



Basic Percent Problems

Regardless of the wording, most percent related problems can be restated into a form similar to its mathematic equivalent. Furthermore, these problems are looking to solve for one of three possible variables:

A number is a certain percentage of another number.

$$N = P\% \times A$$

- 1. The number** that is a certain percentage of another number

What is 50% of 40?

$$N = 50\% \times 40$$

$$N = 0.5 \times 40$$

$$N = 20$$

- 2. The certain percentage**

20 is what percent of 40?

$$20 = P\% \times 40$$

$$20 = 40P$$

$$\frac{20}{40} = \frac{40P}{40}$$

$$.50 = P$$

$$50\% = P$$

- 3. The other number**

20 is 50% of what number?

$$20 = 50\% \times A$$

$$20 = .50A$$

$$\frac{20}{.50} = \frac{.50A}{.50}$$

$$40 = A$$