL DEMOLITION	COMPANY			
2		Unadjusted Trial Bal	lance			
3		April 30, 2015				
4	No.	Account Title	Debit	Credit		
5	101	Cash	\$ 7,000			
6	126	Supplies	16,000			
7	128	Prepaid insurance	12,600			
8	167	Equipment	200,000			
9		Accumulated depreciation—Equipment		\$ 14,000		
10	201	Accounts payable		6,800		
		Interest payable		0		
12	208	Rent payable		0		
13	210	Wages payable		0		
14	213	Property taxes payable		0		
15	251	Long-term notes payable		30,000		
16	301	Nour Nabil, Capital		86,900		
17	302	Nour Nabil, Withdrawals	12,000			
18	401	Demolition fees earned		187,000		
		Depreciation expense—Equipment	0			
20	623	Wages expense	41,400			
21	633	Interest expense	3,300			
22	637	Insurance expense	0			
23	640	Rent expense	13,200			
24	652	Supplies expense	0			
25	683	Property taxes expense	9,700			
		Repairs expense	4,700			
27	690	Utilities expense	4,800			
28		Totals	\$324,700	\$324,700		

Problem 4-2B

Preparing a work sheet, adjusting and closing entries, and financial statements

C3 P1 P2



Required

- **1.** Prepare and complete a 10-column work sheet for fiscal year 2015, starting with the unadjusted trial balance and including adjustments based on these additional facts.
 - **a.** The supplies available at the end of fiscal year 2015 had a cost of \$7,900.
 - **b.** The cost of expired insurance for the fiscal year is \$10,600.
 - **c.** Annual depreciation on equipment is \$7,000.
 - **d.** The April utilities expense of \$800 is not included in the unadjusted trial balance because the bill arrived after the trial balance was prepared. The \$800 amount owed needs to be recorded.
 - **e.** The company's employees have earned \$2,000 of accrued wages at fiscal year-end.
 - **f.** The rent expense incurred and not yet paid or recorded at fiscal year-end is \$3,000.
 - g. Additional property taxes of \$550 have been assessed for this fiscal year but have not been paid or recorded in the accounts.
 - **h.** The long-term note payable bears interest at 12% per year. The unadjusted Interest Expense account equals the amount paid for the first 11 months of the 2015 fiscal year. The \$300 accrued interest for April has not yet been paid or recorded. (Note that the company is required to make a \$10,000 payment toward the note payable during the 2016 fiscal year.)
- **2.** Using information from the completed 10-column work sheet in part 1, journalize the adjusting entries and the closing entries.
- **3.** Prepare the income statement and the statement of owner's equity for the year ended April 30 and the classified balance sheet at April 30, 2015.

Analysis Component

- **4.** Analyze the following separate errors and describe how each would affect the 10-column work sheet. Explain whether the error is likely to be discovered in completing the work sheet and, if not, the effect of the error on the financial statements.
 - **a.** Assume the adjusting entry to reflect expiration of insurance coverage for the period was recorded with a \$2,000 credit to Prepaid Insurance and a \$2,000 debit to Insurance Expense. The adjustment should have been for \$10,600.
 - **b.** When the adjusted trial balance in the work sheet was completed, assume that the \$4,700 Repairs Expense account balance is extended to the Debit column of the balance sheet columns.

Problem 4-3B

Determining balance sheet classifications

Check (3) Total assets, \$195,900; current liabilities. \$23.450; Net income.

\$77.550

C3

In the blank space beside each numbered balance sheet item, enter the letter of its balance sheet classification. If the item should not appear on the balance sheet, enter a Z in the blank.

