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chapter 4

Adjustments, Financial Statements, and the Quality of Earnings

The end of the accounting period is a very busy time for Chipotle Mexican Grill. Although the last day of the fiscal year for Chipotle falls on the last day of December each year, the financial statements are not distributed to users until management and the external auditors (independent CPAs) make many critical evaluations.

- Management must ensure that the correct amounts are reported on the balance sheet and income statement. This often requires estimations, assumptions, and judgments about the timing of revenue and expense recognition and values for assets and liabilities.
- The auditors have to (1) assess the strength of the controls established by management to safeguard the company's assets and ensure the accuracy of the financial records, and (2) evaluate the appropriateness of estimates and accounting principles used by management in determining revenues and expenses.

Managers of most companies understand the need to present financial information fairly so as not to mislead users. However, since end-of-period adjustments are the most complex portion of the annual recordkeeping process, they are prone to error. External auditors examine the company's records on a test, or sample, basis. To maximize the chance of detecting any errors significant enough to affect users' decisions, CPAs allocate more of their testing to transactions most likely to be in error.

Several accounting research studies have documented the most error-prone transactions for medium-size manufacturing companies. End-of-period adjustment errors, such as failure to provide adequate product warranty liability, failure to include items that should be expensed, and end-of-period transactions recorded in the wrong period (called cut-off errors), are in the top category and thus receive a great deal of attention from auditors.

Learning Objectives

After studying this chapter, you should be able to:

- 4-1** Explain the purpose of adjustments and analyze the adjustments necessary at the end of the period to update balance sheet and income statement accounts. p. 162
- 4-2** Present an income statement with earnings per share, statement of stockholders' equity, and balance sheet. p. 175
- 4-3** Compute and interpret the total asset turnover ratio. p. 180
- 4-4** Explain the closing process. p. 181

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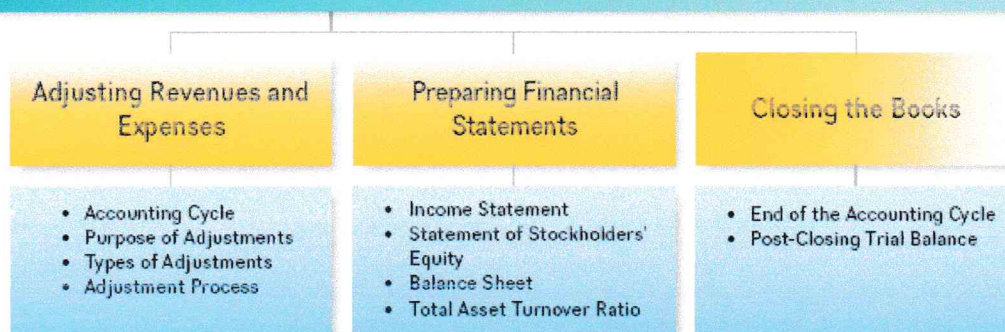
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Users expect revenues and expenses to be reported in the proper period based on the revenue realization and expense matching principles discussed in Chapter 3. Revenues are to be recorded when earned, and expenses are to be recorded when incurred regardless of when cash receipts or payments occur. Many operating activities take place over a period of time or over several periods, such as using insurance that has been prepaid or owing wages to employees for past work. Because recording these and similar activities daily is often very costly, most companies wait until the end of the period (usually monthly, quarterly, or annually) to make **adjustments** to record related revenues and expenses in the correct period. These entries update the records and are the focus of this chapter.

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In this chapter, we emphasize the use of the same analytical tools illustrated in Chapters 2 and 3 (T-accounts and journal entries) to understand how common adjustments are analyzed and recorded at the end of the accounting period. These tools provide the foundation for understanding adjustments that require additional estimation and judgments by management, which we discuss in future chapters. Then, in this chapter, we prepare financial statements using adjusted accounts, and finally, we illustrate how to prepare the accounting records for the next period by performing a process called **closing the books**.

ORGANIZATION of the Chapter



ADJUSTING REVENUES AND EXPENSES

Accounting Cycle

LEARNING OBJECTIVE 4-1

Explain the purpose of adjustments and analyze the adjustments necessary at the end of the period to update balance sheet and income statement accounts.

Exhibit 4.1 presents the basic steps in the **accounting cycle**. As initially discussed in Chapter 2, the accounting cycle is the process followed by entities to analyze and record transactions, adjust the records at the end of the period, prepare financial statements, and prepare the records for the next cycle. **During** the accounting period, transactions that result in exchanges between the company and other external parties are analyzed and recorded in the general journal in chronological order (journal entries), and the related accounts are updated in the general ledger (T-accounts), similar to our Chipotle illustrations in Chapters 2 and 3. In this chapter, we examine the **end-of-period** steps that focus primarily on adjustments to record revenues and expenses in the proper period and to update the balance sheet accounts for reporting purposes.

Purpose of Adjustments

Accounting systems are designed to record most recurring daily transactions, particularly those involving cash. As cash is received or paid, it is recorded in the accounting system. In general, this focus on cash works well, especially when cash receipts and payments occur in the same period as the activities that produce revenues and expenses. However, cash is not always received in the period in which the company earns revenue; likewise, cash is not always paid in the period in which the company incurs an expense.

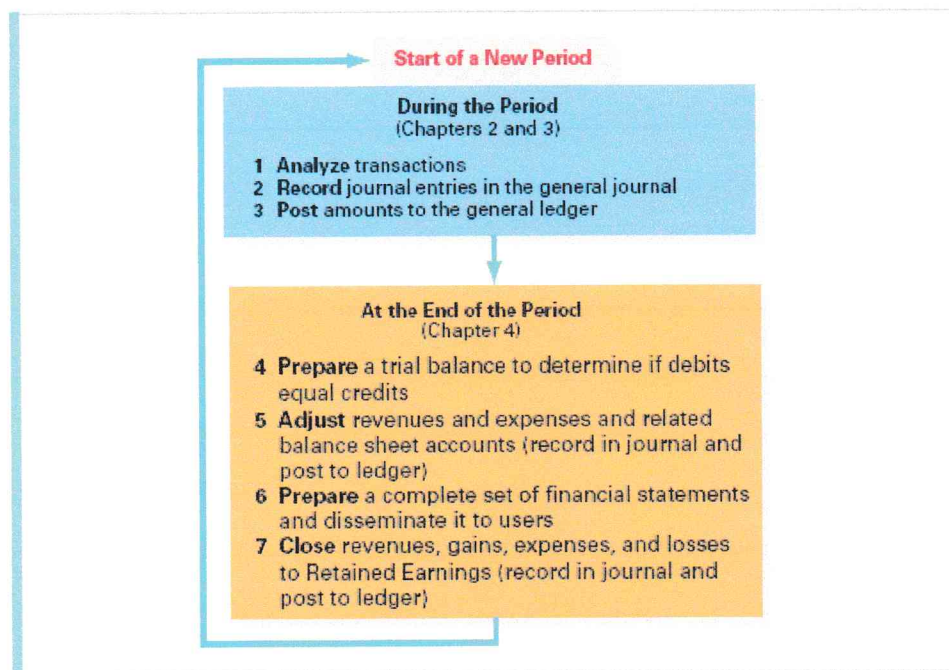
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EXHIBIT 4.1

The Accounting Cycle



ADJUSTING ENTRIES are entries necessary at the end of the accounting period to measure all revenues and expenses of that period.

