

Ratios and Proportions Unit Test Practice
Standards: 7.RP.1, 7.RP.2a-d, 7.RP.3

1. Fill in the blank to make an equivalent ratio.

$$8 : \underline{\quad} = 24 : 36$$

2. John mowed 11 lawns and earned \$206.25.
How much did he make per lawn?

3. In Tyra's class the ratio of boys to girls is 15 to 8. If there are 16 girls in her class then how many boys are there?

4. Best buy! At Target you can buy a pack of 26 erasers for \$3.54 At Shopko you can buy a pack of 35 erasers for \$4.15. **Calculate the unit rate for each option and determine which one is the best buy.**

5. According to the table below how many cookies can be made with 1 cup of chocolate chips?

Cups of chocolate chips	Number cookies
3	15
6	30
9	45

6. Complete the ratio table.

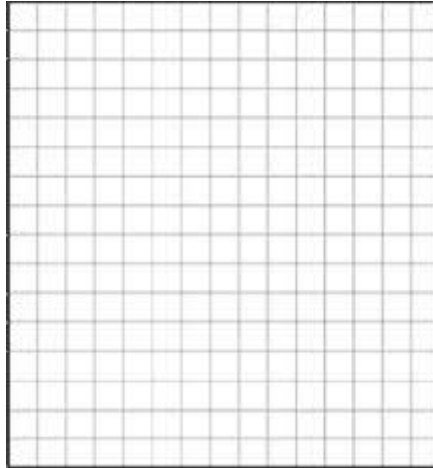
Milk in ounces	Amount of Oatmeal in Ounces
4	$3\frac{1}{5}$
1	
	$5\frac{1}{10}$

(Hint: What is the constant of proportionality? How much oatmeal per one ounce of milk?)

7. Valerie sculpts vases out of clay. The table below shows the relationship between the number of vases she sculpts and the amount of time in hours needed to make the vases.

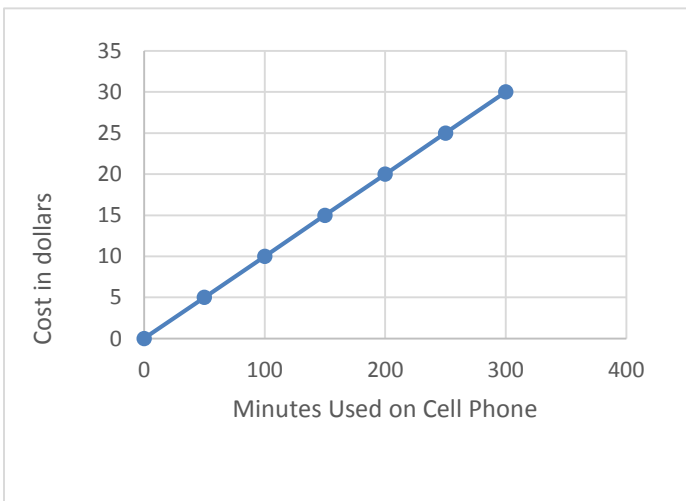
Time spent in hours (x)	5	15	65
Number of vases sculpted (y)	4	12	52

- a) Use the table above to create a graph that represents the relationship between the number of vases she sculpts and the amount of time in hours needed to make the vases. **MAKE SURE TO LABEL!**



- b) Is the number of vases sculpted proportional to the time spent sculpting?
- c) Write an equation that represents the number of vases sculpted and the time spent sculpting.
- d) How many vases could Valerie complete in 45 hours?

8. The graph below represents the cost of using different amounts of minutes on a particular cell phone.



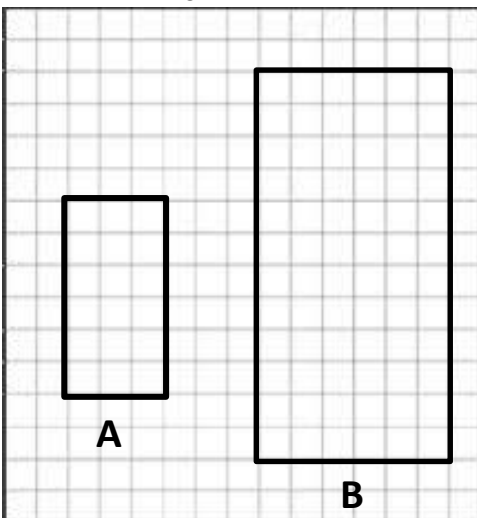
- a. What does the ordered pair (200, 20) represent?
- b. How much would it cost to use 500 minutes?

9. Mitch ran $\frac{5}{2}$ of a mile in $\frac{1}{3}$ of an hour. How many miles can he run per hour?
10. All shoes are $\frac{1}{7}$ off of the original price. How much would a pair of shoes cost that were originally \$35.00?
11. A vacuum sales person receives a commission of $\frac{1}{16}$ of his total sales each month. What would the commission be if his total sales for the month was \$15,432?
12. At Kay's Candy they are selling Thanksgiving boxes of chocolate. Before they discount the boxes of chocolate they decided to mark-up their prices. They first mark-up the price of the boxes by $\frac{1}{8}$ of the original cost of \$26.00. Then Kay's Candy sold the boxes at a discount of $\frac{1}{5}$ off the new price. How much profit did they make with the "Kay's Candy" discount?

Make sure to show your work.

- a. Price after mark-up:
- b. Price after discount:
- c. Kay's Candy profit:

13. Use the diagram below to answer the following questions.



- a. Scale factor of image A to image B: _____
- b. Actual Area of image A: _____
- c. Scale Drawing Area (image B): _____
- d. Ratio of Scale Drawing Area to Actual Area: _____