

SOLUTIONS**Learning Goal 9****Multiple Choice**

1. b
2. c \$500 cash received comes from a revenue recorded in a prior period—June.
3. b Because cash is paid for a future expense.
4. a Because this is a payment for a previously accrued expense. (b involves unearned revenue; c involves supplies which are really an expense that is prepaid; d involves unearned revenue)
5. d
6. c
7. b
8. d
9. b If you have difficulty, try a simple example using the accounting equation: Assume assets are \$10, liabilities are \$3, and owner's equity is \$7. Now assume the amount of the adjustment is \$1.
 Before adjustment: A \$10 = L \$3 + OE \$7
 Then, the adjustment: A \$10 = L \$2 ↓ + OE \$8 (↑ revenue)
 You can see that if you failed to make the adjustment, liabilities would be higher at \$3, and owner's equity would be lower at \$7 because of less revenue. You can use this method for the next four questions as well.
10. a
11. d
12. c
13. d
14. a Unadjusted net income is \$8,000. Then subtract: \$4,700 insurance expense + \$2,000 insurance expense + \$3,500 rent expense.
15. a
16. b
17. a
18. b
19. c
20. b
21. a
22. d Adjusting entries are never done in cash basis accounting because adjusting entries only recognize noncash revenues and noncash expenses. Cash basis accounting, therefore, would never record adjustments.
23. d
24. c

Discussion Questions and Brief Exercises

1. The two important principles are the revenue recognition principle and the matching principle. The revenue recognition principle requires that revenues be recorded in the period in which they were earned. The matching principle requires that expenses be matched against (meaning “subtracted from”) the revenues they helped to create. The matching is done by direct tracing or by identifying the period(s) in which benefits were received from the expense item. Adjusting entries record revenue and expense items that had not yet been recorded into the correct accounting periods.
2. Adjusting entries are recorded at the end of period after all transactions are completed for the period. Therefore, any event during the period that creates the need for an adjusting entry can be identified. In this way, as discussed in #1 above, all the revenues and expenses are recorded into the correct periods.

SOLUTIONS**Learning Goal 9, continued**

3. An unearned revenue adjustment will be needed. Unearned revenue is debited, and a revenue is credited.
4. A prepaid expense adjustment will be needed. An expense is debited, and short-term asset is credited.
5. A depreciation expense adjustment will be needed. Depreciation expense is debited, and accumulated depreciation is credited.
6. An accrued revenue adjustment will be needed. A receivable is debited, and a revenue is credited.
7. An accrued expense adjustment will be needed. An expense is debited, and a liability is credited.
8. The purpose of a Depreciation Expense account is to record the estimated amount of plant and equipment cost that has been used up and has become an expense. Depreciation Expense has a normal debit balance. It appears on the income statement as an operating expense.

The purpose of an Accumulated Depreciation account is to record the cumulative amount of depreciation that has been calculated for a plant and equipment asset. Accumulated depreciation a contra-asset account, which means that it acts as an offset to the balance in a plant and equipment asset account. An accumulated depreciation account has a normal credit balance. The amount of accumulated depreciation appears on the balance sheet as a subtraction from its related plant and equipment asset. An example of a common balance sheet format is:

Equipment	\$100,000
Less: Accumulated depreciation	<u>22,000</u>
	78,000

9. The total wages expense is $\$29,000 + \$3,500 = \$32,500$. To show a wages payable liability of $\$3,500$, wages expense of the same amount is also recorded.
10. Consulting Expense 10,000
 Accounts Payable 10,000
11. Accounts Receivable 10,000
 Consulting Revenue 10,000
12. The equality of the totals on a trial balance only means that debits equal credits; in other words, the accounting equation is in balance. Although this is important, it does not mean that all the individual account balances are correct. Adjusting entries may still be needed to correctly record revenues and expenses.
13. Accounts Payable 1,000
 Repairs Expense 2,800
 Cash 3,800
14. Net income would be understated by \$200 in the current period and overstated by \$200 in the next period when cash is received for the revenue and paid for the expense.
15. Adjusting entries involve revenues and expenses. Revenues and expenses always affect both the income statement and the balance sheet. Mary is correct.
16. Yes. One month of interest expense is owing and unpaid since the last payment on December 1. A December 31 entry that debits Interest Expense and credits Interest Payable is required.
17. This is incorrect. For accounting and financial purposes the word “depreciation” does not refer to loss of value. It means the process of allocating the cost of a plant and equipment asset into expense, as the asset provides benefits during its estimated useful life. This is unrelated to whatever the asset might sell for.
18. a. credit Accumulated Depreciation
 b. debit Office Supplies Expense
 c. debit Accounts Receivable or debit Unearned Revenue
 d. credit Rent Payable or credit Prepaid Rent
 e. credit a revenue

