





Proportional Relationships

NAME: _____

Problem	Ratio in Words	Set up Proportion & Solve	Your Solution (In a complete sentence)
<p>EXAMPLE:</p> <p>DVD's cost \$12 for 4. How much do 16 DVD's cost?</p>	$\frac{\text{money}}{\text{DVD's}}$	$\frac{12}{4} = \frac{x}{16}$ $\times 4$ $x = 12 \cdot 4 = 48$	Sixteen DVD's cost \$48.
<p>1) You need 4 pounds of beef to make 14 tacos. How many tacos can you make with 6 pounds of beef?</p>	$\frac{\text{lbs of beef}}{\text{tacos}}$	$\frac{4}{14} = \frac{6}{x}$ <p>Simplify:</p> $\frac{2}{7} \stackrel{\times 3}{=} \frac{6}{x} \quad x=21$	6 pounds of beef will make <u>21</u> tacos!
<p>2) It takes you 4 hours to drive 300 miles. How far can you drive in 10 hours?</p>	$\frac{\text{hours}}{\text{miles}}$	$\frac{4}{300} = \frac{10}{x}$ $4x = 3,000$ $x = 750$	I can drive <u>750</u> miles in 10 hours.
<p>3) Luz sent 120 texts in the last 12 days. At that rate, how many texts would she send in 30 days?</p>	$\frac{\text{texts}}{\text{days}}$	$\frac{120}{12} = \frac{x}{30}$ <p>Simplify:</p> $\frac{10 \times 30}{1 \times 30} = \frac{x}{30} \quad x=300$	Luz would send <u>300</u> texts in <u>30</u> days.
<p>4) A recipe for M&M's cookies requires 2 cups of M&M's to make 12 cookies. How many cookies can be made with 7 cups of M&M's?</p>	$\frac{\text{cups}}{\text{cookies}}$	$\frac{2}{12} = \frac{7}{x}$ $\times 6 \quad \times 6$ $7 \cdot 6 = 42$	<u>42</u> cookies can be made with 7 cups of m&m's.
<p>5) For every 30 points his team scored, Christian scored 8. If he scored 20 points, how many points did his team score?</p>	$\frac{\text{team}}{\text{Christian}}$	$\frac{30}{8} = \frac{x}{20}$ <p>Simplify:</p> $\frac{15 \times 5}{4 \times 5} = \frac{x}{20} \quad x=75$	If Christian scored 20 points his team scored <u>75</u> .

6) The ratio of boys to girls in a class is 5 to 4. If there are 15 boys, how many girls are there?	$\frac{\text{boys}}{\text{girls}}$	$\frac{5}{4} = \frac{15}{x}$ $x = 12$	There are <u>12</u> girls in the class.
7) The ratio of adult tickets to child tickets sold at a movie theater is 9 to 2. If 80 children attended a movie on Sunday, how many adults attended?	$\frac{\text{adult}}{\text{child}}$	$\frac{9}{2} = \frac{x}{80}$ $x = 360$	360 adults attended the movie on Sunday.
8) A recipe calls for 6 pickles to make 8 servings of pickle pie. If you need to make 36 servings, how many pickles do you need?	$\frac{\text{pickles}}{\text{servings}}$	$\frac{6}{8} = \frac{x}{36}$ $8x = 216$ $x = 27$	You need <u>27</u> pickles to make 36 servings.
9) Ariya spent \$6 on 4 giant Reese's PB Cups. How much would it cost for her to buy 30 giant Reese's PB Cups?	$\frac{\$}{\text{Reese's}}$	$\frac{6}{4} = \frac{x}{30}$ $4x = 180$ $x = 45$	It would cost Ariya <u>\$45</u> to buy 30 Reese's.
10) Donald Duck drove 300 km in 4 hours. At this rate, how far could he drive in 5 hours?	$\frac{\text{km}}{\text{hours}}$	$\frac{300}{4} = \frac{x}{5}$ $4x = 1,500$ $x = 375$	Donald Duck could drive <u>375</u> km in 5 hours.

Rate Yourself! (Circle one of the emojis below.)

 <p>I get it and I can teach my friends!</p>	 <p>I get it and can explain it! I only know the way you taught me.</p>	 <p>I kind of- sort of get it. I can do the easy parts, but need help to do the rest.</p>	 <p>I DON'T GET IT! Even with help, I am having trouble.</p>
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