How does the accounting system record revenues and expenses when one transaction is needed to record a cash receipt or payment and another transaction is needed to record revenue when it is earned or an expense when it is incurred? The solution to the problem created by such differences in timing is to record **adjusting entries** at the end of every accounting period, so that

- Revenues are recorded when they are earned (the **revenue realization principle**),
- Expenses are recorded when they are incurred to generate revenue (the **expense matching principle**),
- **Assets** are reported at amounts that represent the probable future benefits remaining at the end of the period, and
- **Liabilities** are reported at amounts that represent the probable future sacrifices of assets or services owed at the end of the period.

Companies wait until the **end of the accounting period** to adjust their accounts in this way because adjusting the records daily would be very costly and time-consuming. Adjusting entries are required every time a company wants to prepare financial statements for external users.

Types of Adjustments

Exhibit 4.2 describes the four types of adjustments (two in which cash was already received or paid and two in which cash will be received or paid). Because of the timing of the cash receipts or payments, each of these types of adjustments involves two entries:

- One for the cash receipt or payment either before or after the end of the period.
- One for the adjustment to record the revenue or expense in the proper period (the adjusting entry).

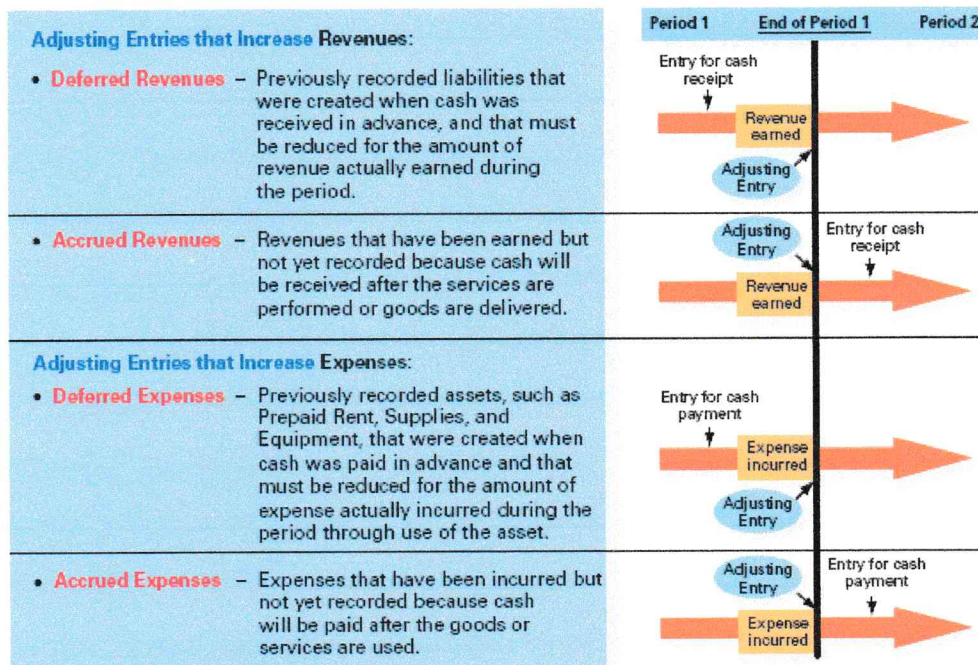
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EXHIBIT 4.2

Four Types of Adjustments



In practice, almost every account, **except Cash**, could require an adjustment. Rather than trying to memorize an endless list of specific examples, you should focus instead on learning the general types of adjustments that are needed and the process that is used to determine how to adjust the accounts. We will illustrate the process involved in analyzing and adjusting the accounts by reviewing all the adjustments needed for Chipotle Mexican Grill before preparing the financial statements for the first quarter of 2012 based on adjusted balances.

Adjustment Process

In analyzing adjustments at the end of the period, there are three steps:

Step 1: Ask: **Was revenue earned or an expense incurred that is not yet recorded?**

If the answer is YES, credit the revenue account or debit the expense account in the adjusting entry.

Step 2: Ask: **Was the related cash received or paid in the past or will it be received or paid in the future?**

If cash **was received** in the past, a deferred revenue (liability) account was recorded in the past → Now, reduce the liability account (usually Unearned Revenue) that was recorded when cash was received, because some or all of the liability has been earned since then.

If cash **will be received** in the future → Increase the receivable account (such as Interest Receivable or Rent Receivable) to record what is owed by others to the company (creating an accrued revenue).

If cash **was paid** in the past, a deferred expense account (asset) was created in the past → Now reduce the asset account (such as Supplies or Prepaid Expenses) that was recorded in the past, because some of or the entire asset has been used since then.

If cash **will be paid** in the future → Increase the payable account (such as Interest Payable or Wages Payable) record what is owed by the company to others (creating an accrued expense).

NOTE: Cash is never included in the adjusting entry, because it was recorded already in the past or be recorded in the future.

Step 3:

Compute the amount of revenue earned or expense incurred. Sometimes the amount is given or known, sometimes it must be computed, and sometimes it must be estimated.

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In summary, the pattern that results when the adjusting entry is recorded is as follows:

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<p>When revenue is earned, the adjusting entry is:</p> <p>DEFERRED REVENUE if cash was received and previously recorded</p> <p>↓</p> <table> <tr> <td>Unearned Revenue (-L)</td> <td>xx</td> </tr> <tr> <td>Revenue (+R, +SE)</td> <td>xx</td> </tr> </table> <p>OR</p> <p>ACCRUED REVENUE if cash will be received</p> <p>↓</p> <table> <tr> <td>Receivable (+A)</td> <td>xx</td> </tr> <tr> <td>Revenue (+R, +SE)</td> <td>xx</td> </tr> </table>	Unearned Revenue (-L)	xx	Revenue (+R, +SE)	xx	Receivable (+A)	xx	Revenue (+R, +SE)	xx	<p>When expense is incurred, the adjusting entry is:</p> <table> <tr> <td>Expense (+E, -SE)</td> <td>xx</td> </tr> <tr> <td>Prepaid Expense (-A)</td> <td>xx</td> </tr> </table> <p>↑</p> <p>DEFERRED EXPENSE if cash was paid and previously recorded</p> <p>OR</p> <table> <tr> <td>Expense (+E, -SE)</td> <td>xx</td> </tr> <tr> <td>Payable (+L)</td> <td>xx</td> </tr> </table> <p>↑</p> <p>ACCRUED EXPENSE if cash will be paid</p>	Expense (+E, -SE)	xx	Prepaid Expense (-A)	xx	Expense (+E, -SE)	xx	Payable (+L)	xx
Unearned Revenue (-L)	xx																
Revenue (+R, +SE)	xx																
Receivable (+A)	xx																
Revenue (+R, +SE)	xx																
Expense (+E, -SE)	xx																
Prepaid Expense (-A)	xx																
Expense (+E, -SE)	xx																
Payable (+L)	xx																

