

LESSON

# 15-1 Planning Adjusting Entries



## Learning Objectives

- LO1** Prepare an unadjusted trial balance.
- LO2** Adjust supplies and prepaid insurance.

# Adjusting Account Balances

LO1

- Some general ledger accounts need to be brought up to date before financial statements are prepared.
- Adjusting entries are used to bring a general ledger account up to date.

# Preparing an Unadjusted Trial Balance

LO1

- The first step in preparing adjusting entries is to prepare a trial balance.
- A trial balance prepared before adjusting entries are posted is called an **unadjusted trial balance**.

# Preparing an Unadjusted Trial Balance

LO1

1 Write account titles

2 Enter account balances

ThreeGreen Products, Inc.												
Unadjusted Trial Balance												
December 31, 20--												
ACCOUNT TITLE	DEBIT					CREDIT						
Cash	54	1	9	4	34							
Petty Cash		2	5	0	00							
Accounts Receivable	20	3	8	1	81							
Allowance for Uncollectible Accounts								1	2	5	15	
Merchandise Inventory	108	4	8	6	44							
Supplies—Office	4	5	4	8	17							
Supplies—Store	5	0	4	9	61							
Prepaid Insurance	11	0	0	0	00							
Notes Receivable	6	2	0	0	00							
Interest Receivable												
Salary Expense	184	2	3	4	95							
Supplies Expense—Office												
Supplies Expense—Store												
Uncollectible Accounts Expense												
Utilities Expense	4	9	6	5	42							
Federal Income Tax Expense	20	0	0	0	00							
Interest Income								4	6	4	00	
Totals	818	9	1	0	27	818	9	1	0	27		

3 Total, prove, and rule column totals

# Recording Adjusting Entries for Supplies


LO2

- Four questions are asked to analyze the adjustments for supplies.
  1. What are the balances of the accounts being adjusted?
  2. What should the balances be for these accounts?
  3. What must be done to correct the account balances?
  4. What adjusting entries are made?


# Recording Adjusting Entries for Supplies

LO2


## Supplies Expense—Office

Adj.		3,938.17	
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## Supplies—Office

Dec. 31 Bal.	4,548.17	Adj.		3,938.17
(New Bal.	610.00)			

## Supplies Expense—Store

Adj.		4,584.61	
------	---	----------	--

## Supplies—Store

Dec. 31 Bal.	5,049.61	Adj.		4,584.61
(New Bal.	465.00)			

# Recording Adjusting Entries for Supplies

LO2

ThreeGreen Products, Inc.			
Unadjusted Trial Balance			
December 31, 20--			
ACCOUNT TITLE	DEBIT		CREDIT
Merchandise Inventory	108	486	44
Supplies—Office	45	48	17
Supplies—Store	50	49	61
Prepaid Insurance	11	00	00

1 Debit Supplies Expense—Office

3 Debit Supplies Expense—Store

GENERAL JOURNAL					
PAGE 15					
DATE	ACCOUNT TITLE	DOC. NO.	POST. REF.	DEBIT	CREDIT
31	Supplies Expense—Office			393	817
	Supplies—Office				393
31	Supplies Expense—Store			458	461
	Supplies—Store				458


2 Credit Supplies—Office

4 Credit Supplies—Store


# Recording an Adjusting Entry for Prepaid Insurance

LO2

Insurance Expense

Adj.		8,200.00
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Prepaid Insurance

Dec. 31 Bal.	11,000.00	Adj.		8,200.00
(New Bal.)	2,800.00			

<i>ThreeGreen Products, Inc.</i>				
<i>Unadjusted Trial Balance</i>				
<i>December 31, 20--</i>				
ACCOUNT TITLE	DEBIT	CREDIT		
<i>Supplies—Store</i>	5 0 4 9 61			
<i>Prepaid Insurance</i>	11 0 0 0 00			
<i>Notes Receivable</i>	6 2 0 0 00			

**1** Debit Insurance Expense

GENERAL JOURNAL													PAGE 15						
DATE		ACCOUNT TITLE					DOC. NO.	POST. REF.	DEBIT			CREDIT							
10	31	Insurance Expense							8	2	0	0	00			10			
11		Prepaid Insurance												8	2	0	0	00	11

**2** Credit Prepaid Insurance



## Lesson 15-1 Audit Your Understanding

1. Which adjusting entry is unique to a corporation?

### ANSWER

Federal income tax expense

## Lesson 15-1 Audit Your Understanding

**2.** What four questions are used to analyze the adjustment of an account?

### ANSWER

1. What is the balance of the account being adjusted?
2. What should the balance be for this account?
3. What must be done to correct the account balance?
4. What adjustment is made?

