

Solutions Chapter 16

Exercise 16.1

a. Income statement

Sales	$275 * \$125$	\$34,375
Cost of sales	$250 * \$30 + 25 * \50	\$ 8,750
		\$25,625

Balance sheet

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash	$275 * \$125$	\$34,375
Inventory	$25 * \$50 + 100 * \100	\$11,250
Total Assets		\$45,625
Equity		\$20,000
Earnings		\$25,625
Total Sources		\$45,625

b. Income statement

Sales	$275 * \$125$	\$34,375
Cost of sales	$100 * \$100 + 50 * \$50 + 125 * \$30$	\$16,250
		\$18,125

Balance sheet

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash	$275 * \$125$	\$34,375
Inventory	$125 * \$30$	\$3,750
Total Assets		\$38,125
Equity		\$20,000
Earnings		\$18,125
Total Sources		\$38,125

c. Income statement

Sales	$275 * \$125$	\$34,375
Cost of sales	$275 * \$50$	\$13,750
		\$20,625

Balance sheet

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash	$275 * \$125$	\$34,375
Inventory	$125 * \$50$	\$6,250
Total Assets		\$40,625
Equity		\$20,000
Earnings		\$20,625
Total Sources		\$40,625

Exercise 16.2

Total sales = 120 units. Ending inventory = 130 units.

a. Income statement

	<i>Revenues</i>	<i>Cost of sales</i>	<i>Profit</i>
1	50*\$80 = \$4,000	50*\$50 = \$2,500	\$1,500
2	30*\$100 = \$3,000	30*\$50 = \$1,500	\$1,500
3	40*\$125 = \$5,000	20*\$50 + 20*\$60 = \$2,200	\$2,800
			\$5,800

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash	\$12,000 - \$11,300	\$ 700
Inventory	(60*\$60)+(60*\$90)+(10*\$110)	\$10,100
Total Assets		\$10,800
Equity		\$5,000
Earnings		\$5,800
Total Sources		\$10,800

b. Income statement

	<i>Revenues</i>	<i>Cost of sales</i>	<i>Profit</i>
1	50*\$80 = \$4,000	50*\$60 = \$3,000	\$1,000
2	30*\$100 = \$3,000	30*\$90 = \$2,700	\$ 300
3	40*\$125 = \$5,000	30*\$90 + 10*\$60 = \$3,300	\$1,700
			\$ 3,000

Balance Sheet

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash		\$700
Inventory	100*\$50 + 20*\$60 + 10*\$110	\$7,300
Total Assets		\$8,000
Equity		\$5,000
Earnings		\$3,000
Total Sources		\$8,000

LIFO periodic cost of sales = 10*\$110 + 60*\$90 + 50*\$60 = \$9,500.

Profit = \$12,000 - \$9,500 = \$2,500.

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash		\$700
Inventory	100*\$50 + 30*\$60	\$6,800
Total Assets		\$7,500
Equity		\$5,000
Earnings		\$2,500
Total Sources		\$7,500

c. Income statement

	Revenues	Cost of sales	Profit
1	$50 \times \$80 = \$4,000$	$50 \times \$54.44 = \$2,722.22$	\$1,278
2	$30 \times \$100 = \$3,000$	$30 \times \$65.67 = \$1,970.18$	\$1,030
3	$40 \times \$125 = \$5,000$	$40 \times \$65.67 = \$2,626.90$	\$2,373
			\$4,681

Balance sheet

<i>Item</i>	<i>Calculations</i>	<i>Amount</i>
Cash		\$700
Inventory	$120 \times \$65.67 + 10 \times \110	\$8,981
Total Assets		\$9,681
Equity		\$5,000
Earnings		\$4,681
Total Sources		\$9,681

Average cost for period: $(100 \times \$50 + 80 \times \$60 + 60 \times \$90 + 10 \times \$110) / 250 = \$65.2$.

Profit = $\$12,000 - 120 \times \$65.2 = \$4,176$.

Item	Calculations	Amount
Cash		\$700
Inventory	$130 \times \$65.2$	\$8,476
Total Assets		\$9,176
Equity		\$5,000
Earnings		\$4,176
Total Sources		\$9,176