A. Current assets
B. Long-term investments
E. Current liabilities
F. Long-term liabilities

C. Plant assets **G.** Equity

D. Intangible assets

1. Commissions earned _____ **11.** Rent receivable **2.** Interest receivable ____ **12.** Salaries payable **3.** Long-term investment in stock ____ **13.** Income taxes payable _____ 14. Owner, Capital __ **4.** Prepaid insurance **5.** Machinery ___ **15.** Office supplies _____ **16.** Interest payable **6.** Notes payable (due in 15 years) **7.** Copyrights ___ **17.** Rent revenue **8.** Current portion of long-term note payable ______ **18.** Notes receivable (due in 120 days) _____ **19.** Land (used in operations) **9.** Accumulated depreciation—Trucks _____ **10.** Office equipment **20.** Depreciation expense—Trucks

The adjusted trial balance for Nazly Co. as of December 31, 2015, follows.

NAZLY COMPANY Adjusted Trial Balance December 31, 2015 Account Title Debit Credit No. 101 \$ 7,400 104 11,200 126 4,600 128 Prepaid insurance 1,000 Equipment 167 24,000 168 \$ 4,000 173 Building.... 100,000 174 10,000 183 Land 30,500 201 Accounts payable..... 3,500 203 1,750 208 Rent payable..... 400 210 Wages payable..... 1,280 213 Property taxes payable 3,330 233 750 251 Long-term notes payable..... 40,000 92,800 301 8,000 302 Professional fees earned..... 401 59,600 406 4,500 Rent earned 407 Dividends earned..... 1,000 409 Interest earned..... 1,320 606 Depreciation expense—Building..... 2,000 Depreciation expense—Equipment.... 612 1,000 18,500 623 Wages expense 633 Interest expense..... 1,550 637 1,525 Insurance expense..... 640 3,600 652 Supplies expense..... 1,000 682 410 683 4,825 684 Repairs expense..... 679 688 521 690 Utilities expense..... 1,920 Totals..... \$224,230 \$224,230

Problem 4-4B

Preparing closing entries, financial statements, and ratios

C3 A1 P2

Nazly invested \$40,000 cash in the business during year 2015 (the December 31, 2014, credit balance of the Nazly, Capital account was \$52,800). Nazly Company is required to make an \$8,400 payment on its long-term notes payable during 2016.

Check (1) Total assets (12/31/2015), \$218,100; Net income, \$4,300

Required

- **1.** Prepare the income statement and the statement of owner's equity for the calendar year 2015 and the classified balance sheet at December 31, 2015.
- **2.** Prepare the necessary closing entries at December 31, 2015.
- **3.** Use the information in the financial statements to calculate these ratios: (a) return on assets (total assets at December 31, 2014, were \$160,000), (b) debt ratio, (c) profit margin ratio (use total revenues as the denominator), and (d) current ratio. Round ratios to three decimals for parts a and c, and to two decimals for parts b and d.

Problem 4-5B

Preparing trial balances, closing entries, and financial statements

C3 P2 P3



Samir Company's adjusted trial balance on December 31, 2015, follows.

SAMIR COMPANY Adjusted Trial Balance December 31, 2015					
No.	Account Title	Debit	Credit		
101	Cash	\$ 14,450			
125	Store supplies	5,140			
128	Prepaid insurance	1,200			
167	Equipment	31,000			
168	Accumulated depreciation—Equipment		\$ 8,000		
201	Accounts payable		1,500		
210	Wages payable		2,700		
301	P. Samir, Capital		35,650		
302	P. Samir, Withdrawals	15,000			
401	Repair fees earned		54,700		
612	Depreciation expense—Equipment	2,000			
623	Wages expense	26,400			
637	Insurance expense	600			
640	Rent expense	3,600			
651	Store supplies expense	1,200			
690	Utilities expense	1,960			
	Totals	\$102,550	\$102,550		

Check (1) Ending capital balance, \$39.590

(2) P-C trial balance totals, \$51,790

Required

- **1.** Prepare an income statement and a statement of owner's equity for the year 2015, and a classified balance sheet at December 31, 2015. There are no owner investments in 2015.
- **2.** Enter the adjusted trial balance in the first two columns of a six-column table. Use the middle two columns for closing entry information and the last two columns for a post-closing trial balance. Insert an Income Summary account (No. 901) as the last item in the trial balance.
- **3.** Enter closing entry information in the six-column table and prepare journal entries for it.

