

Review Exercise Set 28

Exercise 1: Determine whether the proportion is true or false.

$$\frac{4}{7} = \frac{12}{21}$$

Exercise 2: Determine whether the proportion is true or false.

$$\frac{300 \text{ feet}}{5 \text{ rolls}} = \frac{425 \text{ feet}}{7 \text{ rolls}}$$

Exercise 3: Solve. Round answer to the nearest hundredth.

$$\frac{n}{18} = \frac{8}{12}$$

Exercise 4: Solve. Round answer to the nearest hundredth.

$$\frac{n}{15} = \frac{7}{4}$$

Exercise 5: Solve. Round answer to the nearest hundredth.

A truck travels 64.6 miles on 4 gallons of gas. How far can the truck travel on 10 gallons of gas?

Review Exercise Set 28 Answer Key

Exercise 1: Determine whether the proportion is true or false.

$$\frac{4}{7} = \frac{12}{21}$$
$$7 \times 12 = 4 \times 21$$
$$84 = 84$$

True

Both sides of the equals sign are the same so the proportion is true.

Exercise 2: Determine whether the proportion is true or false.

$$\frac{300 \text{ feet}}{5 \text{ rolls}} = \frac{425 \text{ feet}}{7 \text{ rolls}}$$
$$5 \times 425 = 300 \times 7$$
$$2125 = 2100$$

False

Both sides of the equals sign are not the same so the proportion is false.

Exercise 3: Solve. Round answer to the nearest hundredth.

$$\frac{n}{18} = \frac{8}{12}$$
$$18 \times 8 = n \times 12$$
$$144 = 12n$$
$$\frac{144}{12} = \frac{12n}{12}$$
$$12 = n$$

Exercise 4: Solve. Round answer to the nearest hundredth.

$$\begin{aligned}\frac{n}{15} &= \frac{7}{4} \\ 15 \times 7 &= n \times 4 \\ 105 &= 4n \\ \frac{105}{4} &= \frac{4n}{4} \\ 26.25 &= n\end{aligned}$$

Exercise 5: Solve. Round answer to the nearest hundredth.

A truck travels 64.6 miles on 4 gallons of gas. How far can the truck travel on 10 gallons of gas?

Let n = the distance traveled on 10 gallons of gas

$$\begin{aligned}\frac{64.6}{4} &= \frac{n}{10} \\ 4 \times n &= 64.6 \times 10 \\ 4n &= 646 \\ \frac{4n}{4} &= \frac{646}{4} \\ n &= 161.5\end{aligned}$$

The truck would be able to travel 161.5 miles on 10 gallons of gas.