

EXERCISE 7-3 (10–15 minutes)

Current assets

Accounts receivable

Customers

Accounts (of which accounts in the amount of \$40,000 have been pledged as security for a bank loan)	\$79,000		
Installment accounts collectible due in 2007	23,000		
Installment accounts collectible due after December 31, 2007*	<u>34,000</u>	\$136,000	
Other** (\$2,640 + \$1,500)		<u>4,140</u>	\$140,140

Investments

Advance to subsidiary company			81,000
-------------------------------	--	--	--------

*This classification assumes that these receivables are collectible within the operating cycle of the business.

**These items could be separately classified, if considered material.

EXERCISE 7-4 (10–15 minutes)

Computation of cost of goods sold:

Merchandise purchased	\$320,000
Less: Ending inventory	<u>90,000</u>
Cost of goods sold	<u>\$230,000</u>

EXERCISE 7-4 (Continued)

Selling price = 1.4 (Cost of good sold)
 = 1.4 (\$230,000)
 = \$322,000

Sales on account	\$322,000	
Less: Collections	<u>198,000</u>	
Uncollected balance	124,000	
Balance per ledger	<u>82,000</u>	
Apparent shortage	<u>\$ 42,000</u>	—Enough for a new car

EXERCISE 7-5 (15–20 minutes)

(a) (1) June 3	Accounts Receivable—Chester.....	3,000	
	Sales		3,000
June 12	Cash.....	2,940	
	Sales Discounts (\$3,000 X 2%)	60	
	Accounts Receivable—Chester		3,000
(2) June 3	Accounts Receivable—Chester.....	2,940	
	Sales (\$3,000 X 98%)		2,940
June 12	Cash.....	2,940	
	Accounts Receivable—Chester		2,940

EXERCISE 7-7 (10–15 minutes)

(a) Bad Debt Expense	8,500	
Allowance for Doubtful Accounts		8,500*

***.01 X (\$900,000 – \$50,000) = \$8,500**

(b) Bad Debt Expense	3,000	
Allowance for Doubtful Accounts		3,000*

***Step 1: .05 X \$100,000 = \$5,000 (desired credit balance in Allowance account)**

Step 2: \$5,000 – \$2,000 = \$3,000 (required credit entry to bring allowance account to \$5,000 credit balance)

EXERCISE 7-8 (15–20 minutes)

(a) Allowance for Doubtful Accounts	6,000	
Accounts Receivable		6,000

(b) Accounts Receivable	\$800,000
Less: Allowance for Doubtful Accounts	<u>40,000</u>
Net realizable value	<u>\$760,000</u>

(c) Accounts Receivable	\$794,000
Less: Allowance for Doubtful Accounts	<u>34,000</u>
Net realizable value	<u>\$760,000</u>

EXERCISE 7-9 (8–10 minutes)

(a)	Bad Debt Expense.....	5,350	
	Allowance for Doubtful Accounts.....		5,350
	(\$90,000 X 4%) + \$1,750 = \$5,350		
(b)	Bad Debt Expense.....	6,800	
	Allowance for Doubtful Accounts.....		6,800
	\$680,000 X 1% = \$6,800		

EXERCISE 7-10 (10–12 minutes)

- (a) The direct write-off approach is not theoretically justifiable even though required for income tax purposes. The direct write-off method does not match expenses with revenues of the period, nor does it result in receivables being stated at estimated realizable value on the balance sheet.
- (b) Bad Debt Expense – 2% of Sales = \$44,000 (\$2,200,000 X 2%)
Bad Debt Expense – Direct Write-Off = \$31,330 (\$7,800 + \$6,700 + \$7,000 + \$9,830)

Net income would be \$12,670 (\$44,000 – \$31,330) lower under the percentage-of-sales approach.

EXERCISE 7-19 (20–25 minutes)

(a) Notes Receivable	200,000	
Discount on Notes Receivable		34,710
Consulting Revenue		165,290*

*Computation of present value of note:
 PV of \$200,000 due in 2 years at 10%
 $\$200,000 \times .82645 = \$165,290$

(b) Discount on Notes Receivable	16,529	
Interest Revenue		16,529*

* $\$165,290 \times 10\% = \$16,529$

(c) Discount on Notes Receivable	18,181*	
Interest Revenue		18,181

* $\$34,710 - \$16,529$

Cash	200,000	
Notes Receivable		200,000

EXERCISE 7-20 (10–15 minutes)

(a) Accounts Receivable	100,000	
Sales		100,000
Cash	70,000	
Accounts Receivable		70,000

PROBLEM 7-3

- (a) The Allowance for Doubtful Accounts should have a balance of \$50,000 at year-end. The supporting calculations are shown below:

Days Account Outstanding	Amount	Expected Percentage Uncollectible	Estimated Uncollectible
0–15 days	\$300,000	.02	\$ 6,000
16–30 days	100,000	.10	10,000
31–45 days	80,000	.15	12,000
46–60 days	40,000	.25	10,000
61–75 days	20,000	.60	<u>12,000</u>
Balance for Allowance for Doubtful Accounts			<u>\$50,000</u>

The accounts which have been outstanding over 75 days (\$15,000) and have zero probability of collection would be written off immediately by a debit to allowance for Doubtful Accounts for \$15,000 and a credit to Amounts Receivable for \$15,000. It is not considered when determining the proper amount for the Allowance for Doubtful Accounts.