Now let's illustrate the adjustment process for Chipotle at the end of the first quarter of 2012. We start by reviewing the unadjusted trial balance from Chapter 3 with one modification (highlighted):

CHIPOTLE MEXICAN GRILL		
Unadjusted Trial Balance		
For the first quarter ended March 31, 2012		
(in thousands)	Debit	Credit
Cash	370,000	
Short-term investments	94,500	
Accounts receivable	9,100	
Supplies	216,600	
Prepaid expenses	113,700	
Property and equipment (<i>cost</i>)	1,217,100	
Accumulated depreciation (<i>used cost</i>)		370,000
Long-term investments	149,100	
Accounts payable		49,200
Accrued expenses payable		1,600
Dividends payable		3,000
Unearned revenue		33,400
Notes payable		233,200
Common stock		400
Additional paid-in capital		434,600
Retained earnings		668,500
Restaurant sales revenue		619,300
Investment income		4,700
Salaries and wages expense	138,600	
Occupancy expense	10,000	
Other operating expenses	48,600	
General and administrative expenses	49,300	
Gain (loss) on disposal of assets	1,300	
Total	2,417,900	2,417,900

This represents the historical cost of the property and equipment.

This represents the total amount of cost used in prior periods to generate revenues.

Cost \$1,217,100

– Used cost 370,000

\$ 847,100 Property and Equipment (net)

as presented in the prior chapters for reporting purposes.

Total unadjusted revenues = \$624,000

Total unadjusted expenses and losses = \$247,800

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From a review of the unadjusted trial balance on the previous page, we identify several accounts that may need an adjustment:

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- One deferred revenue account:
Unearned Revenue representing the amount received from customers on gift cards. A portion may have been earned during the quarter.
- One accrued revenue:
Interest on investments may have been earned but not yet received by the end of the quarter.
- Three deferred expense accounts:
Supplies of food, beverage, and packaging were used during the period.
Prepaid Expenses relating to rent, insurance, and advertising paid in the past were partially used during the period.
Property and Equipment was used during the period to generate revenue. As explained in the margin of the unadjusted trial balance, the cost of property and equipment is maintained in a separate account from the accumulated amount of cost used to generate revenue in prior periods. Because property and equipment was used during the quarter, we must make an adjustment to reflect that in the Accumulated Depreciation account.
- Four accrued expenses:
Salaries and wages, utilities, interest on notes payable, and income taxes may need to be adjusted for amounts incurred during the quarter but not yet paid. These would be included in Accrued Expenses Payable.

For each of the following adjustments, we shorten the term **adjusting journal entry** to AJE for ease of labeling. Also, as you learned in Chapters 2 and 3, it is important to continue to check that debits equal credits in each entry and that the accounting equation remains in balance. In the following adjustments, all entries and the accounting equation are in balance.

Deferred Revenues

DEFERRED (UNEARNED)

REVENUES are previously recorded liabilities that need to be adjusted at the end of the accounting period to reflect the amount of revenue earned.

When a customer pays for goods or services before the company delivers them, the company records the amount of cash received in a **deferred (unearned) revenue** account. This unearned revenue is a liability representing the company's promise to perform or deliver the goods or services in the future. Recognition of (recording) the revenue is postponed (deferred) until the company meets its obligation.

AJE 1 Unearned Revenue Chipotle received cash last period from customers purchasing gift cards and recorded an increase in Cash and an increase in Unearned Revenues, a liability, to recognize the business's obligation to provide future services to customers. During the first quarter of 2012, customers redeemed the gift cards for \$21,300 in food service.

Step 1:

Was revenue earned that is not yet recorded? Yes. When customers redeemed their gift cards, Chipotle provided food service. Therefore, Chipotle has earned \$21,300 in Restaurant Sales Revenue that is not yet recorded. Record an increase in the revenue account.

Step 2		Debit	Credit
(AJE 1) Unearned Revenue (-L)		21,300	
	Restaurant Sales Revenue (+R, +SE)		21,300

Step 1	Step 3			
Assets	=	Liabilities	+	Stockholders' Equity
		Unearned revenue	-21,300	Restaurant sales revenue (+R)
				+21,300

Was the related cash received in the past or will it be received in the future? In the past. The Unearned Revenue account was created when cash was received in the past. At the end of the quarter, there is a \$33,400 balance in the account. However, it is too large because a portion of it has been earned. Therefore, reduce the unearned revenue account for the amount earned.

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Step

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Step 3:

Compute the amount of revenue earned. The amount of the revenue that was earned is given \$21,300. Record this amount in the adjusting journal entry.

NOTE: The beginning balance for each T-account is from the 3/31/12 unadjusted trial balance on page 165.

– Unearned Revenue (L) +	
	33,400 Bal.
(AJE 1) 21,300	
	12,100

Restaurant Sales – Revenue (R) +	
	619,300 Bal.
	21,300 (AJE 1)
	640,600

Additional examples of deferred revenues include magazine subscription sales by publishing companies; season tickets sold in advance to sporting events, plays, and concerts by these types of organizations; air flight tickets sold in advance by airlines; and rent received in advance by landlords. Each of these requires an adjusting entry at the end of the accounting period to report the amount of revenue earned during the period.

Accrued Revenues

ACCRUED REVENUES are previously unrecorded revenues that need to be adjusted at the end of the accounting period to reflect the amount earned and the related receivable account.

Sometimes companies perform services or provide goods (that is, earn revenue) before customers pay. Because the cash that is owed for these goods and services has not yet been received and the customers have not yet been billed, the revenue that was earned may not have been recorded. Revenues that have been earned but have not yet been recorded at the end of the accounting period are called **accrued revenues**.

AJE 2 Interest on Investments Investments owned by Chipotle earned \$200 in additional investment income for the quarter, but the cash has not yet been received.

Step 1: **Was revenue earned that is not yet recorded? Yes.** Investments earned an additional amount during the quarter, but no Investment Income has yet been recorded. Revenue is understated. Record an increase in the revenue account.

