

Agenda:

- 1) Bell Ringer: page 75
- 2) Share answers to lesson 10 with 3:00 p. 82-83
- 3) Review for Mid-Unit Test
- 4) Homework: Review pgs 87-89- Study Problem Set #4 due Friday

Sep 7-12:49 PM

x	y
gal.	sq. ft
2	400
1	200
3	600

sq ft	gal
400	2
600	3

2 = 400
3 = 600
→ .05

Sep 30-10:26 AM

x # of shirts	y \$
1	22
2	44
5	110
8	176

x days	y cost
6,375	
4,250	

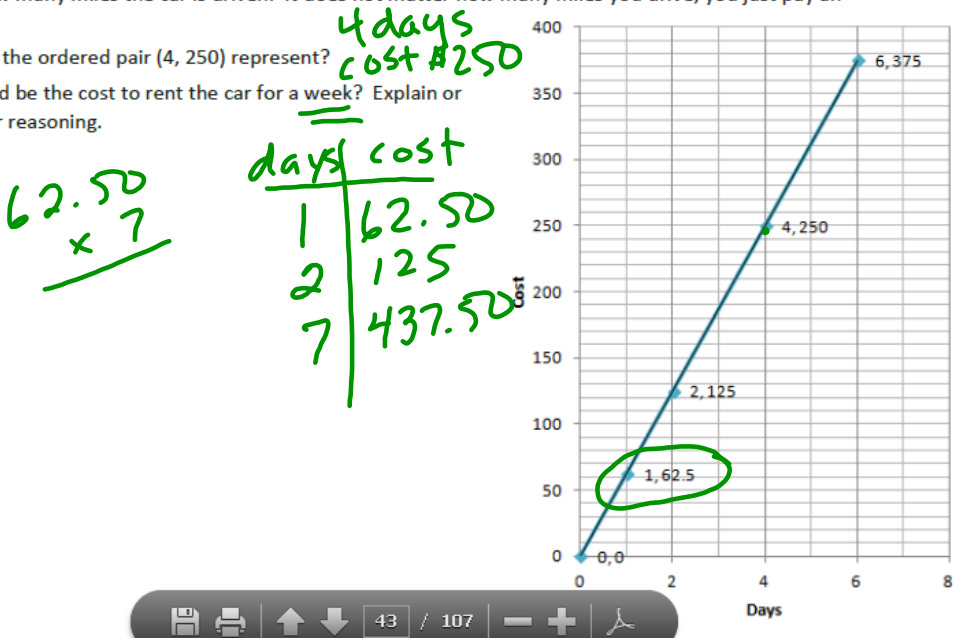
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mix	gal
$\frac{1}{4}$	$\frac{1}{2}$
$\frac{2}{4}$	1
$\frac{3}{4}$	$1\frac{1}{2}$
1	2
?	6

Sep 30-9:30 AM

3. The following graph represents the total cost of renting a car. The cost of renting a car is a fixed amount each day regardless of how many miles the car is driven. It does not matter how many miles you drive; you just pay an amount per day.

- a. What does the ordered pair (4, 250) represent?
- b. What would be the cost to rent the car for a week? Explain or model your reasoning.



Sep 19-10:11 AM

4. Jackie is making a snack mix for a party. She is using M&M's and peanuts. The table below shows how many packages of M&M's she needs to how many cans of peanuts she needs to make the mix.

- a. What points MUST be on the graph for the number of cans of peanuts to be proportional to the packages of M&M's? Explain why.
- b. Write an equation to represent this relationship.
- c. Describe the ordered pair (12, 24) in the context of the problem.

Packages of M&M's		Cans of Peanuts
0		0
1	x 2	2
2	x 2	4
3	x 2	6
4	x 2	8

Handwritten notes:

$$(0,0) \quad (1,2)$$
$$y = 2x$$
$$c = 2p$$
$$2m = p$$

Sep 19-10:11 AM

5. The following table shows the amount of candy and price paid.

Ind x
Dep y

Amount of Candy (pounds)	2	3	5
Cost (Dollars)	5	7.5	12.5

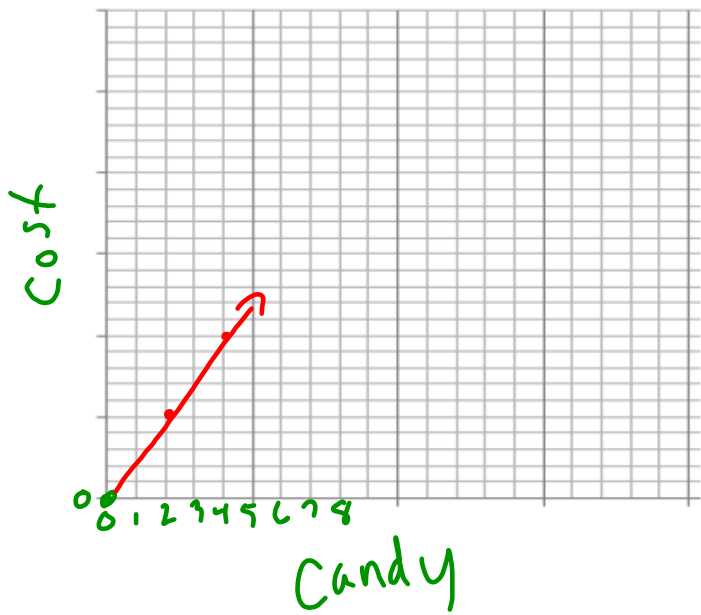
$5:2$ $7.5:3$ $12.5:5?$
 60

- a. Is the cost of candy proportional to the amount of candy? $yes \times 2.5$
- b. Write an equation to illustrate the relationship between the amount of candy and the cost. $y = 2.5x$
- c. Using the equation, predict how much it will cost for 12 pounds of candy? $\$30$
- d. What is the maximum amount of candy you can buy with \$60?