## Lesson 15-1 Audit Your Understanding

- 3.** Which accounts are used for the adjustment to office supplies?

**ANSWER**

Supplies Expense—Office

Supplies—Office

## Lesson 15-1 Audit Your Understanding

4. Which accounts are used for the adjustment to prepaid insurance?

### ANSWER

Insurance Expense

Prepaid Insurance

LESSON

# **15-2** Adjusting Merchandise Inventory and Interest Receivable



## Learning Objectives

**LO3** Adjust merchandise inventory.

**LO4** Adjust interest receivable.

# Recording an Adjusting Entry for Merchandise Inventory

LO3

- The amount of inventory on hand at the beginning of a fiscal period is called **beginning inventory**.
- During the period, merchandise is purchased and merchandise is sold.
- To determine how much merchandise remains in inventory at the end of the period, a physical inventory is conducted.
- The actual count of merchandise at the end of a fiscal period is called **ending inventory**.

# Recording an Adjusting Entry for Merchandise Inventory

LO3

## Merchandise Inventory

Dec. 31 Bal.	108,486.44	Adj.	↓	5,648.44
(New Bal.	102,838.00)			

## Income Summary

Adj.	5,648.44
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ThreeGreen Products, Inc.											
Unadjusted Trial Balance											
December 31, 20--											
ACCOUNT TITLE						DEBIT			CREDIT		
Allowance for Uncollectible Accounts									1	2	5
Merchandise Inventory						108	4	8	6	44	
Supplies—Office						4	5	4	8	17	

1

Debit Income Summary

GENERAL JOURNAL															PAGE 15			
DATE		ACCOUNT TITLE				DOC. NO.	POST. REF.	DEBIT				CREDIT						
4	31	Income Summary						5	6	4	8	44					4	
5		Merchandise Inventory											5	6	4	8	44	5

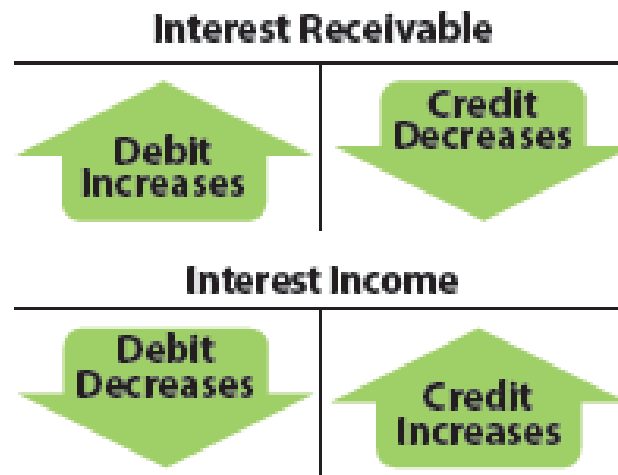
2

Credit Merchandise Inventory

# Journalizing the Adjusting Entry for Interest Receivable

LO3

- Interest earned but not yet received is called **accrued interest income**.







# Journalizing the Adjusting Entry for Interest Receivable

LO3

Interest Expense

Adj.		93.00	
<hr/>			
			Interest Income
			<hr/>
		Dec. 31 Bal.	 464.00
		New Bal.	93.00
		(New Bal.	557.00)

ThreeGreen Products, Inc.			
Unadjusted Trial Balance			
December 31, 20--			
<hr/>			
ACCOUNT TITLE	DEBIT	CREDIT	
Prepaid Insurance	11 0 0 0 00		
Notes Receivable	6 2 0 0 00		
Interest Receivable			
Office Equipment	24 8 9 5 18		

**1** Debit Interest Receivable

GENERAL JOURNAL						
PAGE 15						
DATE	ACCOUNT TITLE	DOC. NO.	POST. REF.	DEBIT	CREDIT	
12 31	Interest Receivable			9 3 00		12
13	Interest Income				9 3 00	13

**2** Credit Interest Income

## Lesson 15-2 Audit Your Understanding

1. How is the amount of merchandise inventory on hand at the end of the fiscal year determined?

### ANSWER

A physical inventory is conducted.

