9-7 Finding the Percent One Number Is of Another

Objective: To find the percent one number is of another.

Example 1   **a.** What percent of 25 is 18?

b. What percent of 80 is 130?

c. 0.8 is what percent of 2?

Solution   Write an equation. Let p = the percent.

a. What percent of 25 is 18?

$$p \cdot 25 = 18$$

$$25p = 18$$

$$\frac{25p}{25} = \frac{18}{25}$$

$$p = \frac{18}{25} = \frac{72}{100} = 72\%$$

So 72% of 25 is 18.

b. What percent of 80 is 130?

$$p \cdot 80 = 130$$

$$80p = 130$$

$$\frac{80p}{80} = \frac{130}{80}$$

$$p = \frac{13}{8} = 1.625 = 162.5\%$$

So 130 is 162.5% of 80.

c. 0.8 is what percent of 2?

$$0.8 = p \cdot 2$$

$$\frac{0.8}{2} = \frac{2p}{2}$$

$$p = 0.4 = 0.40 = 40\%$$

So 0.8 is 40% of 2.

Find each answer.

1. What percent of 56 is 49?

2. 7 is what percent of 20?

3. What percent of 9 is 4.5?

4. What percent of 18 is 27?

5. 48 is what percent of 300?

6. What percent of 100 is 75?

9-7 Finding the Percent One Number Is of Another *(continued)*

Find each answer.

7. What percent of 60 is 42?

8. 18 is what percent of 45?

9. 63 is what percent of 72?

10. What percent of 42 is 28?

11. What percent of 20 is 8?

12. 45 is what percent of 75?

13. 20 is what percent of 25?

14. What percent of 80 is 32?

15. What percent of 5 is 25?

16. What percent of 3.6 is 2.7?

17. 0.5 is what percent of 10?

18. What percent of 400 is 24?

19. What percent of 10 is 4?

20. 56 is what percent of 800?

Spiral Review

21. Replace the __?__ with >, <, or = : $\frac{4}{7}$ __?__ $\frac{4}{9}$ *(Lesson 7-6)*

22. What percent of 4 is 7? *(Lesson 9-7)*

23. Find the LCM: 24 and 36 *(Lesson 7-3)*

24. Evaluate $-2 + 3x^2$ when $x = -1$. *(Lesson 3-6)*