**Solution:**

(1)

The beginning inventory in the LIFO was valued at $149 million less than the FIFO valuation.

The ending inventory in the LIFO was valued at $203 million less than the FIFO valuation.

Thus, the change in inventory (beginning - ending) in the LIFO is valued at $54 million more than the FIFO valuation.

Thus, the cost of goods sold is valued at $54 million more than the FIFO valuation, meaning that the income reported by LIFO would be $54 million lower than the income reported by FIFO.

Thus, under FIFO, there would have been $54 million higher income. So, the pre-tax income would have been

Pre-Tax Income = $792 + $54 = $846 million

(2)

Since the income tax rate is 34%, the income tax under LIFO would be:

Under FIFO, it would be:

(3)

Yes, it is a good decision to use LIFO as it saved substantial amount of taxes (to be precise, by $18.36 million).