Unit 1: Ratio, Rate, Proportion
Review

1.   Currently there are 42 cats and 18 dogs at the Buddy Foundation animal shelter. Write a ratio of dogs to total.

_____

2.   In my candy jar are a number of candies left from Halloween. What combination of candy would represent the ratio 1:2?

Reese's Peanut Butter Cup	Butterfingers	Hershey's Chocolate	Snickers
9	3	6	18

_____

3.   Seven 2-liter bottles of soda cost $9.80. If each 2-liter bottle cost the same, how much did <u>one</u> 2-liter bottle cost?

_____

4.   In his first 14 games, Kris Bryant had 42 hits. How many hits per game did Bryant make?

_____

        If he continued this hitting streak, at this rate, how many hits would he have after 161 games?

_____

5.   A pre-paid phone card costs $3 for $\frac{2}{3}$ hour. Another pre-paid card costs $9 to talk for $2\frac{1}{4}$ hours. Which is a better buy?

6. Which dishwashing soap is the best buy? **Show proof**.

    $6.71 for 9 ounces $5.60 for 7.25 ounces $7.44 for 10.5 ounces

7. Each store is selling delicious Flintstone Vitamins.

    Walmart: 40 vitamins for $14.56   Target: 75 vitamins for $26.08

a. Which store has a better deal? _____

b. Justify your answer. _____

_____

In problems 7 and 8, determine whether or not each pair of ratios is proportional. Show evidence.

8. $\dfrac{28}{72} = \dfrac{15}{27}$ 9. $\dfrac{16}{28} = \dfrac{20}{35}$

10. For the first 165 days of the year in San Diego, 120 of them had a temperature of 80°. At this rate, how many days will be 80° after 363 days?

11. The table below shows the number of rooms painted in 4, 6 and 10 hours. Does the table show a proportional relationship? Explain why or why not.

hours	6	9	15
rooms painted	4	6	10

12. Gia is a nail technician who paints finger and toe nails. Saturday, she worked on 15 customers in 6 hours. Make a table to show the proportional relationship of Gia working 8 and 2 hours.

Hours (x)				
Customers (y)				

$k=$ _____   Unit Rate: _____   Equation: _____

If Gia had 20 customers, how long did she work? _____

If Gia worked 15 hours on the weekend, how many customers did she have? _____

13. Gia worked on Saturday. She worked on 14 customers making $301. Make a table to show the proportional relationship of Gia working on 8 and 2 customers.

Customer (x)				
Cost (y)				

$k=$ _____   Unit Rate: _____   Equation: _____

If Gia had 18 customers, how much did she make? _____

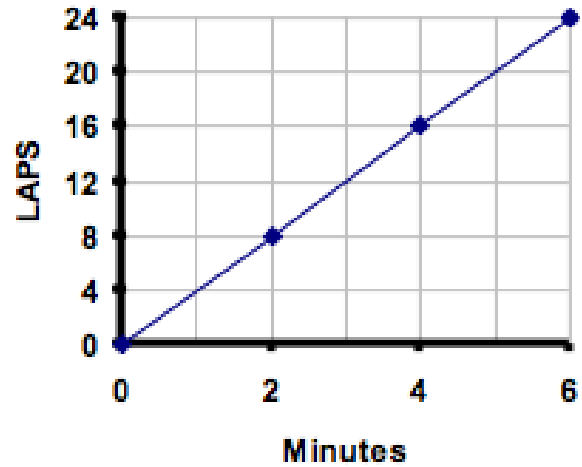If Gia made $451.50 on the weekend, how many customers did she have? _____
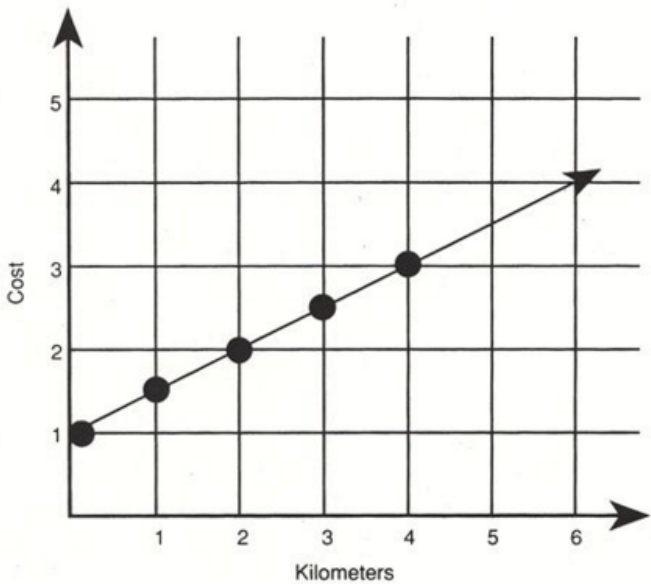
12.

k= _____

Equation: _____

Unit rate: _____

If Jack swam for 20 minutes, how many laps did he swim?

_____

How long did he swim if he swam 180 laps? _____

Jack

13.

Proportional? _____

If yes, write the equation: _____

If no, state why: _____

_____

14. Find the value of x.

$x =$ _____

9 cm

22.8 cm

15.2 cm

x