Step 2		Debit	Credit
(AJE 2) Interest Receivable (+A)	200	
Investment Income (+R, +SE)		200

Step 1	Step 3
Assets	=
Liabilities	+
Stockholders' Equity	
Interest receivable +200	Investment income (+R) +200

Step 2: **Was the related cash received in the past or will it be received in the future? In the future.** Chipotle will receive the cash from the investment income in the next quarter. Because cash will be received, a receivable needs to be increased. Increase Interest Receivable.

Step 3: **Compute the amount of revenue earned.** The amount of the revenue that was earned is given as \$200. Record this amount in the adjusting journal entry

+ Interest Receivable (A) -	
Bal.	0
(AJE 2)	200
200	

- Investment Income (R) +	
4,700	Bal.
200	(AJE 2)
4,900	

Deferred Expenses

DEFERRED EXPENSES are previously acquired assets that need to be adjusted at the end of the accounting period to reflect the amount of expense incurred in using the assets to generate revenue.

Assets represent resources with probable future benefits to the company. Many assets are used over time to generate revenues, including supplies, buildings, equipment, prepaid insurance, prepaid advertising, and prepaid rent. These assets are **deferred expenses**. At the end of every period, an adjustment must be made to record the amount of the asset that was used during the period.

AJE 3 Supplies Supplies include food, beverage, and paper products for Chipotle. At the end of the quarter, Chipotle counted \$10,000 in supplies on hand, but the Supplies account indicated a balance of \$216,600 (from the unadjusted trial balance on page 165).

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Step 1: Was expense incurred that is not yet recorded? Yes. Supplies were used during the quarter to generate revenue, but no entry has been made to record the amount used. Expenses are understated. Record an increase in the Food, Beverage, and Packaging Expense account (also called Supplies Expense by many companies).

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Step 1		Debit	Credit
(AJE 3) Food, Beverage, and Packaging Expense (+E, -SE)	206,600		
Supplies (-A)		206,600	

Assets	=	Liabilities	+	Stockholders' Equity
Supplies -206,600				Food, beverage, and packaging expense (+E) -206,600

Step 2: Was the related cash paid in the past or will it be paid in the future? In the past. Chipotle purchased supplies during the quarter and recorded the acquisition in the Supplies account. Some of these supplies have been used during the quarter, but no entry has been made yet to reduce the account. Assets are overstated. Record a decrease in the Supplies account.

Step 3: Compute the amount of expense incurred. The easiest way to determine the dollar amount of supplies used is to add the dollar amount of supplies available at the beginning of the period plus any purchases made during the period, and then subtract the dollar amount of supplies remaining on hand at the end of the period.

+ Supplies (A) -	
Bal.	216,600
	206,600 (AJE 3)
	10,000

Food, Beverage, and + Packaging Expense (E) -	
Bal.	0
(AJE 3)	206,600
	206,600

Computation of Supplies Expense	
Beginning balance—Supplies	\$ 8,900
+ Purchases during quarter	207,700
Unadjusted balance	216,600
- Amount on hand at end of quarter	(10,000)
Supplies used during quarter	\$206,600

The balance of Supplies on the unadjusted trial balance is \$216,600 which includes the beginning balance for the quarter (\$8,900) and the purchases during the quarter (\$207,700). With \$10,000 remaining on hand, the amount of supplies used during the period is \$206,600. Add this amount in the adjusting entry.

AJE 4 Prepaid Expenses The Prepaid Expenses account includes:

- \$36,000 paid at the beginning of the quarter for rental of facilities at \$6,000 per month,
- \$32,000 for insurance coverage for one year beginning January 2012, and
- \$20,000 for advertising paid at the beginning of the quarter for advertisements to be placed during the quarter.

Step 1: **Was expense incurred that is not yet recorded? Yes.** A portion of the rent and insurance and all of the advertising have been used during the quarter to generate revenue, but no entry has been made to record the amount used. Expenses are understated. Since rent, insurance, and advertising are categorized as occupancy expenses, record an increase in the Occupancy Expense account. (Some companies would record these separately as Rent Expense, Insurance Expense, and Advertising Expense, as you may use in several assignments.)

	Step 1	Debit	Credit
(AJE 4) Occupancy Expense (+E, -SE).....		46,000	
Prepaid Expenses (-A).....			46,000
	Step 2		Step 3

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Assets	=	Liabilities	+	Stockholders' Equity
Prepaid expenses				Occupancy expense (+E)
-46,000				-46,000

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Step 2: **Was the related cash paid in the past or will it be paid in the future? In the past.** Chipotle prepaid rent, insurance, and advertising at the beginning of the quarter. These provided probable future benefits and were recorded as an asset Prepaid Expenses. Because a portion of these prepaid expenses have been used during the quarter, but no entry has been made yet to reflect that, Prepaid Expenses are overstated. Record a decrease in Prepaid Expenses account.

Step 3: **Compute the amount of expense incurred.** The computations for each are as follows:

- Rent: $\$36,000 \times (3 \text{ months in the quarter} / 6 \text{ months prepaid}) = \mathbf{\$18,000}$ rent used.
 - Insurance: $\$32,000 \text{ prepaid} \times (3 \text{ months in the quarter} / 12 \text{ months coverage}) = \mathbf{\$8,000}$ insurance used.
 - Advertising: **\\$20,000** all used during the quarter.
- Total expense = $\$18,000 + \$8,000 + \$20,000 = \mathbf{\$46,000}$

+ Prepaid Expenses (A) –	
Bal.	113,700
	46,000 (AJE 4)
	67,700

+ Occupancy Expense (E) –	
Bal.	10,000
(AJE 4)	46,000
	56,000

AJE 5 Property and Equipment Before illustrating the adjustment process for buildings and equipment, notice that the Property and Equipment account is stated at the original cost of \$1,217,100 in the unadjusted trial balance but was shown at a lower **net** amount in previous chapters. Unlike supplies, which are purchased and then used over a relatively short period, buildings and equipment represent deferred expenses that will be used over many years. Buildings and equipment accounts increase by the cost of the assets when they are **acquired** and decrease by the cost of the assets when they are **sold**. However, these assets are also **used** over time to generate revenue. Thus, a part of their cost should be expensed in the same period (the expense matching principle). Accountants say that buildings and equipment **depreciate** over time as they are used. In accounting, **depreciation is an allocation of an asset's cost over its estimated useful life to the organization.**

A **CONTRA-ACCOUNT** is an account that is an offset to, or reduction of, the primary account.

To keep track of the asset's historical cost, the amount that has been used is not subtracted directly from the asset account. Instead, it is accumulated in a new kind of account called a **contra-account**. Contra-accounts are accounts that are **directly linked to another account, but with an opposite balance**. For Property and Equipment, the contra-account for the total cost used to date is called **Accumulated Depreciation**. This is the first of several contra-accounts you will learn throughout the text. We will designate contra-accounts with an X in front of the type of account to which it is related. For example, this first contra-account will be shown as Accumulated Depreciation (XA).