24 pounds $d = 2.5C$
 $y = 2.5x$

Sep 19-10:11 AM

e. Graph the relationship.



Sep 19-10:11 AM

Ratio and Proportions Mid-Unit Test Review

Name _____

You must show all work to get full credit.

1. Ethan threw a party and invited 10 boys and 8 girls.
Write the ratio of girls to boys invited in simplest form.

1. _____

2. Mrs. Fibonnacci purchased 5 pencils for \$2.99. To the nearest cent,
what is the cost of one pencil?

2. _____

Sep 24-8:43 AM

3. A Honda Accord can travel 280 miles on 8 gallons of gas. A Toyota Camry can travel 297 miles on 9 gallons of gas. Which car gets better gas mileage? Explain how you chose your answer.

4. Santa's sleigh drives 3200 miles in 12 hours. What is its speed in miles per hour?

4. _____

Sep 24-8:43 AM

5. Tell whether the ratios are equivalent.

Show your work and place the symbol = or \neq in the box.

A) $\frac{32}{6.4}$ $\boxed{=}$ $\frac{8.2}{1.64}$

$32 \div 6.4$
5

$8.2 \div 1.64$
5

B) $\frac{24}{12.3}$ $\boxed{}$ $\frac{36}{18.2}$

Sep 24-8:43 AM

6) Tayler and Jenna are planning the prom. The number of guests attending and the cost are represented in the table below.

⊕				
Number of guests	2	4	6	8
Total Cost	50	100	150	200

a) Find the constant of proportionality. _____

b) What does it mean in this situation?

c) Write an equation relating cost to the number of guests.

Sep 24-8:43 AM

7) Are junk emails proportional to total emails? Explain why or why not.

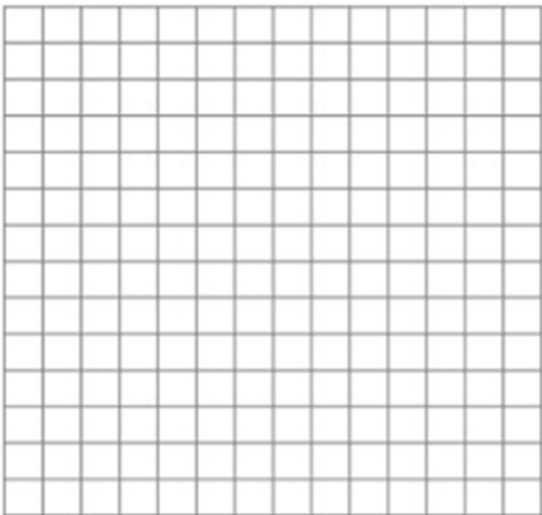
Junk E-mails	10	20	30	40
Total E-mails	15	30	45	60

Sep 24-8:43 AM

8) The Dry Cleaners charges \$13.00 to clean and press two jackets.
a) Draw the graph of the proportional relationship.

b) What is the unit rate?

c) Write the equation of the graph.



Sep 24-8:43 AM

9. Joe rents a car at a rate of \$21 per day.
Complete the table showing the cost for a
given number of days.

equation

$$y = 21x$$

$$\begin{array}{l} 21 \div 1 \\ 42 \div 2 \\ 63 \div 3 \end{array}$$

Number of days	Rental Cost
1	21
2	42
3	63
4	
5	

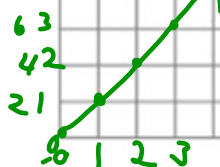
Sep 24-8:43 AM

b) Graph the relationship on the grid.
Be sure to label the axes.

c) Is this a proportional relationship?
Explain your answer.

d) What does the point
(2, 42) represent?

x	y
1	21
2	42
3	63



e) Write the equation for the relation.

Sep 24-8:44 AM

f) If he rents the car for 15 days, what will the cost be?

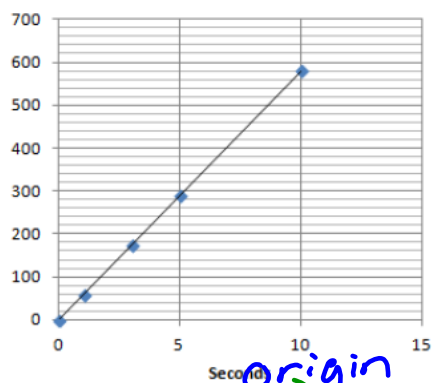
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Sep 9-8:21 AM

Problem Set

1. The graph to the right shows the distance (in ft.) ran by a Jaguar.

- What does the point (5, 280) represent in the context of the situation?
5 sec to Run 280 ft
- What does the point (3, 174) represent in the context of the situation?
3 sec to Run 174 ft
- Is the distance run by the Jaguar proportional to the time?
Explain why or why not.
- Write an equation to represent the distance ran by the Jaguar.
Explain or model your reasoning.



2. Championship T-shirts sell for \$22 each.

- What point(s) MUST be on the graph for the quantities to be proportional to each other?
(1, 22)
- What does the ordered pair (5, 110) represent in the context of this problem?
(0,0) origin
- How many T-shirts were sold if you spent a total of \$88?
5 shirts sold for \$110

$$\frac{88}{22} = 4$$

Sep 19-10:11 AM