

SOLUTIONS**Learning Goal 20****Multiple Choice**

1. d
 2. c Note that this is a discount that reduces the invoice price, before the purchase discount is applied.
 3. a
 4. c
 5. a
 6. d
 7. c Calculation of cash payment: $\$7,000 \times .98 = \$6,860$. \$140 difference is the discount.
 8. a No shipping costs for buyer because they are paid by seller to the destination.
 9. b If you record a purchase at the net amount, all returns, allowances, etc., must also be at the net amount.
 10. a $\$161,850 - \$8,100 = \$153,750$.
 11. c
 12. d
 13. c $\$18/(\$18 + \$582) = .03$
 14. a $\$3,300/.97 = \$3,402.06$. Because the payment is within the discount period, it is considered to be “net of” the 3% discount; that is, the amount after subtracting the discount. Therefore, you must ask: “\$3,300 is 97% of what number? To check your answer, multiply \$3,402.06 times .97.
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SOLUTIONS

Learning Goal 20, continued

Reinforcement Problems

LG 20-1.

June 11	Purchases		15,000	
	Accounts Payable			15,000
12	Purchases		9,000	
	Freight-in		200	
	Accounts Payable			9,200
15	Accounts Payable		1,000	
	Purchase Returns and Allowances			1,000
15	Office Supplies		2,000	
	Accounts Payable			2,000
17	Purchases		5,000	
	Accounts Payable			5,000
20	Accounts Payable		14,000	
	Purchase Discounts			280
	Cash			13,720
	(\$14,000 × .98 = 13,720)			
22	Accounts Payable		9,200	
	Purchase Discounts			90
	Cash			9,110
	[(9,000 × .99) + \$200 = \$9,110]			
27	Accounts Payable		4,000	
	Purchase Discounts			80
	Cash			3,920
	(\$3,920/.98 = \$4,000 invoice amount)			
29	Freight-in		150	
	Cash			150

SOLUTIONS

Learning Goal 20, continued

LG 20-2.

a.

Date	Account	Ref.	Dr.	Cr.
Oct. 3	Purchases		11,000	
	Accounts Payable			11,000
5	Purchases		2,700	
	Accounts Payable			2,700
9	Purchases		6,500	
	Freight-in		220	
	Accounts Payable			6,720
10	Accounts Payable		2,000	
	Purchase Returns and Allowances			2,000
12	Purchases		15,000	
	Freight-in		125	
	Accounts Payable			15,000
	Cash			125
13	Accounts Payable		3,608	
	Purchase Discounts			108
	Cash			3,500
19	Accounts Payable		6,720	
	Purchase Discounts			65
	Cash			6,655
20	Purchases		10,000	
	Accounts Payable			10,000
22	Accounts Payable		7,500	
	Purchase Discounts			150
	Cash			7,350

SOLUTIONS

Learning Goal 20, continued

LG 20-2, continued

Date	Account	Ref.	Dr.	Cr.
Oct. 23	Accounts Payable		5,392	
	Cash			5,392
25	Purchases		12,500	
	Accounts Payable			12,500
29	Accounts Payable		10,000	
	Purchase Discounts			200
	Cash			9,800
	Freight-in		125	
	Cash			125
31	Accounts Payable		2,700	
	Cash			2,700

b.

Accounts Receivable	
11,000	
	2,000
	3,608
	5,392

LG 20-3.

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|---|--|
| a. $\$3,000 + \$125,400 = \$128,400$ | h. $\$114,850 - \$71,000 = \$43,850$ |
| b. $\$125,400 - \$50,160 = \$75,240$ | i. $\$320,500 - \$314,850 = \$5,650$ |
| c. $\$212,500 - \$201,600 = \$10,900$ | j. $\$314,850 - \$103,900 = \$210,950$ |
| d. $\$201,600 - \$128,700 = \$72,900$ | k. 40% |
| e. "f" must be calculated first:
$\$429,900 + \$7,500 = \$437,400$ | l. 36.2% |
| f. $\$99,200 + \$330,700 = \$429,900$ | m. 23.1% |
| g. $\$117,350 - \$2,500 = \$114,850$ | n. 38.2% |
| | o. 33% |

The most profitable company in dollars is the last company (\$103,900 of gross profit dollars). However, the most profitable company as a percentage of sales dollars retained is the first company with a 40% gross profit percentage.