The **NET BOOK VALUE (BOOK VALUE, CARRYING VALUE)** of an asset is the difference between its acquisition cost and accumulated depreciation, its related contra-account.

Since assets have debit balances, Accumulated Depreciation has a credit balance. On the balance sheet, the amount that is reported for Property and Equipment is its **net book value** (also called the **book value** or **carrying value**), which equals the ending balance in the Property and Equipment account (cost) minus the ending balance in the Accumulated Depreciation account (used cost).

+ Property and Equipment (A) –	– Accumulated Depreciation (XA) +	
Beginning bal. Buy (cost)	Accumulated portion of asset cost used when sold	Beginning bal. Portion of asset cost used during period
<u>Ending bal.</u>	–	<u>Ending bal.</u>

Amount reported on the balance sheet

↓

= Net book value

For Chipotle, Accumulated Depreciation has a credit balance of \$370,000.

On the balance sheet (based on unadjusted balances):

Property and equipment (net of accumulated depreciation of \$370,000)	\$847,100
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Depreciation is discussed in much greater detail in Chapter 8. Until then, we will give you the amount of depreciation estimated by the company for the period. Chipotle estimates depreciation to be \$80,400 per year.

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Step 1: **Was expense incurred that is not yet recorded?** **Yes.** The company used buildings and equipment during the first quarter of 2012. However, no expense has yet been recorded, so expenses are understated. Record an increase in the expense account, Depreciation Expense.

Step 1		Debit	Credit
(AJE 5) Depreciation Expense (+E, -SE)		20,100	
Accumulated Depreciation (+XA, -A)			20,100
Step 2		Step 3	
Assets	=	Liabilities	+ Stockholders' Equity
Accumulated depreciation (+XA) -20,100			Depreciation expense (+E) -20,100

Step 2: **Was the related cash paid in the past or will it be paid in the future?** **In the past.** Chipotle purchased property and equipment in the past to be used over several years. The acquisitions were recorded in the asset account Property and Equipment, which maintains the historical cost of the assets. The amount to be used in the future (net book value) must now be reduced for the depreciation for the first quarter of 2012. Reduce the net book value by increasing the contra-account Accumulated Depreciation.

Step 3: **Compute the amount of expense incurred.** The property and equipment has been used to generate revenue for the quarter. Thus, we need to calculate one quarter of Depreciation Expense:

$$\begin{aligned} \text{Depreciation for the quarter} &= \$80,400 \text{ annual depreciation (given)} \times \frac{1}{4} \text{ of the year} \\ &= \$20,100 \text{ depreciation for the quarter} \end{aligned}$$

Accumulated - Depreciation (XA, -A) +	
370,000	Bal.
20,100	(AJE 5)
390,100	

+ Depreciation Expense (E) -	
Bal.	0
(AJE 5)	20,100
20,100	

Accrued Expenses

ACCRUED EXPENSES are previously unrecorded expenses that need to be adjusted at the end of the accounting period to reflect the amount incurred and the related payable account.

Numerous expenses are incurred in the current period without being paid for until the next period. Common examples include Salaries Expense for the wages owed to employees, Utilities Expense for the

water, gas, and electricity used during the period, and the Interest Expense incurred on debt. These **accrued expenses** accumulate (accrue) over time but are not recognized until the end of the period in an adjusting entry.

AJE 6 Salaries and Wages Chipotle's employees earned \$13,400 in salaries and wages for working two days at the end of the quarter. They will be paid in the next quarter.

Accrued Expenses – Payable (L) +	
	1,600 Bal.
	13,400 (AJE 6)
	15,000

Salaries and Wages + Expense (E) –	
Bal. 138,600	
(AJE 6) 13,400	
	152,000

Step 1:

Was expense incurred that is not yet recorded? Yes. The company used employee labor near the end of the first quarter of 2012. However, no expense has yet been recorded, so expenses are understated. Record an increase in the expense account, Salaries and Wages Expense.

	Step 1	Debit	Credit
(AJE 6) Salaries and Wages Expense (+E, –SE)		13,400	
Accrued Expenses Payable (+L)			13,400
Step 2			Step 3
Assets	=	Liabilities	+ Stockholders' Equity
		Accrued expenses payable +13,400	Salaries and wages expense (+E) –13,400

Step 2:

Was the related cash paid in the past or will it be paid in the future? In the future. Chipotle will pay the employees in the next quarter, but no liability has yet been recorded. Because liabilities are understated, record an increase in Accrued Expenses Payable.

Compute the amount of expense incurred. The amount of the salaries and wages owed to employees is given at \$13,400.

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Step

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AJE 7 Interest on Debt Chipotle owed \$233,200 in notes payable during the quarter. There are two components when borrowing (or lending) money: **principal** (the amount borrowed or loaned) and **interest** (the cost of borrowing or lending). The average interest rate on Chipotle's borrowings is 7.7 percent. Notes Payable (the principal) was recorded properly when the money was borrowed. Its balance does not need to be adjusted. However, interest expense is incurred by Chipotle over time as the money is used.

Step 1: **Was expense incurred that is not yet recorded? Yes.** Chipotle used borrowed funds during the quarter, but the expense has not yet been recognized. Expenses are understated. Record an increase in the Interest Expense account.

	Step 1	Debit	Credit
(AJE 7) Interest Expense (+E, -SE).....		4,500	
Accrued Expenses Payable (+L).....			4,500

Assets	=	Liabilities	+	Stockholders' Equity
		Accrued expenses payable	+4,500	Interest expense (+E) -4,500

Step 2: **Was the related cash paid in the past or will it be paid in the future? In the future.** Chipotle will pay interest on the debt in the future. Because cash is owed, a payable account needs to be increased. Increase Accrued Expenses Payable.

Step 3: **Compute the amount of expense incurred. NOTE: Unless told otherwise, the interest rate on loans to others and borrowings is always given as an annual percentage.** To compute interest expense on notes payable for less than a full year, the number of months needed in the calculation is divided by 12. Because the borrowings were outstanding for most of the quarter, the formula to compute interest expense is:

Accrued Expenses - Payable (L) +	
	1,600 Bal.
	13,400 (AJE 6)
	4,500 (AJE 7)
	19,500

+ Interest Expense (E) -	
Bal.	0
(AJE 7)	4,500
	4,500

Principal	×	Rate per year	×	Number of Months (since last computation) / 12	=	Interest for the Period
\$233,200	×	.077	×	3 months / 12 months	=	\$4,500 (rounded to the nearest hundred)

AJE 8 Utilities Most organizations receive utility bills after using utility services such as electricity, natural gas, and telephone. Chipotle received a utility bill for \$4,400 for usage during the quarter. The bill will be paid next quarter.

Step 1:

Was expense incurred that is not yet recorded? Yes. Chipotle used the utilities during the first quarter, but has not yet recorded the expense. Since expenses are understated, increase Occupancy Expense.

