

Name: \_\_\_\_\_

## Finding Wholes with Percent

Percents show a rate per 100. To find the unknown whole with a known part and percent, set up a proportion of equivalent ratios.

**Example:** 8 is 16% of what number?

1. Set up a proportion

$$\frac{8}{x} = \frac{16}{100}$$

2. Cross multiply and solve.

$$\frac{8}{x} = \frac{16}{100} \rightarrow 16x = 800 \rightarrow 800 \div 16 = 50$$

$$x = 50$$

8 is 16% of 50.

**Note:** Dividing the known part by the decimal equivalent of the percent is a shortcut for cross multiplying and solving, e.g.,  $8 \div 0.16 = 50$ .



# Preview

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d. 99 is 30% of...

\_\_\_\_\_

e. 255 is 40% of...

\_\_\_\_\_

f. 64 is 16% of...

\_\_\_\_\_

g. 612 is 90% of...

\_\_\_\_\_

h. 17 is 8% of...

\_\_\_\_\_

i. 40 is 32% of...

\_\_\_\_\_

j. 9 is 6% of...

\_\_\_\_\_

k. 383 is 80% of...

\_\_\_\_\_

l. 846 is 360% of...

\_\_\_\_\_

# ANSWER KEY

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