

Solution:

(1)

Due to a decrease in depreciation expenses, the new depreciation expense will be:

$$\text{Depreciation Expense} = 235,518,000 - 9,000,000 = \$226,518,000$$

The pre-tax income is given by:

$$\text{Pre-tax Income} = \frac{100}{54} \times \$42,233,300$$

Now, the new income will be:

$$\text{New Pre-tax Income} = \frac{100}{54} \times \$42,233,300 + \$9,000,000$$

Thus, the new tax affected income will be:

$$\begin{aligned}\text{New Net Income} &= \frac{54}{100} \times \left(\frac{100}{54} \times \$42,233,300 + \$9,000,000 \right) \\ &= \$42,233,300 + \frac{54}{100} \times \$9,000,000\end{aligned}$$

Thus, there is a material change in the net income given by:

$$\text{Material change in income} = \frac{54}{100} \times \$9,000,000 = \$4.86 \text{ million}$$

Thus, there is a significant difference of \$4.86 million due to the change of the depreciating life.

(2)

$$\text{New Depreciation} = \$72 \text{ million}$$

Now, change in depreciation = +\$36 million. This means that tax is deducted by

$$\text{Tax Saved} = 0.46 \times \$36 \text{ million} = \$16.56 \text{ million}$$

Thus, the net income becomes

$$\text{Net Income} = \$42,233,300 - (\$36 \text{ million} - \$16.56 \text{ million}) = \$22.78 \text{ million}$$

Thus, the new income becomes \$22.78 million.