SOLUTIONS**Learning Goal 9, continued****Reinforcement Problems****LG 9-1.**

Situation	Adjusting for what?	Adjusting entry at end of period
a. On May 1, Holyoke Company paid \$12,000 for a three-year insurance policy. Holyoke Company has a June 30 year end.	prepaid expense	Dr. Insurance Expense Cr. Prepaid Insurance
b. In November, Middlesex Company earned one-fourth of the amount that had been advanced by a customer in September.	unearned revenue	Dr. Unearned Revenue Cr. Revenue
c. An inventory count shows \$520 of office supplies on hand at year end. The beginning balance was \$1,000.	prepaid expense	Dr. Supplies Expense Cr. Supplies
d. Cape Cod Enterprises performed \$7,000 of services for customers during December that remained unrecognized at year end.	accrued revenue	Dr. Accounts Receivable Cr. Revenue
e. Burdett Enterprises shows \$15,000 of Office Equipment and \$105,000 of Automotive Equipment on the balance sheet.	depreciation expense	Dr. Depreciation Expense Cr. Accumulated Depreciation
f. This year, Massasoit Company paid for 18 months of magazine subscriptions, and at year end seven months' worth is still in force.	prepaid expense	Dr. Subscription Expense Cr. Prepaid Subscriptions
g. Kinyon Company records show utility expenses unrecorded and unpaid of \$350.	accrued expense	Dr. Utility Expense Cr. Accounts Payable
h. Campbell Corporation paid a utility bill that was owing in the amount of \$240.	Not an adjusting entry. This is a payment of a previously accrued expense.	
i. In June, Springfield Company completed negotiations, signed a contract, and received \$25,000 in advance. By year end, the company had performed \$5,500 of services on the contract.	unearned revenue	Dr. Unearned Revenue Cr. Revenue
j. North Shore Inc. has a six-day workweek and pays employees weekly, each Saturday. June 30, year end, is on a Tuesday.	accrued expense	Dr. Wages Expense Cr. Wages Payable
k. Bristol Enterprises signed a contract to perform \$30,000 of future services.	No entry required. Just signing a contract does not affect the accounting equation.	
l. The Supplies account of Northern Essex Enterprises shows a beginning balance of \$700 and purchases of \$1,200. The ending inventory shows \$150 still unused.	prepaid expense	Dr. Supplies Expense Cr. Supplies
m. Three Rivers Corporation received a \$50,000 advance from a customer for 2,500 switching devices, all at the same fixed price. By year end, 520 of the switches had been shipped.	unearned revenue	Dr. Unearned Revenue Cr. Revenue