Analysis Component

- **4.** Assume for this part only that
 - **a.** None of the \$600 insurance expense had expired during the year. Instead, assume it is a prepayment of the next period's insurance protection.
 - **b.** There are no earned and unpaid wages at the end of the year. (Hint: Reverse the \$2,700 wages payable accrual.)

Describe the financial statement changes that would result from these two assumptions.

Problem 4-6B^A

Preparing adjusting, reversing, and next period entries

The following six-column table for Galal Ibrahim Co. includes the unadjusted trial balance as of December 31, 2015.

	А	В	С	D	Е	F	G
1	SAFIYA IBR	AHIM SOLUT	TIONS COMP	ANY			
2		December 31	, 2015				
3		Unad	justed			Adjusted	
4		Trial B	alance	Adjus	tments	Trial Balance	
5	Account Title	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
6	Cash	\$ 10,000					
7	Accounts receivable	0					
8	Supplies	7,600					
9	Machinery	50,000					
10	Accumulated depreciation—Machinery		\$20,000				
11	Interest payable		0				
12	Salaries payable		0				
13	Unearned rental fees		7,200				
14	Notes payable		30,000				
15	Safiya Ibrahim, Capital		14,200				
16	Safiya Ibrahim, Withdrawals	9,500					
17	Rental fees earned		32,450				
18	Depreciation expense—Machinery	0					
19	Salaries expense	24,500					
20	Interest expense	2,250					
21	Supplies expense	0					
22	Totals	\$103,850	\$103,850				
23							

Required

- **1.** Complete the six-column table by entering adjustments that reflect the following information:
 - **a.** As of December 31, 2015, employees had earned \$400 of unpaid and unrecorded wages. The next payday is January 4, at which time \$1,200 in wages will be paid.
 - **b.** The cost of supplies still available at December 31, 2015, is \$3,450.
 - **c.** The notes payable requires an interest payment to be made every three months. The amount of unrecorded accrued interest at December 31, 2015, is \$800. The next interest payment, at an amount of \$900, is due on January 15, 2016.
 - **d.** Analysis of the unearned rental fees shows that \$3,200 remains unearned at December 31, 2015.
 - **e.** In addition to the machinery rental fees included in the revenue account balance, the company has earned another \$2,450 in unrecorded fees that will be collected on January 31, 2016. The company is also expected to collect \$5,400 on that same day for new fees earned in January 2016.
 - **f.** Depreciation expense for the year is \$3,800.
- **2.** Prepare journal entries for the adjustments entered in the six-column table for part 1.
- **3.** Prepare journal entries to reverse the effects of the adjusting entries that involve accruals.
- **4.** Prepare journal entries to record the cash payments and cash collections described for January.

Check (1) Adjusted trial balance totals, \$111,300

(This serial problem began in Chapter 1 and continues through most of the book. If previous chapter segments were not completed, the serial problem can begin at this point.)

SERIAL PROBLEM

Gulf Solutions

P2 P3

SP 4 The December 31, 2015, adjusted trial balance of Gulf Solutions (reflecting its transactions from October through December of 2015) follows.

No.	Account Title	Debit	Credit
101	Cash	\$ 48,372	
106	Accounts receivable	5,668	
126	Computer supplies	580	
128	Prepaid insurance	1,665	
131	Prepaid rent	825	
163	Office equipment	8,000	
164	Accumulated depreciation—Office equipment		\$ 400
167	Computer equipment	20,000	

[continued on next page]

[continued from previous page]

168	Accumulated depreciation—Computer equipment		1,250
201	Accounts payable		1,100
210	Wages payable		500
236	Unearned computer services revenue		1,500
301	H. Selim, Capital		73,000
302	H. Selim, Withdrawals	7,100	
403	Computer services revenue		31,284
612	Depreciation expense—Office equipment	400	
613	Depreciation expense—Computer equipment	1,250	
623	Wages expense	3,875	
637	Insurance expense	555	
640	Rent expense	2,475	
652	Computer supplies expense	3,065	
655	Advertising expense	2,753	
676	Mileage expense	896	
677	Miscellaneous expenses	250	
684	Repairs expense—Computer	1,305	
901	Income summary		0
	Totals	<u>\$109,034</u>	\$109,034

Required

Check Post-closing trial balance totals, \$85,110

- **1.** Record and post the necessary closing entries for Gulf Solutions.
- **2.** Prepare a post-closing trial balance as of December 31, 2015.