Step 1		Debit	Credit
(AJE 8) Occupancy Expense (+E, -SE)		4,400	
Accrued Expenses Payable (+L)			4,400

Step 2	Step 3			
Assets	=	Liabilities	+	Stockholders' Equity
		Accrued expenses payable	+4,400	Occupancy expense (+E) -4,400

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Step 2: Was the related cash paid in the past or will it be paid in the future? In the future. Chipotle will pay next quarter the utility bill owed for usage in the first quarter. The liability is understated. Increase the Accrued Expenses Payable account. **Step 3:** Compute the amount of expense incurred. The amount of the utilities incurred in the first quarter is given as \$4,400. **Page 172**

Accrued Expenses – Payable (L) +	
	1,600 Bal.
	13,400 (AJE 6)
	4,500 (AJE 7)
	4,400 (AJE 8)
	<hr/> 23,900

+ Occupancy Expense (E) –	
Bal.	10,000
(AJE 4)	46,000
(AJE 8)	4,400
	<hr/> 60,400

AJE 9 Income Taxes The final adjusting entry is to record the accrual of income taxes that will be paid in the next quarter. This requires computing adjusted pretax income—the balances in the revenue and expense accounts from the unadjusted trial balance plus the effect of all of the other adjustments:

	<u>Revenues and Gains</u>	–	<u>Expenses and Losses</u>	
On unadjusted trial balance	\$624,000		\$247,800	
<i>AJE 1</i>	21,300			
<i>AJE 2</i>	200			
<i>AJE 3</i>			206,600	
<i>AJE 4</i>			46,000	
<i>AJE 5</i>			20,100	
<i>AJE 6</i>			13,400	
<i>AJE 7</i>			4,500	
<i>AJE 8</i>			4,400	
	<hr/> \$645,500	–	<hr/> \$542,800	= \$102,700 Pretax Income

Chipotle estimated a tax rate of 38.9 percent for the quarter, with the taxes due to be paid next quarter.

Step 1: Was expense incurred that is not yet recorded? Yes. Chipotle incurred taxes on its quarterly income. Until an adjusting entry is recorded at the end of the period based on all adjusted revenues, gains, expenses, and losses, expenses on the income statement are understated. Record an increase in Income Tax Expense.

Step 1		Debit	Credit
(AJE 9) Income Tax Expense (+E, -SE)	40,000		
Accrued Expenses Payable (+L)			40,000

Step 2	Step 3
Assets	Stockholders' Equity
=	+
Liabilities	Income tax expense (+E)
Accrued expenses payable	-40,000
+40,000	

Step 2: Was the related cash paid in the past or will it be paid in the future? **In the future.** Income taxes from the first quarter are due by the end of the second quarter. So the liabilities on the balance sheet must be increased. Increase Accrued Expenses Payable.

Step 3: Compute the amount of expense incurred. Income taxes are computed on the pretax income after all other adjustments:

$$\$102,700 \text{ pretax income} \times .389 \text{ tax rate} = \$40,000 \text{ (rounded to the nearest hundred)}$$

Accrued Expenses - Payable (L) +	
	1,800 Bal.
	13,400 (AJE 6)
	4,500 (AJE 7)
	4,400 (AJE 8)
	40,000 (AJE 9)
	63,900

+ Income Tax Expense (E) -	
Bal.	0
(AJE 9)	40,000
	40,000

In all of the above adjustments, you may have noticed that **the Cash account was never adjusted**. The cash has already been received or paid by the end of the period, or will be received or paid in the next period. Adjustments are required to record revenues and expenses in the proper period because the cash part of the transaction is at a different point in time. In addition, **each adjusting entry always included one income statement account and one balance sheet account**. Now it's your turn to practice the adjustment process.

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PAUSE FOR FEEDBACK

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Adjustments are necessary at the end of the accounting cycle to record all revenues and expenses in the proper period and to reflect the proper valuation for assets and liabilities.

- **Deferred revenues** (liabilities) have balances at the end of the period because cash was received before it was earned. If all or part of the liability has been satisfied by the end of the period, revenue needs to be recorded and the liability reduced.
- **Accrued revenue** adjustments are necessary when the company has earned revenue, but the cash will be received in the next period. Since nothing has yet been recorded, revenue needs to be recognized and an asset (a receivable) increased.
- **Deferred expenses** (assets) have balances at the end of the period because cash was paid in the past by the company for the assets. If all or part of the asset has been used to generate revenues in the period, an expense needs to be recorded and the asset reduced.
- **Accrued expense** adjustments are necessary when the company has incurred an expense but the cash will be paid in the next period. Since nothing has yet been recorded, an expense needs to be recognized and a liability (a payable) increased.

SELF-STUDY QUIZ

For practice, complete the following adjustments using the three-step process outlined in the chapter: (1) Determine if revenue was earned or an expense incurred; (2) determine if cash was received or paid in the past or will be received or paid in the future; and (3) compute the amount.

Florida Flippers, a scuba diving and instruction business, completed its first year of operations on December 31, 2014.

- AJE 1:* Florida Flippers received \$6,000 from customers on November 15, 2014, for diving trips to the Bahamas in December and January. The \$6,000 was recorded in Unearned Revenue on that date. By the end of December, one-third of the diving trips had been completed.
- AJE 2:* On December 31, 2014, Florida Flippers provided advanced diving instruction to 10 customers who will pay the business \$800 in January. No entry was made when the instruction was provided.
- AJE 3:* On September 1, 2014, Florida Flippers paid \$24,000 for insurance for the 12 months beginning on September 1. The amount was recorded as Prepaid Insurance on September 1.
- AJE 4:* On March 1, 2014, Florida Flippers borrowed \$300,000 at 12 percent. Interest is payable each March 1 for three years.

	(1) Revenue earned or expense incurred?	(2) Cash received/paid in the past or cash to be received/paid in the future?	(3) Amount	Adjusting Journal Entry		
				Accounts	Debit	Credit
AJE 1						
AJE 2						
AJE 3						
AJE 4						

After you have completed your answers, check them with the solutions at the bottom of the next page.

GUIDED HELP



www.mhhe.com/libby8e

For additional step-by-step video instruction on recording adjusting entries, go to the URL or scan the QR code in the margin with your smartphone or iPad.

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Owners and managers of companies are most directly affected by the information presented in financial statements. If the financial performance and condition of the company appear strong, the company's stock price rises. Shareholders usually receive dividends and increase their investment value. Managers often receive bonuses based on the strength of a company's financial performance, and many in top management are compensated with options to buy their company's stock at prices below market value. The higher the market value, the more compensation they earn. When actual performance lags behind expectations, managers and owners may be tempted to manipulate accruals and deferrals to make up part of the difference. For example, managers may record cash received in advance of being earned as revenue in the current period or may fail to accrue certain expenses at year-end.

