



## Unit Rates & Proportional Relationships

Today's Learning Targets:

5.12 - I know the unit rate of a proportional relationship is the slope of the graph.

5.13 - I can compare the unit rates of a proportional relationship from a graph, a table, or equation.

8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.

Unit Rate: \_\_\_\_\_

ex. 300 miles/ 10 gallons =  $\frac{1}{1}$  gal

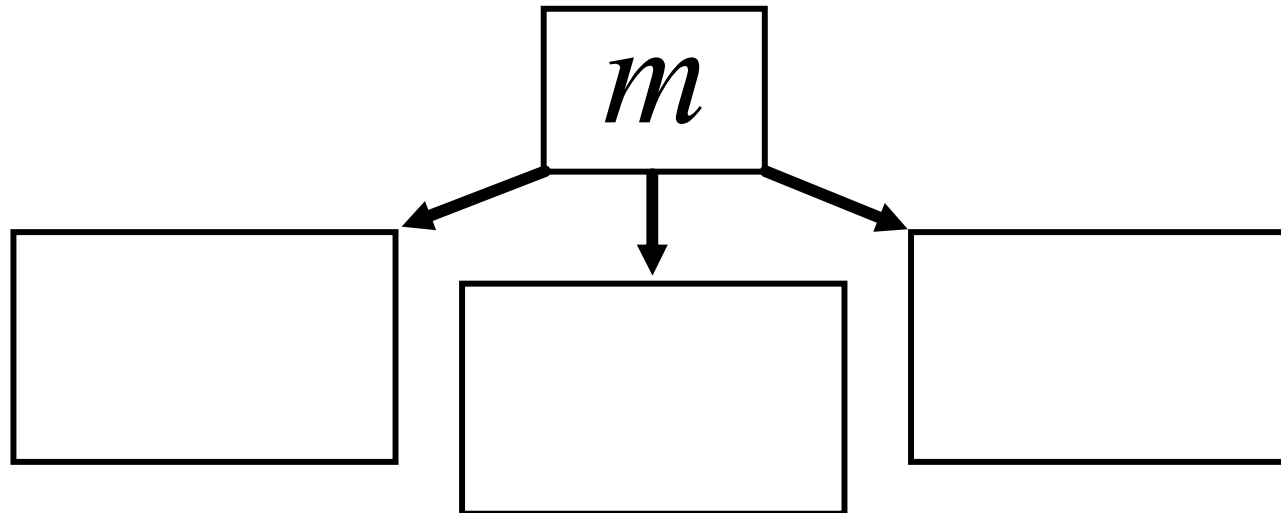
Proportional Relationship: \_\_\_\_\_

ex. 50 miles on 3 gallons  
100 miles on 6 gallons  
150 miles on 9 gallons  $\left. \begin{array}{l} & \\ & \\ & \end{array} \right\} = \frac{1}{1}$  gal

Proportional Relationship: Also called

- Direct Variation:  $y = mx$

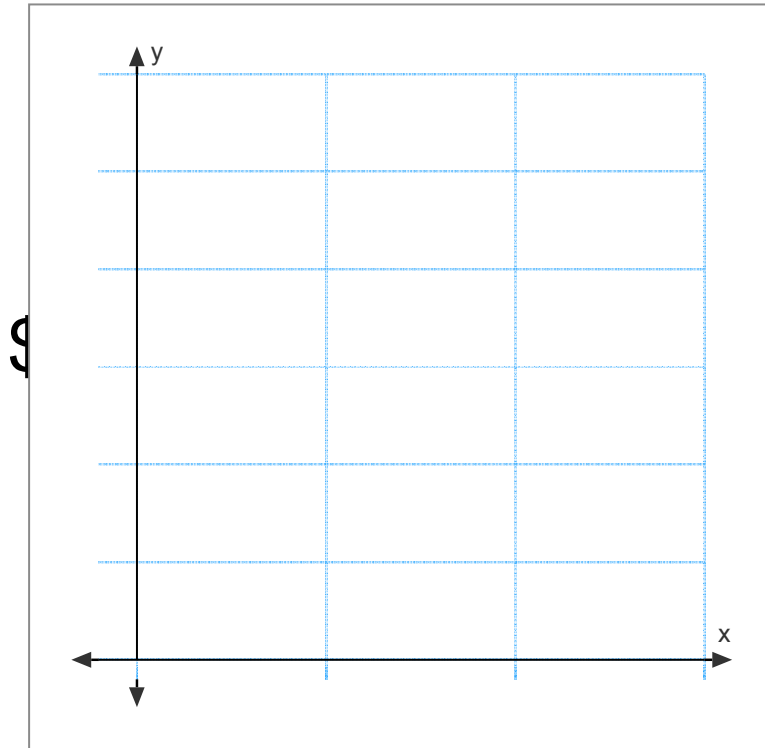
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Unit 5 - 5.12

Five Gala apples cost \$2.00.

# of Apples	0	5	10	15
Cost(\$)	0			



Apples

Find slope with rise/run

Write a direct variation.

Tess rides her bike at 12 mph.

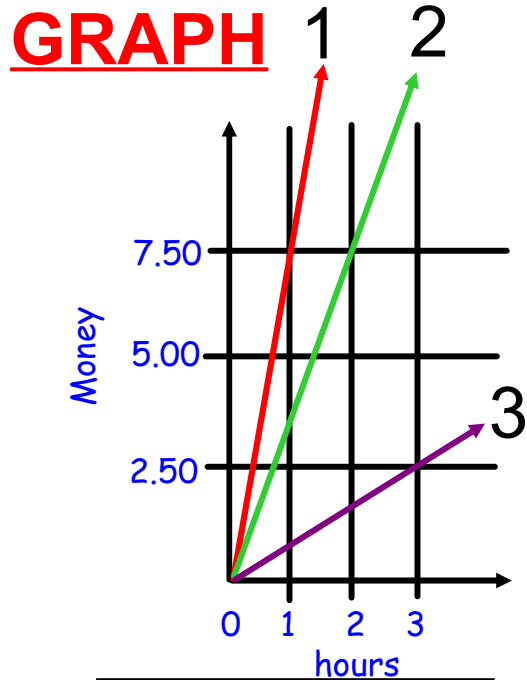
# of hours riding	0	1	2	3
Distance traveled (miles)				

What is the unit rate?

Find the slope by using two of the ordered pairs.

What do you notice?

# Proportional Relationships - Expressed 3 ways



Job 1:
Job 2:
Job 3:

**EQUATION**

$$y = 5.50x$$

y = money earned  
x = hours worked

Equation Job?
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**TABLE**

hrs	3	7	15
\$	17.25	40.25	86.25

Table Job?
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