SOLUTIONS**Learning Goal 9, continued****LG 9-1, continued**

Situation	Adjusting for what?	Adjusting entry at end of period
n. In April, Manchester Company made an \$8,500 deposit with a security services company. At year end on September 30, there were \$7,200 of charges against the deposit.	prepaid expense	Dr. Security Expense Cr. Prepaid Security Service
o. The trial balance of Hartford and Hartford Partnership shows a note payable of \$10,000. Principle and interest is not payable until next year.	accrued expense	Dr. Interest Expense Cr. Interest Payable
p. The trial balance of Mitchell Company shows Unearned Fees of \$11,000. Fees still unearned at the end of the period are \$2,200.	unearned revenue	Dr. Unearned Revenue Cr. Revenue
q. In April, Naugatuck Services, Inc., received an advance from a client for 10 months' services at a monthly fee of \$1,000. The date of the trial balance is December 31.	unearned revenue	Dr. Unearned Revenue Cr. Revenue
r. At year end, a tenant of the Bridgeport Company owes two months of unpaid rent, which has not been recorded.	accrued revenue	Dr. Accounts Receivable Cr. Revenue
s. In September, Housatonic Company prepaid for 500 hours of computer maintenance services. At December 31, year end, 390 hours would be used in the following year.	prepaid expense	Dr. Maintenance Expense Cr. Prepaid Maintenance
t. Northaven Company has \$1,500 of advertising expense incurred but unpaid at year end.	accrued expense	Dr. Advertising Expense Cr. Accounts Payable
u. Waterbury Company has \$440 of earned but uncollected service revenue at year end.	accrued revenue	Dr. Accounts Receivable Cr. Revenue
v. The trial balance of Boston Company shows a balance of \$1,800 in Prepaid Insurance.	prepaid expense	Dr. Insurance Expense Cr. Prepaid Insurance
w. The Norwich Company makes semiannual insurance payments. At year end, the Prepaid Insurance account shows debits of: beginning bal. of \$900, and March 1 and Sept. 1, \$1,800 each.	prepaid expense	Dr. Insurance Expense Cr. Prepaid Insurance
x. A corporation calculates at year end that it owes \$100,000 of income tax.	accrued expense	Dr. Income Tax Expense Cr. Income Tax Payable

SOLUTIONS

Learning Goal 9, continued

LG 9-2.

Journal Entry Item			What kind of adjustment is it?	What is the adjustment recording?
a. Utilities Expense	Dr.	Cr.	accrued expense	a utilities expense that is unpaid
820				
Accounts Payable		820		
b. Accounts Receivable	Dr.	Cr.	accrued revenue	revenue that is earned but not yet paid by the customer
1,100				
Fees Earned		1,100		
c. Unearned Revenue	Dr.	Cr.	unearned revenue	revenue for which cash was received in advance and recorded as a liability
200				
Subscriptions Revenue		200		
d. Depreciation Expense	Dr.	Cr.	depreciation expense	the using up of plant and equipment assets
2,500				
Accumulated Depreciation—Truck		2,500		
e. Cash	Dr.	Cr.	Not an adjustment (Clue: adjusting entries never involve the cash account.) This is a receipt of cash for a <i>previously accrued</i> revenue.	
1,100				
Accounts Receivable		1,100		
f. Rent Expense	Dr.	Cr.	prepaid expense	rent expense that was paid in advance and recorded as an asset
500				
Prepaid Rent		500		
g. Rent Expense	Dr.	Cr.	accrued expense	rent expense that is unpaid
500				
Rent Payable		500		
h. Accounts Receivable	Dr.	Cr.	accrued revenue	revenue that is earned but not yet paid by the customer
950				
Service Revenue		950		
i. Unearned Revenue	Dr.	Cr.	unearned revenue	revenue for which cash was received in advance and recorded as a liability
950				
Service Revenue		950		
j. Supplies Expense	Dr.	Cr.	prepaid expense	supplies expense that was paid in advance and recorded as an asset (supplies)
200				
Supplies		200		
k. Supplies	Dr.	Cr.	Not an adjusting entry. No unrecorded revenue or expense. This entry is a purchase of supplies on account.	
200				
Accounts Payable		200		
l. Advertising Expense	Dr.	Cr.	accrued expense	advertising expense that is unpaid
3,000				
Accounts Payable		3,000		
m. Wages Expense	Dr.	Cr.	accrued expense	wages expense that is unpaid
10,000				
Wages Payable		10,000		

SOLUTIONS

Learning Goal 9, continued

LG 9-2, continued

Journal Entry Item			What kind of adjustment is it?	What is the adjustment recording?
n. Insurance Expense	Dr.	Cr.	prepaid expense	insurance expense that was paid in advance and recorded as an asset (prepare insurance.)
Prepaid Insurance	700	700		
o. Unearned Sales Revenue	Dr.	Cr.	unearned revenue	revenue for which cash was received in advance and recorded as a liability
Sales Revenue	2,000	2,000		

LG 9-3.

- a. \$3,260. The formula that calculates the balance of any account is:

$$\text{Beginning Balance} + \text{Increases} - \text{Decreases} = \text{Ending Balance}$$

The supplies used are decreases in the Supplies account.

