

The Percent Proportion

Key

THE PERCENT PROPORTION:

"love" formula

$$\frac{\text{Percent (\%)}}{100} = \frac{\text{part (is)}}{\text{whole (of)}}$$

Step 1: "Slash" up the problem to make three parts - the "IS", the "OF", and the "%."

Step 2: Set up a proportion using the format shown in the box above.

Step 3: Fill in what you know, and let "x" be the part you are trying to figure out.

Step 4: Solve the proportion using cross-products and algebra.

Example #1:

What is ~~52%~~ of 60?

$$\frac{52}{100} = \frac{x}{60}$$

$$\frac{100x}{100} = \frac{3120}{100}$$

$$x = 31.2$$

31.2

Example #2:

24 is what percent of 160?

$$\frac{x}{100} = \frac{24}{160}$$

$$\frac{160x}{160} = \frac{2400}{160}$$

$$x = 15$$

15%

Example #3:

24 is ~~64%~~ of what number?

$$\frac{64}{100} = \frac{24}{x}$$

$$\frac{2400}{64} = \frac{64x}{64}$$

$$37.5 = x$$

37.5

Now you try some...

What number is ~~6%~~ of 112?

$$\frac{6}{100} = \frac{x}{112}$$

$$\frac{\cancel{100}x}{100} = \frac{672}{100}$$

$$x = 6.72$$

6.72

What is ~~40%~~ of 20?

$$\frac{40}{100} = \frac{x}{20}$$

$$\frac{\cancel{100}x}{100} = \frac{800}{100}$$

$$x = 8$$

8

88 is what percent ~~of~~ 80?

$$\frac{x}{100} = \frac{88}{80}$$

$$\frac{8800}{80} = \frac{\cancel{80}x}{80}$$

$$110 = x$$

110%