

# M-PA Pre-Algebra 5/9

what percent of 80 is 48?

$$\frac{x}{100} * \frac{80}{1} = 48$$

$$\frac{80x}{100} = 48$$

$$\frac{5}{4} \left( \frac{4x}{5} \right) = \left( \frac{48}{1} \right) \frac{5}{4}$$

Multiply by inverse

$$x = \frac{48}{1} * \frac{5}{4} = \frac{12}{1} * \frac{5}{1} = \boxed{60\%}$$

what percent is 13 of 25?

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

$$25x = \frac{1300}{25}$$

$$x = \boxed{52\%}$$

$$\div 25 * \frac{4}{100}$$

$$\frac{13}{4} * \frac{4}{52}$$

Find 40% of 90.

$$0.4 * 90 = \boxed{36}$$

$$0.3 \overline{) 21.0} \\ \underline{3 \phantom{0} 210} \\ 0$$

30% of X is 21

$$\frac{0.3x}{0.3} = \frac{21}{0.3}$$

$$\frac{3x}{10} = 21$$

$$0.3 * X = 21$$

$$\boxed{X = 70}$$

1.) What percent of 60 is 42?

$$\frac{x}{100} \times \frac{60}{1} = 42$$

$$\frac{60x}{100} = 42$$

$$\frac{60x}{100} \div 20 = 42 \div 20$$

$$\frac{3x}{5} = \frac{42}{1}$$

$$\frac{3x}{3} = \frac{210}{3}$$

2.) What percent is 12 of 30?

$$100 \left( \frac{x}{100} \right) = \frac{12}{30} \left( \frac{100}{1} \right)$$

$$\frac{1200}{30} = \frac{1200x}{100}$$

$$40 = 12x$$

$$\frac{40}{12} = \frac{12x}{12}$$

$$x = 3.33\%$$

3.) Find 35% of 70.

$$0.35 \times 70 = 24.5$$

$$64 \div 0.8 =$$

4.) 80% of X is 64

$$0.80 \times X = 64$$

$$\frac{0.8X}{0.8} = \frac{64}{0.8}$$

$$X = 80$$