## Lesson 15-2 Audit Your Understanding

2. What adjusting entry is recorded when the ending merchandise inventory is greater than the beginning value?

### ANSWER

Debit Merchandise Inventory  
Credit Income Summary

## Lesson 15-2 Audit Your Understanding

**3.** How often is revenue earned on an outstanding note receivable?

**ANSWER**

Daily

## Lesson 15-2 Audit Your Understanding

4. What types of accounts are increased by recording an adjusting entry for accrued revenue?

### ANSWER

The adjusting entry for accrued revenue increases a revenue account (a credit) and increases a receivable account (a debit).

LESSON

# 15-3 Adjusting Accumulated Depreciation



## Learning Objectives

- LO5** Calculate depreciation expense using the straight-line method.
- LO6** Adjust accumulated depreciation.

# Categories of Assets

LO5

- Most businesses use several broad categories of assets in their operations.
- Cash and other assets expected to be exchanged for cash or consumed within a year are called **current assets**.
- Physical assets that will be used for a number of years in the operation of a business are called **plant assets**.

# Depreciating Plant Assets

LO5

- A loss in the usefulness of a plant asset as a result of wear or obsolescence is called **depreciation**.
- To match revenue with the expenses used to earn the revenue, the cost of a plant asset must be expensed over the asset's useful life.
- The portion of a plant asset's cost that is transferred to an expense account in each fiscal period during that asset's useful life is called **depreciation expense**.



# Depreciating Plant Assets

LO5

- Three factors are considered in calculating the annual amount of depreciation expense for a plant asset:
  - Original cost
  - Salvage value
  - Useful life

# Depreciating Plant Assets— Original Cost

LO5

- The original cost of a plant asset includes all costs paid to make the asset usable to a business.
- These costs include the price of the asset plus delivery and any necessary installation costs.

# Depreciating Plant Assets— Salvage Value

LO5

- An estimate of the amount that will be received for an asset at the time of its disposal is called its **salvage value**.
  - Salvage value may also be referred to as *residual value* or *scrap value*.
- Since salvage value cannot be known when the asset is bought, it must be estimated.

# Depreciating Plant Assets— Useful Life

LO5

- The period of time over which an asset contributes to the earnings of a business is called its **useful life**.
- The total amount of depreciation expense is distributed over the estimated useful life of a plant asset.
- Two factors affect the useful life of a plant asset:
  - Physical depreciation
  - Functional depreciation

# Straight-line Depreciation

LO5

- Recording an equal amount of depreciation expense for a plant asset in each year of its useful life is called the **straight-line method of depreciation**.

		<b>Estimated Salvage</b>		<b>Estimated Total</b>
<b>Original Cost</b>	–	<b>Value</b>	=	<b>Depreciation</b>
\$2,500.00	–	\$500.00	=	<b>Expense</b>
				\$2,000.00

<b>Estimated Total</b>		<b>Years of</b>		<b>Annual</b>
<b>Depreciation</b>		<b>Estimated Useful</b>		<b>Depreciation</b>
<b>Expense</b>	÷	<b>Life</b>	=	<b>Expense</b>
\$2,000.00	÷	5	=	\$400.00

# Accumulated Depreciation

LO6

- The total amount of depreciation expense that has been recorded since the purchase of a plant asset is called **accumulated depreciation**.

20X2		20X3		20X3
Accumulated Depreciation	+	Depreciation Expense	=	Accumulated Depreciation
\$800.00	+	\$400.00	=	\$1,200.00

# Book Value

LO6

- The original cost of a plant asset minus accumulated depreciation is called the **book value** of a plant asset.

