

Problem 8-7

Car ID	Cost
203	\$60,000
207	60,000
210	63,000

During 2021, each of these autos sold for \$90,000 each

Car ID	Cost	Selling Price
211	\$63,000	\$90,000
212	63,000	93,000
213	64,500	Not sold
214	66,000	96,000
215	69,000	100,500
216	70,500	Not sold
217	72,000	105,000
218	72,300	106,500
219	75,000	Not sold

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Problem 8-7 (continued)

Part 1: Calculate the ending inventory and Cost of goods sold using specific identification.

Cost of goods sold

Car ID	Cost
203	\$60,000
207	60,000
210	63,000
211	63,000
212	63,000
214	66,000
215	69,000
217	72,000
218	<u>72,300</u>
Cost of goods sold	\$588,300

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Problem 8-7 (continued)

Ending inventory – Specific identification

Car ID	Cost
213	\$ 64,500
215	70,500
219	<u>75,000</u>
Ending inventory	\$210,000

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Problem 8-7 (continued)

Part 2: Calculate ending inventory and Cost of goods sold using FIFO, periodic

Cost of goods sold:

$$\begin{aligned} & \$60,000 + \$60,000 + \$63,000 + \$63,000 + \$63,000 + \$64,500 + \\ & \$66,000 + \$69,000 + \$70,500 = \mathbf{\$579,000} \end{aligned}$$

Ending inventory: $(\$72,000 + \$72,300 + \$75,000) = \mathbf{\$219,300}$

Part 3: Calculate the ending inventory and Cost of goods sold using LIFO, periodic

Cost of goods sold:

$$\begin{aligned} & \$75,000 + \$72,300 + \$72,000 + \$70,500 + \$69,000 + \$66,000 + \\ & \$64,500 + \$63,000 + \$63,000 = \mathbf{\$615,300} \end{aligned}$$

Ending inventory: $\$60,000 + \$60,000 + \$63,000 = \mathbf{\$183,000}$

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Problem 8-7 (continued)

Part 4: Calculate the ending inventory and Cost of goods sold using Average cost, periodic

$$\begin{aligned} \text{Total cost of goods available for sale: } & \$60,000 + \$60,000 + \$63,000 + \\ & \$63,000 + \$63,000 + \$64,500 + \$66,000 + \$69,000 + \$70,500 + \\ & \$72,000 + \$72,300 + \$75,000 = \mathbf{\$798,300} \end{aligned}$$

Total # of units available for sale: 12

Average cost per unit: $\$798,300 \div 12 = \$66,525$

Cost of goods sold: 9 units x $\$66,525/\text{unit} = \mathbf{\$598,725}$

Ending inventory: 3 units x $\$66,525/\text{unit} = \mathbf{\$199,575}$

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