

Analyzing Relations Worksheet #2

Name: _____

Date: _____ Hour: _____

Directions: Determine the rate of change for each function and answer the question that follows.

Linear Relationship

Rate of Change

a. $y = 2x - 15$ in meters per second

Rate of Change: _____

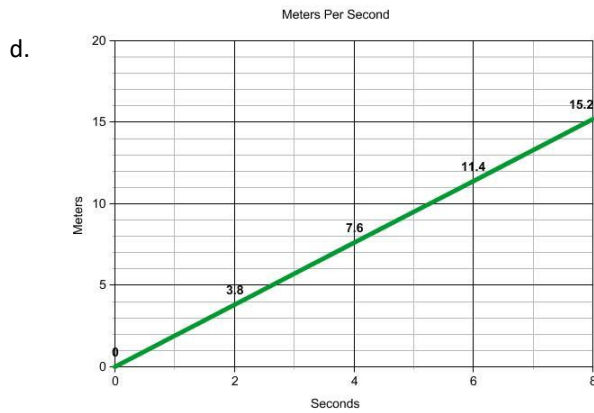
b. 21 meters in 10 seconds

Rate of Change: _____

c.

Time (seconds)	0	2	4	6
Distance (meters)	9	13.4	17.8	22.2

Rate of Change: _____



Rate of Change: _____

WHICH LINEAR RELATIONSHIP HAS THE GREATEST RATE OF CHANGE? _____

Directions: Determine the initial value for each function and answer the question that follows.

Linear Relationship

Initial Value

a. $y = 8x$ in dollars per salmon steak

Initial Value: _____

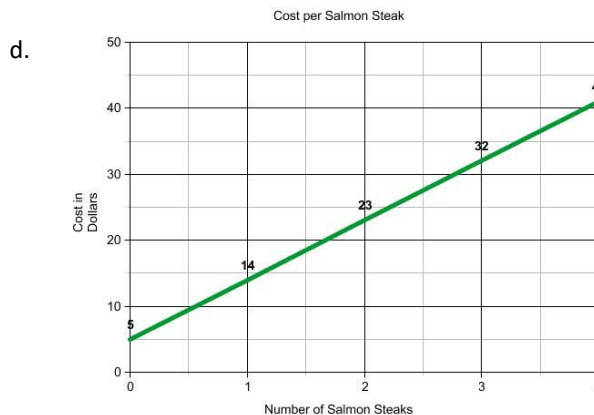
b. \$16.50 for 2 salmon steaks

Initial Value: _____

c.

# of Salmon Steaks	0	3	6	9
Cost (\$)	9	32.25	55.50	78.75

Initial Value: _____

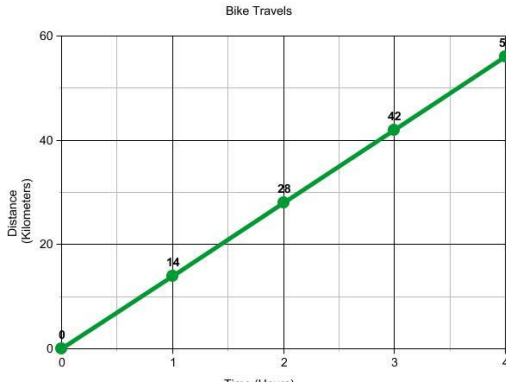


Initial Value: _____

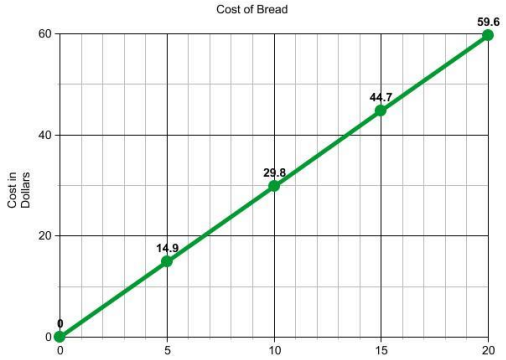
WHICH LINEAR RELATIONSHIP HAS THE GREATEST INITIAL VALUE? _____

What is unit rate?

Directions: Determine the unit rate for each and then rank the following proportional relationships in order from 1 (highest rate of change) to 4 (lowest rate of change):

	<u>Proportional Relationship</u>	<u>Unit Rate</u>	<u>Order</u>										
a.	$y = 13x$ for kilometers per hour	Unit Rate: _____	_____										
b.	Teddy rides his bike 50 kilometers in 4 hours	Unit Rate: _____	_____										
c.	<table border="1" style="border-collapse: collapse; text-align: center; width: 100%;"> <tr> <th style="padding: 2px;">Time (hrs)</th> <td>0</td> <td>3</td> <td>6</td> <td>9</td> </tr> <tr> <th style="padding: 2px;">Distance (km)</th> <td>0</td> <td>36</td> <td>72</td> <td>108</td> </tr> </table>	Time (hrs)	0	3	6	9	Distance (km)	0	36	72	108	Unit Rate: _____	_____
Time (hrs)	0	3	6	9									
Distance (km)	0	36	72	108									
d.		Unit Rate: _____	_____										

Directions: Determine the unit rate for each and then rank the following proportional relationships in order from 1 (highest rate of change) to 4 (lowest rate of change):

	<u>Proportional Relationship</u>	<u>Unit Rate</u>	<u>Order</u>										
a.	$y = 2.99x$ for loaves of bread in dollars per loaf	Unit Rate: _____	_____										
b.	Edith charges \$8.67 for 3 loaves of bread	Unit Rate: _____	_____										
c.	<table border="1" style="border-collapse: collapse; text-align: center; width: 100%;"> <tr> <th style="padding: 2px;"># of Loaves</th> <td>0</td> <td>2</td> <td>4</td> <td>6</td> </tr> <tr> <th style="padding: 2px;">Cost of Bread (\$)</th> <td>0</td> <td>5.90</td> <td>11.80</td> <td>17.70</td> </tr> </table>	# of Loaves	0	2	4	6	Cost of Bread (\$)	0	5.90	11.80	17.70	Unit Rate: _____	_____
# of Loaves	0	2	4	6									
Cost of Bread (\$)	0	5.90	11.80	17.70									
d.		Unit Rate: _____	_____										