		20X3		
Original Cost	–	Accumulated Depreciation	=	Ending 20X3 Book Value
\$2,500.00	–	\$1,200.00	=	\$1,300.00

# Journalizing the Adjusting Entry for Accumulated Depreciation

LO6


## Office Equipment

Dec. 31 Bal. 24,895.18	
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### Depreciation Expense—Office Equipment

Adj.  7,485.00	
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### Accumulated Depreciation—Office Equipment

Dec. 31 Bal.  6,189.00
Adj. 7,485.00
(New Bal. 13,674.00)

## Store Equipment

Dec. 31 Bal. 59,148.11	
------------------------	--

### Depreciation Expense—Store Equipment

Adj.  9,830.00	
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### Accumulated Depreciation—Store Equipment

Dec. 31 Bal.  8,495.00
Adj. 9,830.00
(New Bal. 18,325.00)



# Journalizing the Adjusting Entry for Accumulated Depreciation

LO6

ThreeGreen Products, Inc.											
Unadjusted Trial Balance											
December 31, 20--											
ACCOUNT TITLE						DEBIT			CREDIT		
Office Equipment						24	8	9	5	18	
Accumulated Depreciation—Office Equipment									6	1	8
Store Equipment						59	1	4	8	11	
Accumulated Depreciation—Store Equipment									8	4	9

GENERAL JOURNAL											
										PAGE 15	
DATE		ACCOUNT TITLE				DOC. NO.	POST. REF.	DEBIT			CREDIT
14	31	Depreciation Expense—Office Equip.						7	4	8	5
15		Accumulated Depreciation—Office Equip.									7
16	31	Depreciation Expense—Store Equip.						9	8	3	0
17		Accum. Depreciation—Store Equip.									9

**1** Debit Depreciation Expense—Office Equipment and credit Accumulated Depreciation—Office Equipment

**2** Debit Depreciation Expense—Store Equipment and credit Accumulated Depreciation—Store Equipment

## Lesson 15-3 Audit Your Understanding

1. What are two categories of assets?

### ANSWER

Current assets

Plant assets

## Lesson 15-3 Audit Your Understanding

2. What three factors are used to calculate a plant asset's annual depreciation expense?

### ANSWER

Original cost, salvage value, and useful life

## Lesson 15-3 Audit Your Understanding

**3.** What plant asset account does not have a contra account for accumulated depreciation?

**ANSWER**

Land

## Lesson 15-3 Audit Your Understanding

4. How does an adjusting entry for accumulated depreciation affect the related plant asset account?

**ANSWER**

No change

LESSON

# **15-4** Calculating Federal Income Tax



## Learning Objectives

- LO7** Post adjusting entries.
- LO8** Adjust federal income tax payable.
- LO9** Prepare an adjusted trial balance.

# Adjusting Entries

LO7

GENERAL JOURNAL													PAGE 15		
	DATE		ACCOUNT TITLE	DOC. NO.	POST. REF.	DEBIT				CREDIT					
1			<i>Adjusting Entries</i>												
2	Dec.	31	<i>Uncollectible Accounts Expense</i>			2	3	8	4	10					
3			<i>Allowance for Uncollectible Accounts</i>								2	3	8	4	10
4		31	<i>Income Summary</i>			5	6	4	8	44					
5			<i>Merchandise Inventory</i>								5	6	4	8	44
6		31	<i>Supplies Expense—Office</i>			3	9	3	8	17					
7			<i>Supplies—Office</i>								3	9	3	8	17
8		31	<i>Supplies Expense—Store</i>			4	5	8	4	61					
9			<i>Supplies—Store</i>								4	5	8	4	61
10		31	<i>Insurance Expense</i>			8	2	0	0	00					
11			<i>Prepaid Insurance</i>								8	2	0	0	00
12		31	<i>Interest Receivable</i>				9	3	00						
13			<i>Interest Income</i>									9	3	00	
14		31	<i>Depreciation Expense—Office Equip.</i>			7	4	8	5	00					
15			<i>Accum. Depreciation—Office Equip.</i>								7	4	8	5	00
16		31	<i>Depreciation Expense—Store Equip.</i>			9	8	3	0	00					
17			<i>Accum. Depreciation—Store Equip.</i>								9	8	3	0	00
18															



# Posting Adjusting Entries

LO7

GENERAL JOURNAL										PAGE 15
DATE	ACCOUNT TITLE	DOC. NO.	POST. REF.	DEBIT	CREDIT					
	<i>Adjusting Entries</i>									
Dec. 31	Uncollectible Accounts Expense		6165	2 3 8 4 10						
	Allowance for Uncollectible Accounts		1135		2 3 8 4 10					
31	Income Summary		3150	5 6 4 8 44						
	Merchandise Inventory		1140		5 6 4 8 44					
31	Supplies Expense—Office		6155	3 9 3 8 17						
	Supplies—Office		1145		3 9 3 8 17					
31	Supplies Expense—Store		6160	4 5 8 4 61						
	Supplies—Store		1150		4 5 8 4 61					

