

What percent of 80 is 48?

$$\begin{array}{c} \downarrow \\ \frac{X}{100} \end{array}$$

$$\begin{array}{c} \downarrow \\ * \end{array} \quad \begin{array}{c} \downarrow \\ 80 \end{array} = \begin{array}{c} \downarrow \\ 48 \end{array}$$

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

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

What percent is 13 of 25

proportion

$$\begin{array}{c} \downarrow \\ \frac{X}{100} \end{array}$$

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

$$25X = (100)(13)$$

$$\frac{25X}{25} = \frac{1300}{25} \quad \boxed{X = 52\%}$$

3.) Find 40% of 90

$$\frac{40}{100} * 90 = \frac{(40)(90)}{100} = 36$$

4.) 30% of X is 21

$$\frac{30}{100} * X = 21$$

$$\frac{100}{30} \left(\frac{30X}{100} \right) = (21) \frac{100}{30}$$

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

1.) What percent of 60 is 42?

$$\begin{array}{c} \downarrow \\ X \\ \hline 100 \end{array}$$

$$\begin{array}{c} \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \\ * \quad 60 = 42 \end{array}$$

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

$$X = \boxed{70\%}$$

2.) What percent is 12 of 30?

$$\begin{array}{c} \downarrow \\ X \\ \hline 100 \end{array}$$

$$\begin{array}{c} \downarrow \\ \frac{12}{30} \end{array}$$

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

3.) Find 30% of 70

$$\begin{array}{ccc} \downarrow & \downarrow & \downarrow \\ \frac{30}{100} & * & 70 \end{array} \quad \frac{(30)(70)}{100} = \boxed{21}$$

4.) 80% of X is 64

$$\begin{array}{ccccc} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ \frac{80}{100} & * & X & = & 64 \end{array}$$

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

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

= 80 I think, I'm not sure, I'm just. I want to say it is, but I might have just cost us a year of math.

