Solution:

If an additional 100 units were purchased for $80 each, then there will be differences in the income statement.

Firstly, the purchases will increase by $8,000 since we have purchased the items.

Now, for the beginning inventory, it is always the same. But the final inventory will change. However, it will now have 100 + 150 = 250 units

For FIFO, we assumed that the earliest stock gets empty. So, for FIFO, the ending inventory is as follows:

- 100 units of $80 each, and
- 150 units the same as described before.

Thus, the FIFO ending inventory also increases by $8,000.

For LIFO, we assumed that the latest stock gets empty. So, for LIFO, the ending inventory will be as follows:

- 110 units of $50,
- 80 units of $60
- 60 units of $70

Thus, the value becomes $14,500 while the original was $7,900 resulting in a gain of $6,600.

This causes a change for LIFO, while the valuation increases proportionally for FIFO. The changes are summarized in the table:

COMPARATIVE EFFECTS OF THE ADDITIONAL PURCHASES					
Method	Purchases	Ending Inventory	COGS	Gross Profit	Income Tax
FIFO	+$8,000	+$8,000	(No Change)	(No Change)	(No Change)
LIFO	+$8,000	+$6,600	+$1,400	-$1,400	-$560

As you can see, there is no change in taxes in FIFO, but LIFO saved an additional $560 in taxes.