

MasterMath

NUMBER SENSE

The Percent Equation



A percentage has a decimal and a fraction that it is equivalent to.

$$25\% = .25 = \frac{25}{100}$$

$25\% = .25$ $25\% = \frac{25}{100}$
% means per 100

The Percent Equation



a is p percent of w

In math, "is" means "equals",
and "percent of" means "times"

$$a = p \text{ (written as a decimal or fraction)} \cdot w$$

$$a = p \cdot w$$

The Percent Equation



a = p • w

How much is 6% of 25?

$a = .06 \times 25$
 $a = 1.5$

$.06 \times 25$

$6\% = .06$

$6 \times 25 =$
 $4 \times 25 = 100$
 $+ 2 \times 25 = \frac{50}{150}$

The Percent Equation

a = p • w

1.5 is what percent of 25? 1.5 is 6% or what number?

$a = p \cdot w$ $a = p \cdot w$
 $a \div w = p$ $a \div p = w$
 $1.5 \div 25 = .06$ $1.5 \div .06 = 25$
 $.06 = 6\%$

$.06 = 6\%$

The Percent Equation

You try it!

28 is what percent of 145?

The Percent Equation

You try it!
 28 is what percent of 145?


$$a = p \cdot w$$

$$28 = p \cdot 145$$


$$\frac{28}{145} = \frac{p \cdot 145}{145}$$

$$.192 = p$$

$$19.2\% = p$$

The Percent Equation 

You try it!
 45% of the kids at camp were boys. There were 90 boys. How many kids were at camp? How many girls were at camp?

The Percent Equation 

You try it!
 45% of the kids at camp were boys. There were 90 boys. How many kids were at camp? How many girls were at camp?

$$a = p \cdot w$$

$$90 = .45 \cdot w$$

$$\frac{90}{.45} = w$$

$$200 = w$$

$$200 - 90 = 110$$

The Percent Equation 