So in this case: $150 + 3,530 - x = 420$. So, $x = 3,260$.

You could also visualize the Supplies account to help you solve the problem:

Supplies	
Bal.	150
	3,530
Bal.	<u>420</u>

- b. Other asset accounts analysis:

Item	Prepaid Insurance	Prepaid Rent	Prepaid Travel	Prepaid Subscriptions
Beginning balance	\$1,000	\$3,750	\$5,000	\$300
Payments/purchases made	\$5,050	\$ 850	\$3,000	\$550
Expense for the period	\$5,350	\$4,100	\$3,250	\$750
Ending balance	\$ 700	\$ 500	\$4,750	\$100

- c. \$13,250 d. \$110,100

LG 9-4. See table on page 165 of the book for the solution.

SOLUTIONS**Learning Goal 9, continued****LG 9-5.**

Date	Account Titles and Explanation	Post. Ref.	Debit	Credit
Dec.	(a)			
31	Insurance Expense		3,333	
	Prepaid Insurance			3,333
	To record 10 months of insurance expense			
	(b)			
31	Office Supplies Expense		1,525	
	Office Supplies			1,525
	To record office supplies used			
	(c)			
31	Tennis Supplies Expense		1,200	
	Tennis Supplies			1,200
	To record tennis supplies used			
	(d)			
31	Depreciation Expense—Equipment		2,700	
	Accumulated Depreciation—Equipment			2,700
	To record one-half year of depreciation			
	(e)			
31	Wages Expense		600	
	Wages Payable			600
	To record three days of accrued wages at \$200 per day			
	(f)			
31	Interest Receivable		500	
	Interest Earned			500
	To record interest unearned but not yet received or recorded			
	(g)			
31	Unearned Revenue		1,200	
	Tennis School Revenue			1,200
	To record two months of revenue earned			

SOLUTIONS

Learning Goal 9, continued

LG 9-6.

Date	Account Titles and Explanation	Post. Ref.	Debit	Credit
June	(a)			
30	Accounts Receivable		4,500	
	Consulting Fees Revenue			4,500
	To accrue revenue from Megawatt Industries			
	(b)			
30	Supplies		150	
	Supplies Expense			150
	To adjust overstated liability expense			
	(c)			
30	Utilities Expense		900	
	Accounts Payable			900
	To accrue utilities expense			
	(d)			
30	Insurance Expense		1,900	
	Prepaid Insurance			1,900
	To record usage of prepaid item			
	(e)			
30	Unearned Revenue		2,500	
	Research Revenue			2,500
	To record two months of revenue earned			
	(f)			
30	Depreciation Expense		5,000	
	Accumulated Depreciation			5,000
	To record current year depreciation			

Note on adjustment B: This is an unusual adjustment because *too much* supplies expense was recorded. The expense was overstated by \$150 because the actual supplies on hand were \$650, not \$500. The asset must be adjusted *up*, so this is the opposite of the usual entry.

SOLUTIONS**Learning Goal 9, continued****LG 9-6, continued**

2. Classification, valuation, and timing elements of each adjusting entry:

Item	Classification	Valuation	Timing
a	Accounts Receivable and Consulting Revenue both increase.	The amount to record is \$4,500.	The revenue was earned in the current year ending June 30, so it must be recorded in this period instead of recording it when the cash is received next period.
b	Supplies increases and Supplies Expense decreases.	The expense is overstated by \$150.	The correct amount of supplies expense must be matched against the current year's revenue for the year that ends on June 30.
c	Accounts Payable and Utilities Expense both increase.	The amount of service consumed was \$900.	The correct amount of utilities expense must be matched against the current year's revenue instead of being recorded when the expense is paid next period.
d	Prepaid Insurance decreases and Insurance Expense increases.	The amount of the asset consumed was \$1,900. \$500 remains to be consumed next year.	The correct insurance expense must be matched against the revenues in each of the periods that receive a benefit. These are the current year ending June 30 and the next period beginning July 1.
e	Unearned Revenue decreases and Research Revenue increases.	The amount of the liability earned was \$2,500. \$12,500 remains to be earned next year.	Some revenue was earned in the current year ending June 30. The revenue must be recorded as earned, instead of recording all the revenue when the cash was received.
f	Accumulated Depreciation and Depreciation Expense both increase.	Based on a straight-line depreciation calculation, \$5,000 of the asset cost is estimated to be used up.	The depreciation expense must be matched against the revenues in each of the years that receive a benefit during the estimated useful life of the asset.