Evidence from studies of large samples of companies indicates that some managers do engage in such behavior. This research is borne out by enforcement actions of the Securities and Exchange Commission against companies and sometimes against their auditors. In January 2003, an SEC study reported that, in a five-year period, there were 227 enforcement investigations. Of these, "126 involved improper revenue recognition and 101 involved improper expense recognition. ... Of the 227 enforcement matters during the Study period, 157 resulted in charges against at least one senior manager... Furthermore, the Study found that 57 enforcement matters resulted in charges for auditing violations... ." (p. 47).*

In many of these cases, the firms involved, their managers, and their auditors are penalized for such actions. Furthermore, owners suffer because news of an SEC investigation negatively affects the company's stock price.

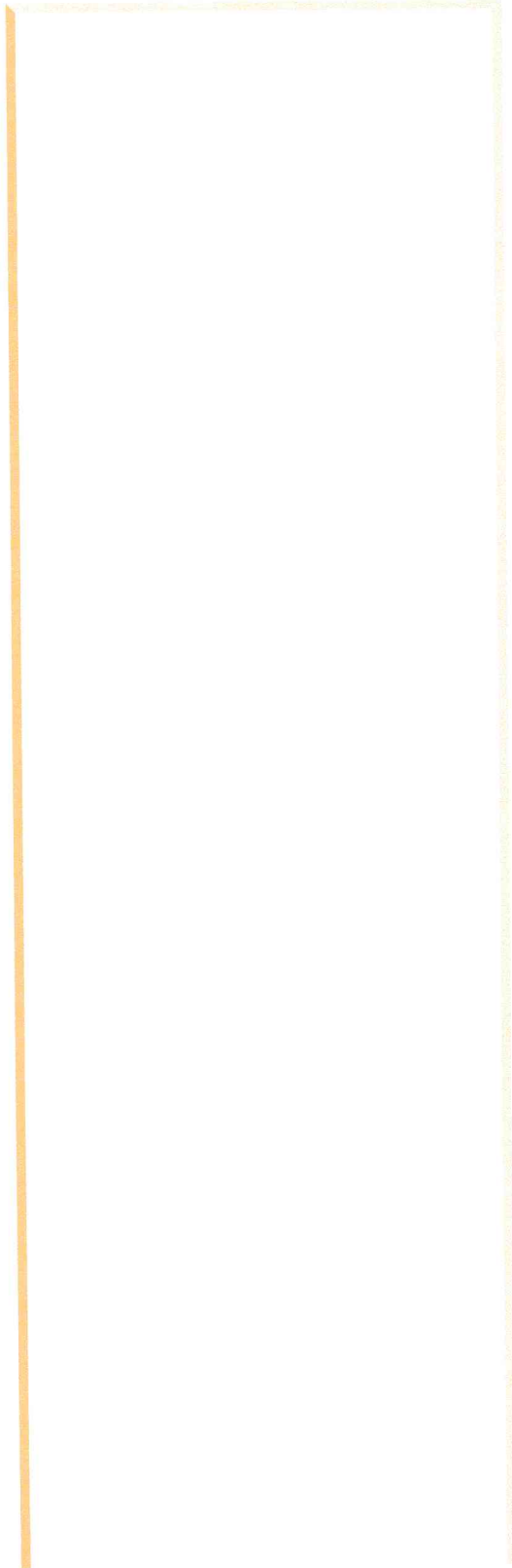
*These statistics are reported in the Securities and Exchange Commission's study, "Report Pursuant to Section 704 of the Sarbanes-Oxley Act of 2002," January 27, 2003.

Solutions to SELF-STUDY QUIZ

	(1) Revenue earned or expense incurred?	(2) Cash received/paid in the past or cash to be received/paid in the future?	(3) Amount	Adjusting Journal Entry		
				Accounts	Debit	Credit
AJE 1	Diving Trip Revenue earned	Received in past: <i>Unearned Revenue</i>	$\$6,000 \times 1/3 =$ \$2,000 earned	Unearned Revenue (-L) Diving Trip Revenue (+R, +SE)	2,000	2,000
AJE 2	Instruction Revenue earned	To be received: <i>Accrued Revenue</i>	\$800 earned (given)	Accounts Receivable (+A) Instruction Revenue (+R, +SE)	800	800
AJE 3	Insurance Expense incurred	Paid in past: <i>Prepaid Expense</i>	$\$24,000 \times 4 \text{ months}/$ $12 = \$8,000$ used	Insurance Expense (+E, -SE) Prepaid Insurance (-A)	8,000	8,000
AJE 4	Interest Expense incurred	To be paid: <i>Accrued Expense</i>	$\$300,000 \times .12 \times$ $10/12 = \$30,000$ incurred and owed	Interest Expense (+E, -SE) Interest Payable (+L)	30,000	30,000

PREPARING FINANCIAL STATEMENTS

As you learned in Chapter 1, the financial statements are interrelated—that is, the numbers from one statement flow into the next statement. The following illustration highlights the interconnections among the statements using the fundamental accounting equation.



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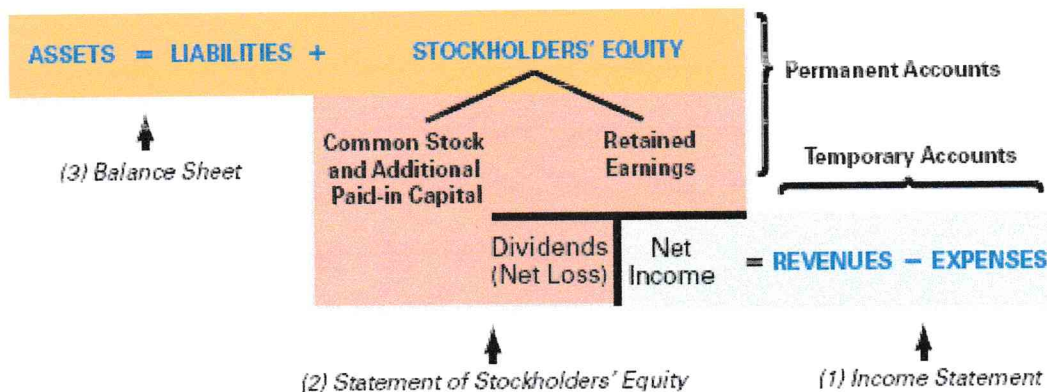
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**LEARNING
OBJECTIVE 4-2**

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Present an income statement with earnings per share, statement of stockholders' equity, and balance sheet.

