

8.4 Comparing Proportions

Corrective Assignment

NAME: _____

DATE: _____

Determine if the tables are proportional. If they are, write an equation.

1.

<i>x</i>	0	2	12	10
<i>y</i>	0	5	30	25

Is the relationship proportional?

If so, write the equation:

2.

<i>x</i>	0	4	12	16
<i>y</i>	0	3	9	14

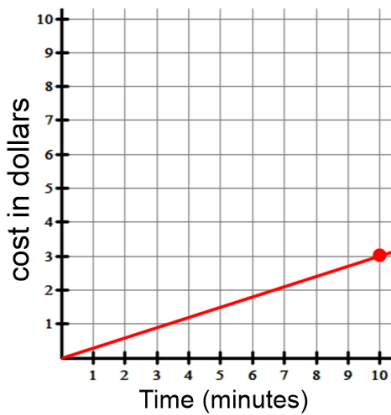
Is the relationship proportional?

If so, write the equation:

The following are proportional. Compare the relationships and answer the questions.

3. The companies below offer snow removal services. Which company is cheaper?

Snow Go



Equation:

Blizzard

Charges 5 dollars every 15 minutes.

Equation:

a. How much will it cost for each company to work for 30 minutes? Use the equations.

Snow Go:

Blizzard:

b. How long would each company work for 60 dollars? Use the equations.

Snow Go:

Blizzard:

c. Which company is cheaper? Justify your answer.

The following are proportional. Compare the relationships and answer the questions.

4. Below are two competing Gas Stations. Which company sells gas for less?

Phil R Up

Gas (gallons)	Cost (\$)
2	5
4	10
6	15
8	20

Equation:

Top Off

$$c = 2.25g$$

Where c is the cost and g is # of gallons

a. How much would 12 gallons of gas cost at each station? Use the equations.

Phil R Up:

Top Off:

b. How much gas you could you get for \$40 at each station? Use the equations.

Phil R Up:

Top Off:

c. Which company is cheaper? Justify your answer.

ANSWERS TO 8.4 CORRECTIVE ASSIGNMENT

1. YES, $y = \frac{5}{2}x$ or $y = 2.5x$	2. NO																
<p>3.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> <p>Snow Go</p> $y = \frac{3}{10}x$ </td> <td style="width: 50%; padding: 5px;"> <p>Blizzard</p> $y = \frac{1}{3}x$ </td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;"> <p>a. \$9</p> </td> <td style="padding: 5px;"> <p>\$10</p> </td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;"> <p>b. 200 minutes</p> </td> <td style="padding: 5px;"> <p>180 minutes</p> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <p>c. Snow Go is cheaper.</p> <p>$k = 0.3$ means Snow Go charges 30 cents per minute.</p> <p>$k = 0.\bar{3}$ means Blizzard charges $33.\bar{3}$ cents per minute.</p> </td> </tr> </table>	<p>Snow Go</p> $y = \frac{3}{10}x$	<p>Blizzard</p> $y = \frac{1}{3}x$	<p>a. \$9</p>	<p>\$10</p>	<p>b. 200 minutes</p>	<p>180 minutes</p>	<p>c. Snow Go is cheaper.</p> <p>$k = 0.3$ means Snow Go charges 30 cents per minute.</p> <p>$k = 0.\bar{3}$ means Blizzard charges $33.\bar{3}$ cents per minute.</p>		<p>4.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> <p>Phil R Up</p> $y = \frac{5}{2}x$ </td> <td style="width: 50%; padding: 5px;"> <p>Top Off</p> $y = 2.25x$ </td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;"> <p>a. \$30</p> </td> <td style="padding: 5px;"> <p>\$27</p> </td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;"> <p>b. 16 gallons</p> </td> <td style="padding: 5px;"> <p>$17.\bar{7}$ gallons</p> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <p>c. Top Off is cheaper.</p> <p>$k = 2.5$ means Phil R Up charges \$2.50 per gallon.</p> <p>$k = 2.25$ means Top Off charges \$2.25 per gallon.</p> </td> </tr> </table>	<p>Phil R Up</p> $y = \frac{5}{2}x$	<p>Top Off</p> $y = 2.25x$	<p>a. \$30</p>	<p>\$27</p>	<p>b. 16 gallons</p>	<p>$17.\bar{7}$ gallons</p>	<p>c. Top Off is cheaper.</p> <p>$k = 2.5$ means Phil R Up charges \$2.50 per gallon.</p> <p>$k = 2.25$ means Top Off charges \$2.25 per gallon.</p>	
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