

Sec 4-4: Percent Change

$$\text{Amount of change} = \text{Final amt} - \text{Orig amt}$$

$$\text{Percent Change} = \frac{\text{Amount of change}}{\text{Original Amount}} \times 100$$

Or

$$\frac{\text{Percent Change}}{100} = \frac{\text{Amount of change}}{\text{Original Amount}}$$

1. The price of a car was \$12,500. There was a 12% decrease in the price. Find the new price.

$$\begin{aligned} \frac{12}{100} &= \frac{x}{12,500} & x &= 1500 \rightarrow 12,500 - 1500 \\ & & &= 11,000 \\ \text{OR} & & & \\ & (.88)(12,500) & = & 11,000 \end{aligned}$$

2. The number of students at a school was 1400. The next year there was a 1.5% increase in the number of students. How many students were there the next year?

$$\begin{aligned} (.015)(1400) &= 21 \\ 1400 + 21 &= 1421 \\ \text{OR} & 100 + 1.5 = 101.5\% \\ & (1.015)(1400) \\ &= 1421 \end{aligned}$$