

Proportional Relationship Worksheets

1. Darla drives at a constant speed of 45 miles per hour.

a) If she drives for y miles and it takes her x hours, write the two-variable equation to represent the number of miles Darla can drive in x hours.

b) Darla plans to drive to the market 14 miles from her house, then to the post office 3 miles from the market, and then return home, which is 15 miles from the post office. Assuming she drives at a constant speed the entire time, how long will it take her to run her errands and get back home? Round your answer to the hundredths place.

2. The equation that represents how many miles, y , Dave travels after x hours is $y = 50x + 15$. Use the equation to complete the table below.

x (hours)	Linear Equation: $y = 50x + 15$	y (miles)
1	$y = 50(1) + 15$	65
2		
3		
3.5		
4.1		

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Proportional Relationship Worksheets

1. Darla drives at a constant speed of 45 miles per hour.

a) If she drives for y miles and it takes her x hours, write the two-variable equation to represent the number of miles Darla can drive in x hours.

$$\frac{y}{x} = 45$$
$$y = 45x$$

b) Darla plans to drive to the market 14 miles from her house, then to the post office 3 miles from the market, and then return home, which is 15 miles from the post office. Assuming she drives at a constant speed the entire time, how long will it take her to run her errands and get back home? Round your answer to the hundredths place.

Altogether, Darla plans to drive 32 miles because $14 + 3 + 15 = 32$.

$$32 = 45x$$

$$\frac{32}{45} = \frac{45}{45}x$$

$$0.71111 \dots = x$$

It will take Darla about 0.71 hours to run her errands and get back home.

2. The equation that represents how many miles, y , Dave travels after x hours is $y = 50x + 15$. Use the equation to complete the table below.

x (hours)	Linear Equation: $y = 50x + 15$	y (miles)
1	$y = 50(1) + 15$	65
2	$y = 50(2) + 15$	115
3	$y = 50(3) + 15$	165
3.5	$y = 50(3.5) + 15$	190
4.1	$y = 50(4.1) + 15$	220

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