

Proportion Worksheets (Tables)

1. The table below shows the relationship between the amount of candy bought (in pounds) and the total cost of the candy (in dollars). Determine if y is proportional to x . Justify your answer

x Amount of Candy (pounds)	y Cost (dollars)
5	10
4	8
6	12
8	16
10	20

2. Randy is driving from New Jersey to Florida. Every time Randy stops for gas, he records the distance he traveled in miles and the total number of gallons he used. Assume that the number of miles driven is proportional to the number of gallons consumed in order to complete the table.

Gallons Consumed	2	4		8	10	12
Miles Driven	54		189	216		

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$$\frac{10}{5} = 2 \quad \frac{8}{4} = 2 \quad \frac{12}{6} = 2 \quad \frac{16}{8} = 2 \quad \frac{20}{10} = 2$$

y (cost) is proportional to x (amount of candy) because all of the values of the ratios comparing cost to pounds are equivalent. All of the values of the ratios are equal to 2. Therefore, every measure of x (amount of candy) can be multiplied by the number 2 to get each corresponding measure of y (cost).

2. Randy is driving from New Jersey to Florida. Every time Randy stops for gas, he records the distance he traveled in miles and the total number of gallons he used. Assume that the number of miles driven is proportional to the number of gallons consumed in order to complete the table.

Gallons Consumed	2	4	7	8	10	12
Miles Driven	54	108	189	216	270	324

Since the quantities are proportional, then every ratio comparing miles driven to gallons consumed must be equal. Using the given values for each quantity, the value of the ratio is

$$\frac{54}{2} = 27$$

$$\frac{216}{8} = 27$$

If the number of gallons consumed is given and the number of miles driven is the unknown, then multiply the number of gallons consumed by 27 to determine the number of miles driven.

$$4(27) = 108$$

$$10(27) = 270$$

$$12(27) = 324$$

If the number of miles driven is given and the number of gallons consumed is the unknown, then divide the number of miles driven by 27 to determine the number of gallons consumed.

$$\frac{189}{27} = 7$$

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