SOLUTIONS

Learning Goal 20, continued

LG 20-4.

a.

Beginning inventory			\$4,000
Purchases		13,650	
Less:			
Purchase returns and allowances	1,450		
Purchase discounts	<u>250</u>	<u>1,700</u>	
Net purchases		11,950	
Add: Freight-in		<u>400</u>	
Cost of goods purchased			<u>12,350</u>
Cost of goods available for sale			16,350

b. The formula is: $BI + P - EI = C \text{ of GS}$ Solution: $4,000 + 12,350 - 3,750 = 12,600$

LG 20-5.

Sales			151,900
Less:			
Sales returns and allowances		10,500	
Sales discounts		<u>14,100</u>	<u>24,600</u>
Net Sales			127,300

Beginning inventory			\$49,630
Purchases		395,000	
Less:			
Purchase returns and allowances	9,050		
Purchase discounts	<u>45,300</u>	<u>54,350</u>	
Net purchases		340,650	
Add: Freight-in		<u>3,860</u>	
Cost of goods purchased			<u>344,570</u>
Cost of goods available for sale			394,140

SOLUTIONS

Learning Goal 20, continued

LG 20-6.

Buyer Company:

Date	Account	Post. Ref.	Dr.	Cr.
April 1	Purchases		15,000	
	Accounts Payable			15,000
3	Purchases		9,000	
	Freight-in		200	
	Accounts Payable			9,200
4	Accounts Payable		5,000	
	Purchase Returns and Allowances			5,000
5	Purchases		5,000	
	Accounts Payable			5,000
6	Equipment		3,675	
	Accounts Payable			3,675
11	Accounts Payable		10,000	
	Purchase Discounts			200
	Cash			9,800
13	Accounts Payable		9,200	
	Purchase Discounts			90
	Cash			9,110
15	Purchases		17,100	
	Accounts Payable			17,100
15	Accounts Payable		4,000	
	Purchase Discounts			80
	Cash			3,920
19	Supplies		525	
	Cash			525

SOLUTIONS**Learning Goal 20, continued****LG 20-6, continued**

Date	Account	Post. Ref.	Dr.	Cr.
April 20	Purchases		11,000	
	Accounts Payable			11,000
30	Accounts Payable		5,500	
	Purchase Discounts			110
	Cash			5,390
31	Accounts Payable		1,000	
	Cash			1,000

Seller Company:

Date	Account	Post. Ref.	Dr.	Cr.
April 1	Accounts Receivable		15,000	
	Sales			15,000
3	Accounts Receivable		9,200	
	Sales			9,200
4	Sales Returns and Allowances		5,000	
	Accounts Receivable			5,000
5	Accounts Receivable		5,000	
	Sales			5,000
6	Accounts Receivable		3,675	
	Sales			3,500
	Sales Tax Payable			175
11	Cash		9,800	
	Sales Discounts		200	
	Accounts Receivable			10,000

SOLUTIONS

Learning Goal 20, continued

LG 20-6, continued

Date	Account	Post. Ref.	Dr.	Cr.
April 13	Cash		9,110	
	Sales Discounts		90	
	Accounts Receivable			9,200
15	Accounts Receivable		17,100	
	Sales			17,100
15	Cash		3,920	
	Sales Discounts		80	
	Accounts Receivable			4,000
19	Cash		525	
	Sales			500
	Sales Tax Payable			25
20	Accounts Receivable		11,000	
	Sales			11,000
30	Cash		5,390	
	Sales Discounts		110	
	Accounts Receivable			5,500
31	Cash		1,000	
	Accounts Receivable			1,000

Comments:

October 6: Because in this case the buyer is the final user, sales tax is calculated on the purchase.

