

8.3 Solving Percent Problems

Finding a Percent of a Number

Proportion

Find 35% of 60.

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

$$\frac{?}{60} = \frac{35}{100}$$

$$\frac{x}{60} = \frac{35}{100}$$

$$x \cdot 100 = 60 \cdot 35 \text{ (Cross multiply)}$$

$$\frac{100x}{100} = \frac{2100}{100} \text{ (isolate the variable)}$$
$$x = 21$$

Multiply by a decimal.

1. Change the percent to a decimal.
2. Multiply the decimal by the original number.

Find 5% of 180

Write the percent as a decimal.

$$5\% = 0.05$$

Multiply.

$$0.05 \text{ of } 180 = 0.05 \cdot 180$$

$$= 9$$