Post the debit

1

Post the credit

2

3

Enter general ledger account numbers in general journal

ACCOUNT <i>Allowance for Uncollectible Accounts</i>					ACCOUNT NO. 1135				
DATE	ITEM	POST. REF.	DEBIT	CREDIT	BALANCE		DEBIT	CREDIT	
Dec. 31	Balance	✓						1 2 5 15	
31		G15		2 3 8 4 10				2 5 0 9 25	

ACCOUNT <i>Uncollectible Accounts Expense</i>					ACCOUNT NO. 6165				
DATE	ITEM	POST. REF.	DEBIT	CREDIT	BALANCE		DEBIT	CREDIT	
Dec. 31		G15	2 3 8 4 10				2 3 8 4 10		

3



# Calculating Income Before Federal Income Taxes

LO8

- A trial balance prepared after adjusting entries are posted is called an **adjusted trial balance**.

# Calculating Income Before Federal Income Taxes

LO8

ThreeGreen Products, Inc.  
Adjusted Trial Balance  
December 31, 20--

ACCOUNT TITLE	DEBIT	CREDIT
Cash	54 194 34	
Petty Cash	2 50 00	
Accounts Receivable	20 381 81	
Income Summary	5 648 44	
Sales		632 371 75
Sales Discount	1 648 19	
Sales Returns and Allowances	3 941 57	
Purchases	254 851 26	
Purchases Discount		9 221 14
Purchases Returns and Allowances		14 950 01
Advertising Expense	4 680 00	
Credit Card Fee Expense	6 842 20	
Depreciation Expense—Office Equipment	7 485 00	
Depreciation Expense—Store Equipment	9 830 00	
Insurance Expense	8 200 00	
Miscellaneous Expense	3 495 04	
Payroll Taxes Expense	16 697 98	
Rent Expense	8 400 00	
Salary Expense	184 234 95	
Supplies Expense—Office	3 938 17	
Supplies Expense—Store	4 584 61	
Uncollectible Accounts Expense	2 384 10	
Utilities Expense	4 965 42	
Federal Income Tax Expense		
Interest Income		5 570 00

1. Enter the account titles of all general ledger accounts.
2. Enter the account balances of all accounts except Federal Income Tax Expense.
3. Calculate the total account balances of income statement credit accounts. Include the account balance of Income Summary if the account has a credit balance.
4. Calculate the total account balances of income statement debit accounts, excluding the balance of Federal Income Tax Expense. Include the account balance of Income Summary if the account has a debit balance.
5. Subtract the total of debits from the total of credits to calculate net income before federal income taxes.

$$\begin{array}{rcl}
 \text{\textcircled{3}} & & \text{\textcircled{4}} \\
 \$635,345.90 & - & \$531,826.93 = \$103,518.97 \\
 \text{\textcircled{5}} & & 
 \end{array}$$

# Calculating Federal Income Tax

LO8

- Different tax rates are applied to different levels of net income.
- Each tax rate and taxable income amount on one line of a tax table is called a **tax bracket**.
- The tax rate associated with a tax bracket is called a **marginal tax rate**.

# Calculating Federal Income Tax

LO8

*Tax Rate Schedule*

If taxable income (line 30, Form 1120, or line 26, Form 1120-A) is:			
Over—	But not over—	Tax is:	Of the amount over—
\$0	50,000	15%	-0-
50,000	75,000	\$7,500 + 25%	\$50,000
75,000	100,000	13,750 + 34%	75,000
100,000	335,000	22,250 + 39%	100,000
335,000	10,000,000	113,900 + 34%	335,000
10,000,000	15,000,000	3,400,000 + 35%	10,000,000
15,000,000	18,333,333	5,150,000 + 38%	15,000,000
18,333,333	—	35%	-0-

