

“ $\frac{is}{of}$ ” **Percent Word Problems**

Use and solve the following proportion to solve all Percent Word Problems:

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

Today’s lesson is going to focus on the second half of this proportion:

When reading a word problem, the “part” is always shown with/attached to the word “is,” and then whole is always shown with/attached to the word “of”. To solve, use the same process we have been using on all our proportional word problems:

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

Example #: 21 is what percent of 63?



Step #1: Ask: are you solving for the part, the whole, or the percent?
(The percent)

Step #2: Set up the proportion:

$$\frac{x}{100} = \frac{21}{63}$$

Step #3: Simplify if possible & draw your wings

$$\frac{x}{100} = \frac{1}{3}$$

Step #4: Write the cross product expressions:

$$3 \cdot x = 100 \cdot 1$$

Step #5: Multiply the solvable expression:

$$3 \cdot x = 100$$

Step #6: Solve for the variable:

$$x = 33\%$$

Example #2: 55% of 75 is what?



Step #1: Ask: are you solving for the part, the whole, or the percent?
(The part)

Step #2: Set up the proportion:

Step #3: Simplify if possible & draw your wings:

Step #4: Write the cross product expressions:

Step #5: Multiply the solvable expression:

Step #6: Solve for the variable:

Example #3: 63 is 45% of what?



Step #1: Ask: are you solving for the part, the whole, or the percent?
(The whole)

Step #2: Set up the proportion:

Step #3: Simplify if possible & draw your wings:

Step #4: Write the cross product expressions:

Step #5: Multiply the solvable expression:

Step #6: Solve for the variable: