

# Quick Questions On Inventory Valuation

1. Calculate the value of a 400-unit ending inventory using the following data and the LIFO, FIFO, and Weighted Average methods of inventory valuation. State the advantages and disadvantages of each method.

		Units	Unit Cost	Total Cost
Inventory	Jan. 1	250	\$50	\$12,500
Purchase of:	April 4	100	\$52	5,200
	Sept. 16	200	\$55	11,000
	Dec. 10	<u>300</u>	\$57	<u>17,100</u>
	Totals	850		\$45,800

LIFO: assumes 400 units of ending inventory were acquired first

$$\begin{aligned}
 (250) (\$50) &= \$12,500 \\
 (100) (\$52) &= \$ 5,200 \\
 \underline{(50) (\$55)} &= \underline{\$ 2,750} \\
 400 &\quad \$20,450
 \end{aligned}$$

FIFO: assumes 400 units of ending inventory were acquired last

$$\begin{aligned}
 (300) (\$57) &= \$17,100 \\
 \underline{(100) (\$55)} &= \underline{\$ 5,500} \\
 400 &\quad \$22,600
 \end{aligned}$$

Weighted Average:

$$\begin{aligned}
 \text{Average Price} &= \text{Total Cost} / \text{Total Units} \\
 &= \$ 45,800 / 850 \\
 &= \$53.88
 \end{aligned}$$

$$\begin{aligned}
 \text{Inventory Value} &= (\text{Average Price}) (\text{Ending Units}) \\
 &= (\$53.88) (400) \\
 &= \$21,552
 \end{aligned}$$

During periods of rising prices, LIFO results in higher cost of goods sold, lower income, a smaller income tax expense, and an under valuation of inventory. The results are the opposite when inventory prices are falling. FIFO affects are the opposite of LIFO affects. Weighted Average method tends to be in between and FIFO.

2. Given the following data, calculate the value of the ending inventory applying the rules pertaining to lower of cost or market.

Product	Units on Hand	Per Unit Value		Total Cost	Total Market	Lower of Cost or Market (by product)
		Cost	Market			
A	20	\$12	\$14	\$ 240	\$ 280	\$ 240
B	30	24	23	720	690	690
C	25	30	31	750	<u>775</u>	<u>750</u>
					<u>\$1,745</u>	<u>\$1,680</u>

$$\begin{aligned}
 &\text{Lower of Cost or Market} \\
 &\text{(by total market)} \quad \underline{\underline{\$1,710}}
 \end{aligned}$$