

October 29, 2018

Warm Up- Copy the following notes

How to find the percentage of a number:

1) Given the problem, **What is 30% of 27?**

Method #1 30% = 0.3

Multiply 27 by 0.3
= ?

What we know? OF = multiply

$$\frac{\text{is}}{\text{of}} = \frac{\text{part}}{\text{whole}}$$

100

What = unknown value

Fractions represent part/whole

IS is placed over OF

Whole is ALWAYS 100%

Method #2 So, we have the following equation:

is/of = part/whole

X (what) / 27 = 30/100

$$\frac{\text{is}}{\text{of}} = \frac{\%}{\text{part}} = \frac{\text{whole}}{\text{whole}}$$

$$\begin{array}{r} 280 \\ \times .3 \\ \hline 84.0 \end{array}$$

Method 1

What is
30% of
280?

$$\begin{array}{ccc} x & = & 30 \\ \hline 280 & & 100 \end{array}$$

$$\begin{array}{r} 28 \\ \times 3 \\ \hline 8400 \end{array}$$

$$\frac{100x}{100} = \frac{8400}{100} = \frac{84}{1}$$

$$x = 84$$

What is 30% of 280?

$$30\% = .3$$

$$\begin{array}{r} 280 \\ \times .3 \\ \hline 84.0 \end{array}$$

$$\begin{array}{r} 280 \\ \times 3 \\ \hline 8400 \end{array}$$

is
of = part
whole

$$\frac{x}{280} = \frac{30}{100}$$

$$\frac{100x}{100} = \frac{8400}{100}$$
$$x = 84$$

Make Foldable to use on Clue #2

What is 25% of 136?

Method 1:

Multiply 0.25×136

Method 2:

Using **is/of** method:

$$x/136 = 25/100$$

What is 150% of? 128

If no relationship is found horizontally or vertically,
then use cross-products

$\frac{\text{is}}{\text{of}} = \frac{\text{part}}{\text{whole}}$

$$\begin{array}{r} x \\ 128 \end{array} = \begin{array}{r} 150 \\ 100 \end{array}$$

Multiplying by $\frac{1}{2}$ is the same thing as dividing by 2.

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Period 5

Warm Up - Video on finding Unit Rates

Math Mystery - Read front page.

**Answer the problems under Clue 1 to get your first clue
by finding the Unit Rates.**

**Go back to the front page and cross off any suspects that
you can eliminate.**