(b) Accounts receivable (\$555,000 – \$15,000)	\$540,000
Less: Allowance for doubtful accounts	<u>50,000</u>
Accounts receivable (net)	<u>\$490,000</u>

- (c) The year-end bad debt adjustment would decrease before-tax income \$30,000 as computed below:

Estimated amount required in the Allowance for Doubtful Accounts	\$50,000
Balance in the account after write-off of uncollectible accounts but before adjustment (\$35,000 – \$15,000)	<u>20,000</u>
Required charge to expense	<u>\$30,000</u>

PROBLEM 7-8

10/1/07	Notes Receivable	100,000	
	Sales		100,000

12/31/07	Interest Receivable	2,000*	
	Interest Revenue		2,000

*\$100,000 X .08 X 3/12 = \$2,000

10/1/08	Cash	8,000*	
	Interest Receivable		2,000
	Interest Revenue.....		6,000**

*\$100,000 X .08 = \$8,000

**\$100,000 X .08 X 9/12 = \$6,000

12/31/08	Interest Receivable	2,000	
	Interest Revenue.....		2,000

10/1/09	Cash	8,000	
	Interest Receivable		2,000
	Interest Revenue.....		6,000

	Cash	100,000	
	Notes Receivable.....		100,000

Note: Entries at 10/1/08 and 10/1/09 assumes reversing entries were not made on January 1, 2008 and January 1, 2009.

SOLUTIONS TO EXERCISES

EXERCISE 8-1 (15–20 minutes)

Items 1, 3, 5, 8, 11, 13, 14, 16, and 17 would be reported as inventory in the financial statements.

The following items would not be reported as inventory:

2. Cost of goods sold in the income statement.
4. Not reported in the financial statements.
6. Cost of goods sold in the income statement.
7. Cost of goods sold in the income statement.
9. Interest expense in the income statement.
10. Advertising expense in the income statement.
12. Office supplies in the current assets section of the balance sheet.
15. Not reported in the financial statements.
18. Short-term investments in the current asset section of the balance sheet.

EXERCISE 8-2 (10–15 minutes)

Inventory per physical count	\$441,000
Goods in transit to customer, f.o.b. destination	+ 38,000
Goods in transit from vendor, f.o.b. seller	+ 51,000
Inventory to be reported on balance sheet	<u>\$530,000</u>

The consigned goods of \$61,000 are not owned by Jose Oliva and were properly excluded.

The goods in transit to a customer of \$46,000, shipped f.o.b. shipping point, are properly excluded from the inventory because the title to the goods passed when they left the seller (Oliva) and therefore a sale and related cost of goods sold should be recorded in 2007.

The goods in transit from a vendor of \$83,000, shipped f.o.b. destination, are properly excluded from the inventory because the title to the goods does not pass to Oliva until the buyer (Oliva) receives them.

EXERCISE 8-7 (Continued)

(b)	May 31	Purchase Discounts Lost	132	
		 Accounts Payable		
		 (\$13,200 X .01)		132
		 (Discount lost on purchase		
		 of May 11, \$13,200, terms		
		 1/15, n/30)		

EXERCISE 8-8

(a)	Feb. 1	Inventory [\$10,800 – (\$10,800 X 10%)].....	9,720	
		 Accounts Payable.....		9,720
	Feb. 4	 Accounts Payable [\$2,500 –		
		 (\$2,500 X 10%)]	2,250	
		 Inventory.....		2,250
	Feb. 13	 Accounts Payable (\$9,720 – \$2,250)	7,470	
		 Inventory (3% X \$7,470).....		224.10
		 Cash		7,245.90
(b)	Feb. 1	Purchases [\$10,800 – (\$10,800 X 10%)]	9,720	
		 Accounts Payable.....		9,720
	Feb. 4	 Accounts Payable [\$2,500 – (\$2,500 X		
		 10%)]	2,250	
		 Purchase Returns and Allowances		2,250
	Feb. 13	 Accounts Payable (\$9,720 – \$2,250)	7,470	
		 Purchase Discounts (3% X \$7,470).....		224.10
		 Cash		7,245.90

EXERCISE 8-8 (Continued)

(c) Purchase price (list)	\$10,800
Less: Trade discount (10% X \$10,800)	<u>1,080</u>
Price on which cash discount based	9,720
Less: Cash discount (3% X \$9,720)	<u>291.60</u>
Net price	<u>\$ 9,428.40</u>

EXERCISE 8-9 (15–25 minutes)

