

TH-PA Pre-Algebra Week 31 5/11

What percent of 80 is 48?

$$\frac{X}{100} * 80 = 48$$

$$\frac{\cancel{100}}{\cancel{80}} \left(\frac{\cancel{80}X}{\cancel{100}} \right) = 48 \left(\frac{100}{80} \right)$$

$$X = \frac{(48)(\cancel{100})}{\cancel{80}} = (6)(10) = \boxed{60\%}$$

What percent is 13 of 25?

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

of
↓
over

$$\frac{(100)(13)}{25} = \frac{25X}{25}$$

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

$$\frac{\cancel{100}(13)}{\cancel{25}} = X = (4)(13) = \boxed{52\%}$$

Find 40% of 90

$$\begin{array}{ccc} \downarrow & \downarrow & \\ \frac{40}{100} & * & 90 = \frac{(\cancel{40})(\cancel{90})}{\cancel{100}} = \boxed{36} \end{array}$$

30% of x is 21

$$\begin{array}{ccccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & & \\ \frac{30}{100} & * & x & = & 21 & \frac{100}{30} \left(\frac{30x}{100} \right) = (21) \frac{100}{30} \end{array}$$

$$x = \frac{(\cancel{21})(\cancel{100})}{\cancel{30}} = (7)(10) = \boxed{70}$$

1.) What percent of 60 is 42?

$$\frac{X}{100} * 60 = 42$$

$$\frac{100}{60} \left(\frac{60X}{100} \right) = (42) \frac{100}{60}$$

$$X = \frac{(42)(100)}{60} = (7)(10) = \boxed{70\%}$$

2.) What percent is 12 of 30?

$$\frac{X}{100} * \frac{12}{30} = \frac{30X}{30} = \frac{(100)(12)}{30}$$

$$X = \frac{(100)(12)}{30} = \frac{4}{3} = \boxed{40\%}$$

3.) Find 30% of 70

$$\frac{30}{100} * 70 = \frac{(30)(70)}{100} = \boxed{21}$$

4.) 80% of X is 64

$$\frac{80}{100} * X = 64$$

$$\left(\frac{100}{80} \right) \left(\frac{80X}{100} \right) = (64) \frac{100}{80}$$

$$X = \frac{(64)(100)}{80} = 8(10) = \boxed{80}$$

inverse $\left(\frac{80}{100} \right) \frac{100}{80}$