

6.3 The Percent Proportion p.228

In a percent proportion, one ratio compares **part** of a quantity to the **whole** quantity.

The other ratio is the equivalent **percent written as a fraction** (the denominator is 100).

after solving, **round to the nearest tenth of a percent, if necessary.

$$\text{percent ratio} < \frac{x}{100} = \frac{\text{is}}{\text{of}} \rightarrow \begin{array}{l} \text{part} \\ \text{whole (total)} \end{array}$$

1. 22 is what percent of 115?

$$\frac{x}{100} = \frac{22}{115}$$

Looking for the percent

$$19.1\%$$

2. What number is 80% of 500?

$$\frac{80}{100} = \frac{x}{500}$$

Looking for the part (is)

$$400$$

3. 14.4 is 32% of what number?

$$\frac{32}{100} = \frac{14.4}{x}$$

Looking for the whole (of)

$$45$$

4. Find 12.5% of 88.

$$\frac{12.5}{100} = \frac{x}{88}$$

$$11$$

5. 19 is 62.5% of what number?

$$\frac{62.5}{100} = \frac{19}{x}$$

$$30.4$$

6. 17 is what percent of 68?

$$\frac{x}{100} = \frac{17}{68}$$

$$25\%$$

7. There are about 68 million owned dogs in the United States. 13.6 million were adopted. What percent were adopted?

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

$$\frac{x}{100} = \frac{13.6}{68}$$

$$\boxed{20\%}$$

8. A salesperson receives 3% commission on sales. The salesperson receives \$180 in commission. What is the amount of sales?

$$\frac{3}{100} = \frac{180}{x}$$

$$\boxed{\$6000}$$

Besides percent, all answers need a unit

9. A recent poll shows that 65% of adults are in favor of increased funding for education. The number of adults surveyed for the poll was 140. How many were in favor of increased spending?

$$\frac{65}{100} = \frac{x}{140}$$

$$\boxed{91 \text{ adults}}$$

10. On a recent round of golf, Antonio made par on 15 out of 18 holes. What percent did he make?

$$\frac{x}{100} = \frac{15}{18}$$

$$\boxed{83.3\%}$$

$$\boxed{83\frac{1}{3}\%}$$