

# The Percent Proportion

ANSWER  
KEY

To solve a percent problem using a proportion, set up a ratio showing part to the whole and a ratio showing the percent.

$$\frac{\text{part}}{\text{whole}} = \frac{\%}{100}$$

## Three types of problems:

### 1. When you are looking for the PERCENT:

What percent of 8 is 2?

$$\frac{2}{8} = \frac{x}{100}$$

$$2(100) = 8x$$
$$\frac{200}{8} = \frac{8x}{8}$$

$$25\%$$

$$25 = x$$

### 2. When you are looking for the PART:

3. What number is 20% of 64?

$$\frac{20}{100} = \frac{x}{64}$$

$$20(64) = 100x$$
$$\frac{1280}{100} = \frac{100x}{100}$$

$$12.8$$

$$12.8 = x$$

### 4. When you are looking for the WHOLE:

5. 5 is 30% of what number?

$$\frac{30}{100} = \frac{5}{x}$$

$$5(100) = 30x$$
$$\frac{500}{30} = \frac{30x}{30}$$

$$16.\bar{6}$$

$$16.\bar{6} = x$$

## Lesson 3 Skills Practice

### The Percent Proportion

Find each number. Round to the nearest tenth if necessary.

1. 50 is 20% of what number?

250

2. What percent of 20 is 4?

20%

3. What number is 70% of 250?

175

4. 10 is 5% of what number?

200

5. What number is 45% of 180?

81

6. 40% of what number is 82?

205

7. What percent of 90 is 36?

40%

8. 60 is 25% of what number?

240

9. What number is 32% of 1,000?

320

10. What percent of 125 is 5?

4%

11. 73 is 20% of what number?

365

12. 57% of 109 is what number?

62.1

13. What percent of 185 is 35?

18.9%

14. 25 is what percent of 365?

6.8%

15. 85% of 190 is what number?

161.5

16. 12.5 is 25% of what number?

50

17. What percent of 128 is 24?

18.8%

18. 5.25% of 170 is what number?

8.9

19. What is 82% of 230?

188.6

20. What percent of 49 is 7?

14.3%