Beyond the Numbers



Icon denotes assignments that involve decision making.

REPORTING IN ACTION





TELECOM EGYPT

BTN 4-1 Refer to Telecom Egypt's IFRS financial statements on its website (www.te.eg) for the fiscal year ended December 31, 2015, to answer the following.

 $(USD \ 1 = EGP \ 7.8301, \ USD \ 1 = AED \ 3.6725)$

Required

- 1. For the fiscal year ended December 31, 2015, what amount is credited to Income Summary to summarize its revenues earned?
- 2. For the fiscal year ended December 31, 2015, what amount is debited to Income Summary to summarize its expenses incurred?
- 3. For the fiscal year ended December 31, 2015, what is the balance of its Income Summary account before it is closed?
- 4. In its statement of cash flows for the year ended December 31, 2015, what amount of cash is paid in dividends to common stockholders?

Fast Forward

5. Access Telecom Egypt's IFRS financial statements for fiscal years ending after December 31, 2015, at its Website (www.te.eg). How has the amount of net income closed to Income Summary changed in the fiscal years ending after December 31, 2015? How has the amount of cash paid as dividends changed in the fiscal years ending after December 31, 2015?

BTN 4-2 Key figures for **Etisalat** and **Telecom Egypt** follow.

Key Figures	Etisalat (\$)		Telecom Egypt (\$)	
(\$ millions)	2015	2014	2015	2014
Current assets	\$11,349	\$10,234	\$1,135	\$1,187
Current liabilities	11,531	10,856	698	617

COMPARATIVE ANALYSIS

A1



TELECOM EGYPTEtisalat

Required

- **1.** Compute the current ratio for both years for both companies.
- **2.** Which company has the better ability to pay short-term liabilities according to the current ratio?
- **3.** Analyze and comment on each company's current ratio for 2015 and 2014.
- **4.** How do Etisalat's and Telecom Egypt's ratios compare to their industry (assumed) average ratio of 0.7?

BTN 4-3 On January 20, 2015, Salma Magdy, the accountant for Thuraya Satellite Telecommunications, is feeling pressure to complete the annual financial statements. The company president has said he needs up-to-date financial statements to share with the bank on January 21 at a dinner meeting that has been called to discuss Thuraya's obtaining loan financing for a special building project. Salma knows that she will not be able to gather all the needed information in the next 24 hours to prepare the entire set of adjusting entries. Those entries must be posted before the financial statements accurately portray the company's performance and financial position for the fiscal period ended December 31, 2014. Salma ultimately decides to estimate several expense accruals at the last minute. When deciding on estimates for the expenses, she uses low estimates because she does not want to make the financial statements look worse than they are. Salma finishes the financial statements before the deadline and gives them to the president without mentioning that several account balances are estimates that she provided.

ETHICS CHALLENGE





Required

- **1.** Identify several courses of action that Salma could have taken instead of the one she took.
- **2.** If you were in Salma's situation, what would you have done? Briefly justify your response.

BTN 4-4 Assume that one of your classmates states that a company's books should be ongoing and therefore not closed until that business is terminated. Write a half-page memo to this classmate explaining the concept of the closing process by drawing analogies between (1) a scoreboard for an athletic event and the revenue and expense accounts of a business or (2) a sports team's record book and the capital account. (*Hint*: Think about what would happen if the scoreboard is not cleared before the start of a new game.)

COMMUNICATING IN PRACTICE

C1 P2

BTN 4-5 Access **Motley Fool**'s discussion of the current ratio at **Fool.com/School/Valuation/CurrentAndQuickRatio.htm**. (If the page changed, search that site for the *current ratio*.)

