

Lesson 3.9 Finding Percents

Use these methods to find the percent one number is of another number:

50 is what percent of 80?

$$50 = n\% \times 80$$

$$50 = \frac{n}{100} \times 80 \quad 50 = \frac{80n}{100}$$

$$5000 = 80n$$

$$5000 \div 80 = 80n \div 80$$

$$62.5 = n$$

50 is 62.5% of 80.

$\frac{1}{4}$ is what percent of $\frac{5}{8}$?

$$\frac{1}{4} = n\% \times \frac{5}{8}$$

$$\frac{1}{4} = \frac{n}{100} \times \frac{5}{8} \quad \frac{1}{4} = \frac{5n}{800}$$

$$800 = 20n$$

$$800 \div 20 = 20n \div 20$$

$$40 = n$$

$\frac{1}{4}$ is 40% of $\frac{5}{8}$.

Complete the following.

a

1. 12 is _____% of 20.
2. 15 is _____% of 100.
3. 0.9 is _____% of 6.
4. 1.8 is _____% of 18.
5. 48 is _____% of 64.
6. 19 is _____% of 95.
7. 1.8 is _____% of 6.
8. 12 is _____% of 32.
9. $\frac{3}{8}$ is _____% of $\frac{3}{4}$.
10. 0.6 is _____% of 0.5.

b

- 0.9 is _____% of 4.5.
- 16 is _____% of 25.
- $\frac{1}{3}$ is _____% of $\frac{5}{6}$.
- 45 is _____% of 50.
- 16 is _____% of 40.
- 39 is _____% of 26.
- 5.6 is _____% of 2.8.
- 64 is _____% of 51.2.
- 1.4 is _____% of 5.6.
- $\frac{7}{10}$ is _____% of $\frac{7}{8}$.