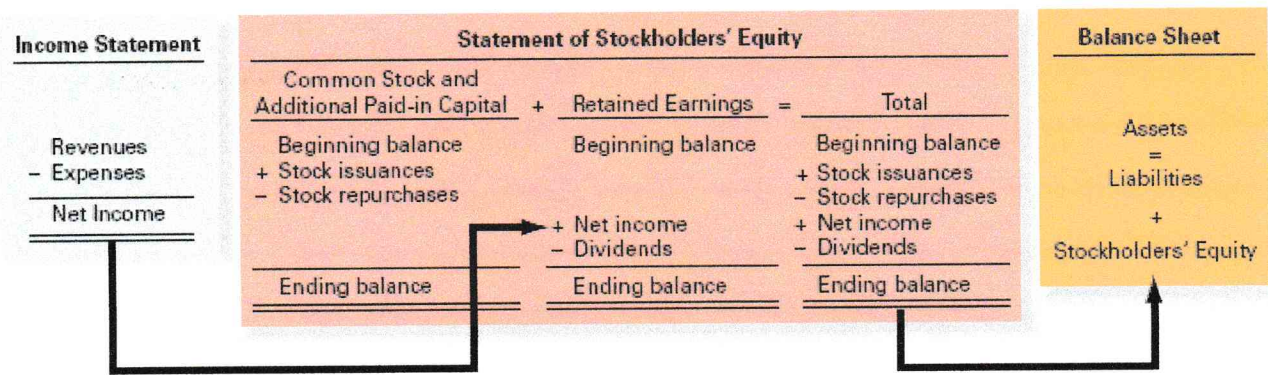
Also notice special labels for the accounts. Balance sheet accounts are considered **permanent**, indicating that they retain their balances from the end of one period to the beginning of the next. Revenue, expense, gain, and loss accounts are **temporary** accounts because their balances accumulate for a period but start with a zero balance at the beginning of the next period. These labels will be discussed in the section on closing the books, which follows our presentation of Chipotle's financial statements.



Starting on the bottom right, notice that

- Revenues minus expenses yields net income on the **Income Statement**.
- Net income (or net loss) and dividends to stockholders affect Retained Earnings and any additional issuances of stock during the period affect the balance in Common Stock and Additional Paid-in Capital, all of which appear on the **Statement of Stockholders' Equity**.
- Stockholders' Equity is a component of the **Balance Sheet**.

Thus, if a number on the income statement changes or is in error, it will impact the other statements. Another way of presenting the relationships among the statements is illustrated below.



Before we prepare a complete set of financial statements, let's update the trial balance to reflect the adjustments and the adjusted balances for the statements. Any account that

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<u>AJE</u>	<u>Debit</u>	<u>Credit</u>
c. Depreciation Expense (+E, -SE) Accumulated Depreciation (+XA, -A) \$300 × 1/12 = \$25 depreciation in April	25	25
d. Wages Expense (+E, -SE) Wages Payable (+L) \$200 per day × 2 days = \$400 incurred in April	400	400
e. Utilities Expense (+E, -SE) Utilities Payable (+L) \$52 is estimated as incurred in April	52	52
f. Interest Expense (+E, -SE) Interest Payable (+L) \$3,700 principal × .12 annual rate × 1/12 = \$37 interest incurred in April	37	37
g. Income Tax Expense (+E, -SE) Income Tax Payable (+L)	244	244
	<u>Revenues</u>	<u>Expenses</u>
Unadjusted balances	\$5,212	\$4,350
AJE (a)	400	
AJE (b)		50
AJE (c)		25
AJE (d)		400
AJE (e)		52
AJE (f)		37
Adjusted balances	\$5,612	\$4,914 = \$698 Pretax Income × .35 tax rate <u>\$244 (rounded)</u>

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Adjusted Trial Balance

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TERRIFIC LAWN MAINTENANCE CORPORATION		
Adjusted Trial Balance at April 30, 2014		
	Debit	Credit
Cash	5,032	
Accounts receivable	1,700	
Prepaid expenses	250	
Equipment (<i>cost</i>)	4,600	
Accumulated depreciation (<i>used cost</i>)		25
Land	3,750	
Accounts payable		220
Wages payable		400
Utilities payable		52
Short-term notes payable		400
Interest payable		37
Income tax payable		244
Unearned revenue		1,200
Long-term notes payable		3,300
Common stock		150
Additional paid-in capital		8,850
Retained earnings		0
Mowing revenue		5,600
Interest revenue		12
Wages expense	4,300	
Fuel expense	410	
Insurance expense	50	
Utilities expense	52	
Depreciation expense	25	
Interest expense	77	
Income tax expense	244	
Total	20,490	20,490

TERRIFIC LAWN MAINTENANCE CORPORATION
Income Statement
For the Month Ended April 30, 2014


Operating revenues:	
Mowing revenue	\$5,600
Operating expenses:	
Wages expense	4,300
Fuel expense	410
Insurance expense	50
Utilities expense	52
Depreciation expense	25
	<u>4,837</u>
Operating income	763
Other items:	
Interest revenue	12
Interest expense	<u>(77)</u>
Pretax income	698
Income tax expense	<u>244</u>
Net Income	<u>\$ 454</u>
Earnings per share (for the month) ($\$454 \div 1,500$ shares)	<u>\$.30</u>

TERRIFIC LAWN MAINTENANCE CORPORATION
Statement of Stockholders' Equity
For the Month Ended April 30, 2014

	Common Stock	Additional Paid-in Capital	Retained Earnings	Total
Beginning April 1, 2014	\$ 0	\$ 0	\$ 0	\$ 0
Stock issuance	150	8,850		9,000
Net income			454	454
Dividends declared			0	0
Balance, April 30, 2014	<u>\$150</u>	<u>\$8,850</u>	<u>\$454</u>	<u>\$9,454</u>

TERRIFIC LAWN MAINTENANCE CORPORATION
Balance Sheet
April 30, 2014

Assets		Liabilities	
Current Assets:		Current Liabilities:	
Cash	\$ 5,032	Accounts payable	\$ 220
Accounts receivable	1,700	Wages payable	400
Prepaid expenses	<u>250</u>	Utilities payable	52
Total current assets	6,982	Short-term notes payable	400
		Interest payable	37
Equipment (net of \$25 accumulated depreciation)	4,575	Income tax payable	244
Land	<u>3,750</u>	Unearned revenue	<u>1,200</u>
		Total current liabilities	2,553
		Long-term notes payable	3,300
		Stockholders' Equity	
		Common stock	150
		Additional paid-in capital	8,850
		Retained earnings	<u>454</u>
		Total stockholders' equity	<u>9,454</u>
Total assets	<u>\$15,307</u>	Total liabilities and stockholders' equity	<u>\$15,307</u>

- 
- Step 1: Determining if revenue was earned or an expense was incurred. Record an increase in the revenue or expense account.
- Step 2: Determining whether cash was received or paid in the past or will be received or paid in the future. If in the past, the existing asset or liability is overstated and needs to be reduced. If in the future, the related receivable or payable account needs to be increased.
- Step 3: Computing the amount of revenue earned or expense incurred in the period.
- Recording adjusting entries has no effect on the Cash account.