Required

- **1.** What level for the current ratio is generally regarded as sufficient to meet near-term operating needs?
- 2. Once you have calculated the current ratio for a company, what should you compare it against?
- **3.** What are the implications for a company that has a current ratio that is too high?

TAKING IT TO





TEAMWORK IN ACTION

P1 P2 P3

BTN 4-6 The unadjusted trial balance and information for the accounting adjustments of Dalia Noshy follow. Each team member involved in this project is to assume one of the four responsibilities listed. After completing each of these responsibilities, the team should work together to prove the accounting equation utilizing information from teammates (1 and 4). If your equation does not balance, you are to work as a team to resolve the error. The team's goal is to complete the task as quickly and accurately as possible.

Account Title	Debit	Credit
Cash	\$16,000	
Supplies	12,000	
Prepaid insurance	3,000	
Equipment	25,000	
Accumulated depreciation—Equipment		\$ 7,000
Accounts payable		3,000
D. Noshy, Capital		34,000
D. Noshy, Withdrawals	6,000	
Investigation fees earned		33,000
Rent expense	15,000	
Totals	\$77,000	\$77,000

Additional Year-End Information

- **a.** Insurance that expired in the current period amounts to \$2,200.
- **b.** Equipment depreciation for the period is \$4,000.
- **c.** Unused supplies total \$5,000 at period-end.
- **d.** Services in the amount of \$800 have been provided but have not been billed or collected.

Responsibilities for Individual Team Members

- 1. Determine the accounts and adjusted balances to be extended to the balance sheet columns of the work sheet for Dalia. Also determine total assets and total liabilities.
- **2.** Determine the adjusted revenue account balance and prepare the entry to close this account.
- **3.** Determine the adjusted account balances for expenses and prepare the entry to close these accounts.
- **4.** Prepare T-accounts for both Dalia, Capital (reflecting the unadjusted trial balance amount) and Income Summary. Prepare the third and fourth closing entries. Ask teammates assigned to parts 2 and 3 for the postings for Income Summary. Obtain amounts to complete the third closing entry and post both the third and fourth closing entries. Provide the team with the ending capital account balance.
- **5.** The entire team should prove the accounting equation using post-closing balances.

ENTREPRENEURIAL DECISION

A1 C3 P2



BTN 4-7 Review this chapter's opening feature involving Elhame Bourani and her **Fine Arts Center**.

- **1.** Explain how a classified balance sheet can help Elhame know what bills are due when, and whether she has the resources to pay those bills.
- **2.** Why is it important for Elhame to match costs and revenues in a specific time period? How do closing entries help him in this regard?
- **3.** What objectives are met when Elhame applies closing procedures each fiscal year-end?

BTN 4-8 Select a company that you can visit in person or interview on the telephone. Call ahead to the company to arrange a time when you can interview an employee (preferably an accountant) who helps prepare the annual financial statements. Inquire about the following aspects of its *accounting cycle*:

HITTING THE ROAD

C2

- **1.** Does the company prepare interim financial statements? What time period(s) is used for interim statements?
- **2.** Does the company use the cash or accrual basis of accounting?
- **3.** Does the company use a work sheet in preparing financial statements? Why or why not?
- **4.** Does the company use a spreadsheet program? If so, which software program is used?
- **5.** How long does it take after the end of its reporting period to complete annual statements?

BTN 4-9 Samsung (samsung.com) is a leading manufacturer of consumer electronic products. The following selected information is available from Samsung's 2013 financial statements.

GLOBAL DECISION





(millions of Korean Won)	2013	2012
Current assets	₩ 110,760,271	₩ 87,269,017
Current liabilities	51,315,409	46,933,052

Required

- **1.** Compute Samsung's current ratio for 2013 and 2012.
- **2.** Comment on any change from 2013 and 2012 for the current ratio.

ANSWERS TO MULTIPLE CHOICE QUIZ

- **1.** e
- **2.** c
- **3.** a
- **4.** c
- **5.** b