(a) Jan. 4	Accounts Receivable.....	640	
	Sales (80 X \$8).....		640
Jan. 11	Purchases (\$150 X \$6).....	900	
	Accounts Payable.....		900
Jan. 13	Accounts Receivable.....	1,050	
	Sales (120 X \$8.75).....		1,050
Jan. 20	Purchases (160 X \$7).....	1,120	
	Accounts Payable.....		1,120
Jan. 27	Accounts Receivable.....	900	
	Sales (100 X \$9).....		900
Jan. 31	Inventory (\$7 X 110).....	770	
	Cost of Goods Sold.....	1,750*	
	Purchases (\$900 + \$1,120).....		2,020
	Inventory (100 X \$5).....		500

*($\$500 + \$2,020 - \$770$)

EXERCISE 8-13 (Continued)

(c) Sales	\$25,400	= (\$24 X 200) + (\$25 X 500) + (\$27 X 300)
Cost of Goods Sold	<u>11,400</u>	
Gross Profit (FIFO)	<u>\$14,000</u>	

Note: FIFO periodic and FIFO perpetual provide the same gross profit and inventory value.

- (d) LIFO matches more current costs with revenue. When prices are rising (as is generally the case), this results in a higher amount for cost of goods sold and a lower gross profit. As indicated in this exercise, prices were rising and cost of goods sold under LIFO was higher.

EXERCISE 8-14 (20–25 minutes)

(a) (1) LIFO	600 @ \$6.00 =	\$3,600
	100 @ \$6.08 =	<u>608</u>
		<u>\$4,208</u>

- (2) Average cost

$$\frac{\text{Total cost}}{\text{Total units}} = \frac{\$33,655^*}{5,300} = \$6.35 \text{ average cost per unit}$$

$$700 @ \$6.35 = \underline{\$4,445}$$

EXERCISE 8-14 (Continued)

<u>*Units</u>		<u>Price</u>		<u>Total Cost</u>
600	@	\$6.00	=	\$ 3,600
1,500	@	\$6.08	=	9,120
800	@	\$6.40	=	5,120
1,200	@	\$6.50	=	7,800
700	@	\$6.60	=	4,620
<u>500</u>	@	\$6.79	=	<u>3,395</u>
<u>5,300</u>				<u>\$33,655</u>

(b) (1) FIFO 500 @ \$6.79 = \$3,395
 200 @ \$6.60 = 1,320
\$4,715

(2) LIFO 100 @ \$6.00 = \$ 600
 100 @ \$6.08 = 608
 500 @ \$6.79 = 3,395
\$4,603

(c) Total merchandise available for sale \$33,655
 Less inventory (FIFO) 4,715
 Cost of goods sold \$28,940

(d) FIFO.

EXERCISE 9-17 (Continued)

(d) Gross profit is 25% of cost

$$\frac{25\%}{100\% + 25\%} = 20\% \text{ markup on selling price}$$

Total goods available for sale (at cost)		\$2,100,000
Sales (at selling price)	\$2,500,000	
Less: Gross profit (20% of sales)	<u>500,000</u>	
Sales (at cost)		<u>2,000,000</u>
Ending inventory (at cost)		<u>\$ 100,000</u>

EXERCISE 9-18 (20–25 minutes)

(a)	<u>Cost</u>	<u>Retail</u>
Beginning inventory	\$ 58,000	\$100,000
Purchases	122,000	200,000
Net markups		<u>10,345</u>
Totals	<u>\$180,000</u>	310,345
Net markdowns		<u>(26,135)</u>
Sales price of goods available		284,210
Deduct: Sales		<u>186,000</u>
Ending inventory at retail		<u>\$ 98,210</u>

- (b)
1. $\$180,000 \div \$300,000 = \underline{60\%}$
 2. $\$180,000 \div \$273,865 = \underline{65.73\%}$
 3. $\$180,000 \div \$310,345 = \underline{58\%}$
 4. $\$180,000 \div \$284,210 = \underline{63.33\%}$

EXERCISE 9-18 (Continued)

- (c) 1. Method 3.
2. Method 3.
3. Method 3.

(d) $58\% \times \$98,210 = \underline{\$56,962}$

(e) $\$180,000 - \$56,962 = \underline{\$123,038}$

(f) $\$186,000 - \$123,038 = \underline{\$62,962}$

EXERCISE 9-19 (12–17 minutes)

	<u>Cost</u>		<u>Retail</u>
Beginning inventory	\$ 200,000		\$ 280,000
Purchases	<u>1,375,000</u>		<u>2,140,000</u>
Totals	1,575,000		2,420,000
Add: Net markups			
Markups		\$95,000	
Markup cancellations		<u>(15,000)</u>	<u>80,000</u>
Totals	<u>\$1,575,000</u>		2,500,000
Deduct: Net markdowns			
Markdowns		35,000	
Markdowns cancellations		<u>(5,000)</u>	<u>30,000</u>
Sales price of goods available			2,470,000
Deduct: Sales			<u>2,200,000</u>
Ending inventory at retail			<u>\$ 270,000</u>

$$\text{Cost-to-retail ratio} = \frac{\$1,575,000}{\$2,500,000} = 63\%$$

$$\text{Ending inventory at cost} = 63\% \times \$270,000 = \underline{\$170,100}$$