

Proportions and Percents

6th Grade Mathematics

Mr. Wong

6-6 Proportions and Percents

$$\frac{\textit{is}}{\textit{of}} = \frac{\%}{100}$$

(Ex. 1) What percent of 25 is 13?

$$\frac{\textit{is}}{\textit{of}} = \frac{\%}{100}$$

$$\frac{13}{25} = \frac{x}{100}$$

What is the "is" ?

$$25 \cdot x = 13 \cdot 100$$

What is the "of" ?

$$25x = 1300$$

What is the "%" ?

$$\div 25 \quad \div 25$$

Cross Multiply

Solve

$$x = 52\%$$

(Ex. 2) Find 116% of 75.

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

$$\frac{x}{75} = \frac{116}{100}$$

What is the "is" ? $75 \cdot 116 = x \cdot 100$

What is the "of" ? $8700 = 100x$

What is the "%"? $\div \quad \div$

Cross Multiply

$$\frac{100}{87} = \frac{100}{x}$$

Solve

(Ex. 3) Find 96% of 5.7.

$$\frac{\textit{is}}{\textit{of}} = \frac{\%}{100}$$

$$\frac{x}{5.7} = \frac{96}{100}$$

What is the "is" ? $5.7 \cdot 96 = x \cdot 100$

What is the "of" ? $547.2 = 100x$

What is the "%"? $\div \qquad \qquad \div$

Cross Multiply

$$\frac{547.2}{100} = \frac{100}{x}$$

Solve

(Ex. 4) 75 is what percent of 250?

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

$$\frac{75}{250} = \frac{x}{100}$$

What is the "is" ?

$$250 \cdot x = 75 \cdot 100$$

What is the "of" ?

$$250 x = 7500$$

What is the "%" ?

$$\div \qquad \div$$

Cross Multiply

$$\frac{250}{x} = \frac{250}{30\%}$$

Solve