LG 9-7.

- a. \$12,000 less the decrease in Prepaid Insurance = \$8,000
 b. \$12,000 less the increase in Insurance Payable = \$10,000

LG 9-8.

Date	Account Titles and Explanation	Post. Ref.	Debit	Credit
June	(a)			
30	Unearned Charter Revenue		18,870	
	Charter Service Revenue			18,870
	To record revenue earned (\$5,250 + \$13,620)			

SOLUTIONS**Learning Goal 9, continued****LG 9-8, continued**

Date	Account Titles and Explanation	Post. Ref.	Debit	Credit
June	(b)			
30	Depreciation Expense—Aircraft		48,000	
	Accumulated Depreciation—Aircraft			48,000
	To record one year of depreciation			
	(c)			
30	Wages Expense		840	
	Wages Payable			840
	To accrue two days unpaid wages at \$420 per day			
	(d)			
30	Insurance Expense		1,175	
	Prepaid Insurance			1,175
	To record prepaid insurance expired (R173 \$400 + JRX22 \$775)			
	(e)			
30	Equipment Rental Expense		4,400	
	Accounts Payable			4,400
	To record accrued rental charges			
	(f)			
30	Office Supplies Expense		650	
	Aircraft Supplies Expense		18,050	
	Office Supplies			650
	Aircraft Supplies			18,050
	To record use of supplies			

SOLUTIONS**Learning Goal 9, continued****LG 9-9.**

- a. $\$12,000 \times 2/36 = \667
 - b. The amount of the customer advance is missing. This should be dividend by 4.
 - c. The amount of purchases is missing. Assuming that all uses are recorded with a single adjustment at ear end, the calculation would be: $\$1,000 + \text{purchases} - \$520 = \text{amount used}$.
 - d. No calculation is required. The amount needed for the adjustment is given.
 - e. The years of estimated useful life for each asset is missing. Details of depreciation calculation method are in Learning Goals 6 and 28.
 - f. The amount paid is missing. The calculation for adjustment would be: $\$ \text{paid} \times 11/18 = \text{amount used}$. (Or, $\$ \text{paid}/18 \times 11$)
 - g. No calculation is required. The amount needed for the adjustment is given.
 - h. This does not involve an adjusting entry. It is the payment of a liability. Adjusting entries will always involve either a revenue or expense.
 - i. No calculation is required. The amount needed for the adjustment ($\$5,500$) is given.
 - j. The amount of the weekly wages is missing. The calculation for adjustment would be: $\$ \text{weekly wages} \times 2/6 = 2 \text{ days of wages expense}$.
 - k. This event does not require an adjusting entry. A contract has been signed, but no services have been performed yet, so no revenue has been earned.
 - l. Assuming that supplies expense for the period is recorded with a single adjustment: $\$700 + \$1,200 - \$150 = \$1,750$.
 - m. $\$50,000/2,500 = \20 per switch . $\$20 \times 520 = \$10,400$.
 - n. No calculation is required. The amount for security services expense ($\$7,200$) is given.
 - o. The amount of any interest expense incurred but not yet paid is missing. This should be accrued.
 - p. $\$11,000 - \$2,200 = \$8,800$.
 - q. $\$10,000 \times 9/10 = \$9,000$. (counting April)
 - r. The monthly rent amount is missing. The calculation for adjustment would be: $\$ \text{monthly} \times 2$
 - s. The amount of the prepayment is missing. The current expense calculation would be: $(\$ \text{paid}/500) \times 110$
 - t. No calculation is required. The amount of the expense is given.
 - u. No calculation is required. The amount of the revenue is given.
 - v. The amount of the prepayment and the periods prepaid are missing. The calculation for adjustment would be: $\$ \text{prepaid}/\text{periods prepaid} \times \text{periods used in current accounting period}$.
 - w. $\$900 + \$1,800 + (\$1,800 \times 4/6) = \$3,900$.
 - x. No calculation is required. The amount of the tax expense is given.
-