Income  
Subject to  
Marginal Tax  
Rate

×

Marginal Tax  
Rate

=

Marginal Income  
Tax

518.97

×

39%

=

\$1,372.40

Bracket  
Minimum  
Income Tax

+

Marginal Income  
Tax

=

Federal Income  
Tax

\$22,250.00

+

\$1,372.40


=

\$22,622.40

# Journalizing the Adjusting Entry for Federal Income Tax Payable

LO8

## Federal Income Tax Expense

4/15	5,000.00
6/15	5,000.00
9/15	5,000.00
12/15	5,000.00
12/31 Adj. 	3,622.40
(Adj. Bal.	23,622.40)

## Federal Income Tax Payable

12/31 Adj. 	3,622.40
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# Journalizing the Adjusting Entry for Federal Income Tax Payable

Enter general ledger account numbers in the general journal

LO8

1 Debit Federal Income Tax Expense

GENERAL JOURNAL									
PAGE 15									
DATE	ACCOUNT TITLE				DOC. NO.	POST. REF.	DEBIT		
18	31	Federal Income Tax Expense				6205	3	6	2 2 40
19		Federal Income Tax Payable				2170		3	6 2 2 40

2 Credit Federal Income Tax Payable

Post the debit to the general ledger

3 Post the credit to the general ledger

ACCOUNT Federal Income Tax Payable									
ACCOUNT NO. 2170									
DATE	ITEM	POST. REF.	DEBIT			CREDIT			BALANCE
									DEBIT
Dec. 31		G15				3	6	2 2 40	3 6 2 2 40

ACCOUNT Federal Income Tax Expense									
ACCOUNT NO. 6205									
DATE	ITEM	POST. REF.	DEBIT			CREDIT			BALANCE
									DEBIT
Dec. 31	Balance	✓							20 0 0 0 00
31		G15	3	6	2 2 40				23 6 2 2 40

# Completing an Adjusted Trial Balance

LO9

ThreeGreen Products, Inc. Adjusted Trial Balance December 31, 20--				
ACCOUNT TITLE	DEBIT		CREDIT	
Cash	54	194.34		
Petty Cash	2	50.00		
Unemployment Tax Payable—State			1	47.42
Federal Income Tax Payable			3	622.40
Dividends Payable			3	750.00
Capital Stock			75	000.00
Retained Earnings			65	218.84
Dividends	15	000.00		
Income Summary	5	648.44		
Sales			632	371.75
Sales Discount	1	648.19		
Sales Returns and Allowances	3	941.57		
Purchases	254	851.26		
Purchases Discount			9	22.14
Purchases Returns and Allowances			1	495.01
Advertising Expense	4	680.00		
Credit Card Fee Expense	6	842.20		
Depreciation Expense—Office Equipment	7	485.00		
Depreciation Expense—Store Equipment	9	830.00		
Insurance Expense	8	200.00		
Miscellaneous Expense	3	495.04		
Payroll Taxes Expense	16	697.98		
Rent Expense	8	400.00		
Salary Expense	184	234.95		
Supplies Expense—Office	3	938.17		
Supplies Expense—Store	4	584.61		
Uncollectible Accounts Expense	2	384.10		
Utilities Expense	4	965.42		
Federal Income Tax Expense	23	622.40		
Interest Income			5	57.00
<b>Totals</b>	<b>842</b>	<b>324.77</b>	<b>842</b>	<b>324.77</b>

1 Enter the adjusted balance of Federal Income Tax Payable

2 Update balance of Federal Income Tax Expense

3 Total, prove, and rule the trial balance

## Lesson 15-4 Audit Your Understanding

1. How does the trial balance serve as a check list for preparing adjusting entries?

### ANSWER

A business can examine each account to determine if the account needs adjustment.



## Lesson 15-4 Audit Your Understanding

**2.** In what order can the adjusting entries be journalized?

### **ANSWER**

By the order the accounts appear in the trial balance, beginning with assets or revenue

## Lesson 15-4 Audit Your Understanding

- 3.** Which accounts are totaled to determine net income before federal income taxes?

### ANSWER

All income statement debit accounts, excluding federal income tax expense, and all income statement credit accounts

## Lesson 15-4 Audit Your Understanding

4. What is the bracket minimum tax and marginal tax rate of the 25% tax bracket?

### ANSWER

Bracket minimum tax, \$7,500.00

Marginal tax rate, 25%