October 11: The balance due the original \$15,000 less the \$5,000 return. The discount therefore applies to \$10,000.

October 13: The discount does not apply to the shipping charges. The cash due is \$200 shipping charges plus $(\$9,000 \times .99)$ for a total of \$9,110.

October 15: The amount to pay after the chain discount is calculated as $\$20,000 \times .95 \times .9 = \$17,100$.

October 19: This is another taxable sale because the buyer company is the final user of the supplies.

October 23: This sale is FOB *destination* and there is no indication that the goods have arrived. Therefore, no purchase or sale should be recorded yet because title to the merchandise has not transferred from the seller to the buyer.

SOLUTIONS

Learning Goal 20, continued

LG 20-6, *continued*

October 30: This is a payment on part of the *invoice price*, so the discount is calculated on the \$5,500.

October 31: The balance due is \$5,000 minus \$4,000 Accounts Payable reduction from the October 15 payment.

LG 20-7.

Date	Account	Post. Ref.	Dr.	Cr.
August 1	Purchases		10,000	
	Accounts Payable			10,000
2	Purchases		4,100	
	Accounts Payable			4,100
7	Accounts Receivable		8,000	
	Sales			8,000
9	Accounts Receivable		4,000	
	Sales			4,000
10	Accounts Payable		2,000	
	Purchase Returns and Allowances			2,000
11	Accounts Payable		8,000	
	Purchase Discounts			60
	Cash			7,840
	Freight-in		150	
	Cash			150
12	Accounts Payable		4,100	
	Purchase Discounts			40
	Cash			4,060
15	Sales Returns and Allowances		500	
	Accounts Receivable			500

SOLUTIONS

Learning Goal 20, continued

LG 20-7, continued

Date	Account	Post. Ref.	Dr.	Cr.
August 16	Accounts Receivable		10,000	
	Sales			10,000
17	Cash		2,425	
	Sales Discounts		75	
	Accounts Receivable			2,500
18	Cash		3,880	
	Sales Discounts		120	
	Accounts Receivable			4,000
24	Purchases		25,000	
	Accounts Payable			25,000
25	Cash		2,910	
	Sales Discounts		90	
	Accounts Receivable			3,000
31	Cash		24,500	
	Notes Payable			24,500
31	Accounts Payable		25,000	
	Purchase Discounts			500
	Cash			24,500

Comments:

- The payment received from Baton Rouge Corporation on August 17 is \$2,500 of the *invoice* (gross) amount, so the discount is based on this amount.
- The payment received from St. Petersburg Company on August 25 is the amount of *cash received*. Because this is within the discount period, the cash is considered to be the amount *after* applying the discount percent, so it is 97% of the larger amount. So, $\$2,910 / .97 = \$3,000$ determines the amount of the receivable to credit.
- The purchase on August 27 from Orlando Company is FOB *destination*, and there is no indication that the goods have arrived, so title has not transferred to buyer. If title of goods has not transferred to buyer, there is no purchase to record yet.

SOLUTIONS

Learning Goal 20, continued

LG 20-8.

1. $\$10,000 \times .02 = \200
 2. $(\$10,000 / .98) - \$10,000 = \$204.08$
 3. Invoice price: $\$20,000 \times 85 \times .95 = \$16,150$. Discount: $\$16,150 \times .02 = \323 .
 4. The discount should not apply to the \$20,000 of merchandise that was returned.
 Amount paid: $\$50,000 \times .94 = \$49,000$
 Correct amount: $\$30,000 \times .98 = \underline{\$29,400}$
 Credit on next purchase: $\underline{\underline{\$19,600}}$
 5. Payable to Westchester: $\$15,000 \times .98 = \$14,700$
 Receivable from Westchester: $\$10,000 \times .99 = \underline{\$ 9,900}$
 Net payment (within discount period): $\underline{\underline{\$ 4,800}}$
 6. The discount will not apply to any payment after June 13, the end of the discount period.
 Discount: $\$9,000 \times .02 = \180 .
 Correct Accounts Payable balance: $\$12,000 - \$9,000 = \$3,000$.
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