## Solution:

## (1)

Since the ending inventory was understated by \$20,000, this means that the cost of goods sold is overstated by \$20,000 since we assumed that this cost is sold to customers.

Thus, this means that the gross profit generated will be understated by \$20,000.

what does this mean? The income before tax will be hence understated by \$20,000. Since income taxes are 40% on income, the taxes will be understated by \$8,000, leading to the net income being understated by \$12,000.

Thus, the effect can be written as a table:

Particulars	Effect
Income Before Tax	-\$20,000
	(understated)
Income Tax	-\$8,000
	(understated)
Net Income	-\$12,000
	(understated)
Retained Earnings	-\$12,000
	(understated)

## (2)

In 2016, this means that the beginning inventory has been understated by \$20,000, which means that the cost of goods available for sale is understated by \$20,000. Since ending inventory is calculated correctly, the cost of goods sold is understated by \$20,000.

Thus, the gross profit generated will be overstated by \$20,000.

By applying the same logic as in (1), we can see that all the other items will be overstated in accordance with the following table:

Particulars	Effect
Income Before Tax	+\$20,000
	(overstated)
Income Tax	+\$8,000
	(overstated)
Net Income	+\$12,000
	(overstated)
Retained Earnings	+\$12,000
_	(overstated)