



## Percentage Calculation Formulas

**Corresponding Percentage Application:** What is 20% of 700? Answer is 140.

$$\% = \frac{\text{Base (y)} \times \text{Rate (x)}}{100}$$

$$\% = \frac{700 \times 20}{100} = 140$$

**Percent Difference Application:** What is the change expressed in percent from one number to another? (E.g. What is the change from 97,235 to 126,567? Answer is 30.17 percent.)

$$\Delta \% = 100 \left( \frac{\text{New Amount (x)} - \text{Base (y)}}{\text{Base (y)}} \right)$$

$$\Delta \% = 100 \frac{126,567 - 97,235}{97,235} = 30.17\%$$

**Percent of Total Application:** What percentage one number is of another? (E.g. What is percentage of \$3.92 million is \$1.67 million? Answer is 42.6 percent.)

$$\%T = 100 \left( \frac{\text{Amount (x)}}{\text{Total (y)}} \right)$$

$$\%T = 100 \left( \frac{\$1.67 \text{ million}}{\$3.92 \text{ million}} \right) = 42.6\%$$