

**Solution:**

Let's consider the effect under FIFO.

Under FIFO, the principle is that any goods that are bought the earliest are sold first, meaning that the latest stock remains in the inventory at the end.

Thus, under this principle, the following changes occur due to the purchase:

- Purchases increase by \$400 (since purchase is being made by the store.)
- The ending inventory also increases by \$400 (since this is the unsold inventory.)

Thus, there will be no effect on the cost of goods sold because these are two equal yet opposite effects. Thus, there will be no change in the income and hence, the income taxes.

However, under LIFO, things change.

The goods that are bought at the latest are always assumed to be sold first, meaning that the older stock remains there.

Thus, under this principle, the following changes occur due to the purchase:

- Purchases increase by \$400 (as already expected.)
- The ending inventory becomes \$400 (80 units) + \$300 (50 units) + \$210 (30 units) = \$910 (160 units), which is \$330 more than the earlier inventory.

Thus, there is a net increase of \$70 in terms of the cost of goods sold due to this effect, meaning that the net income (before tax) decreases by \$70.

Since tax is 40%, the taxes decrease by \$28, meaning that there is a savings of \$28 in terms of taxes.

The overall net income, hence, decreased by \$42.