

## Proportional Relationship Worksheets

1. Wesley walks at a constant speed from his house to school 1.5 miles away. It took him 25 minutes to get to school.

a) What fraction represents his constant speed,  $C$ ?

b) You want to know how many miles he has walked after 15 minutes. Let  $y$  represent the distance he traveled after 15 minutes of walking at the given constant speed. Write a fraction that represents the constant speed,  $C$ , in terms of  $y$ .

c) Write the fractions from parts (a) and (b) as a proportion, and solve to find how many miles Wesley walked after 15 minutes.

d) Let  $y$  be the distance in miles that Wesley traveled after  $x$  minutes. Write a linear equation in two variables that represents how many miles Wesley walked after  $x$  minutes.

## Proportional Relationship Worksheets

1. Wesley walks at a constant speed from his house to school 1.5 miles away. It took him 25 minutes to get to school.

a) What fraction represents his constant speed,  $C$ ?

$$\frac{1.5}{25} = C$$

b) You want to know how many miles he has walked after 15 minutes. Let  $y$  represent the distance he traveled after 15 minutes of walking at the given constant speed. Write a fraction that represents the constant speed,  $C$ , in terms of  $y$ .

$$\frac{y}{15} = C$$

c) Write the fractions from parts (a) and (b) as a proportion, and solve to find how many miles Wesley walked after 15 minutes.

$$\begin{aligned}\frac{1.5}{25} &= \frac{y}{15} \\ 25y &= 22.5 \\ \frac{25}{25}y &= \frac{22.5}{25} \\ y &= 0.9\end{aligned}$$

*Wesley walks 0.9 miles in 15 minutes.*

d) Let  $y$  be the distance in miles that Wesley traveled after  $x$  minutes. Write a linear equation in two variables that represents how many miles Wesley walked after  $x$  minutes.

$$\begin{aligned}\frac{1.5}{25} &= \frac{y}{x} \\ 25y &= 1.5x \\ \frac{25}{25}y &= \frac{1.5}{25}x \\ y &= \frac{1.5}{25}x\end{aligned}$$

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