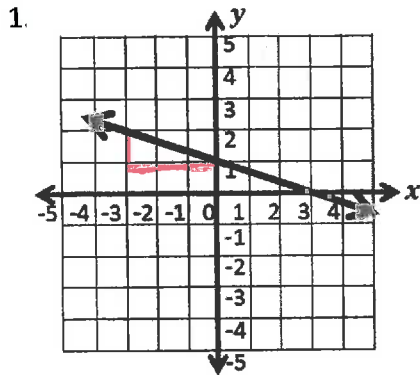


Name: Answer Key

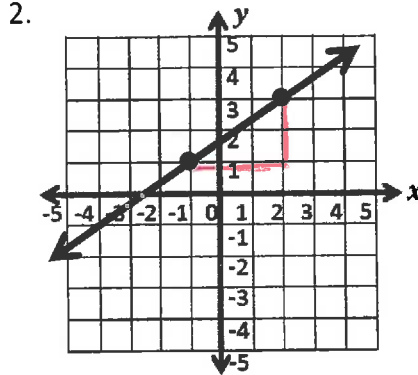
Date: _____ Period: _____

Assignment 39: Mixed Review of Slope and Intercepts

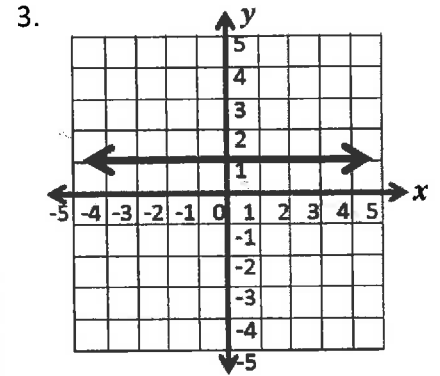
Directions for 1-6: Find the slope for each of the following.



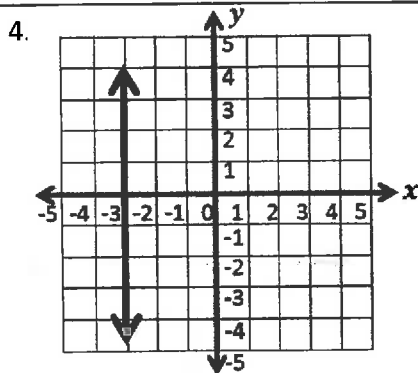
$\frac{\Delta y}{\Delta x} = \frac{-1}{3}$



$\frac{y_2 - y_1}{x_2 - x_1} = \frac{1}{3}$



Rate of Change: 0



$\frac{\text{rise}}{\text{run}}$: Undefined

5.

X	Y
-4	5
0	2
4	-1
8	-4
12	-7

$\frac{2-5}{0-4} = \frac{-3}{-4} = \frac{3}{4}$

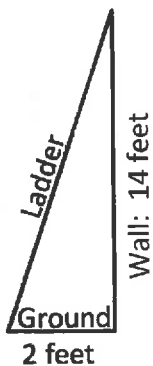
Rate of Change: $\frac{3}{4}$

6. A line that passes through (2, 4.4) and (5, 8.9)

$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{8.9 - 4.4}{5 - 2} = \frac{4.5}{3} = 1.5$

Slope: 1.5

7. Find the slope of the ladder in the picture below:



Slope: $\frac{14 \text{ ft up wall}}{2 \text{ ft up on floor}}$

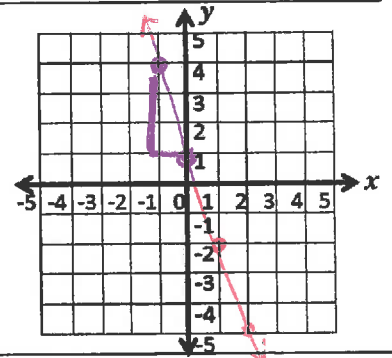
7 ft up wall per ft on floor

8. Find the slope of the line that passes through the points below:

(-1, 4) (0, 1) (1, -2) (2, -5)

↑ y-intercept

$m = -3$



9. Find the x intercept and y intercept for the linear equation below. Then graph the line using the intercepts, and find the slope.

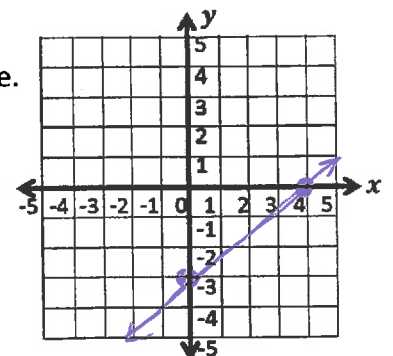
$3x - 4y = 12$

x-int:

y-int:

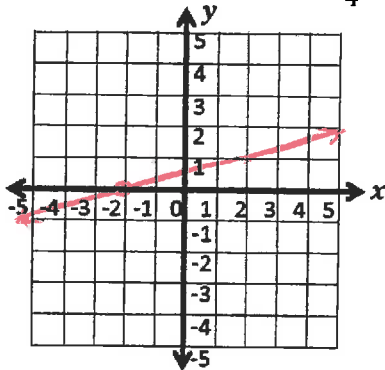
Plug 0 for y
0 for x
Slope: $\frac{3}{4}$
 $3x = 12$
 $x = 4$

Plug 0 for x
 $-4y = 12$
 $y = -3$

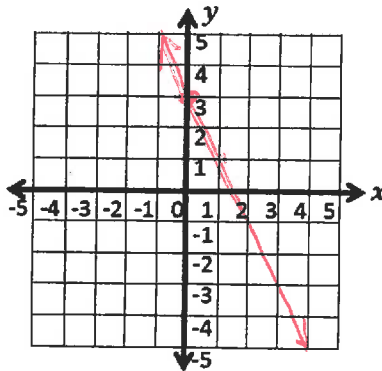


Directions for 10-15: Plot the point given, and use the given slope to create a line through the point with that slope.

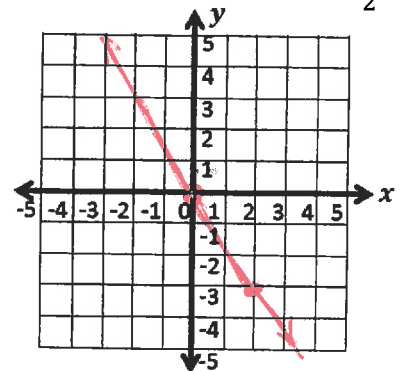
10. Draw a line with a x-int of $(-2, 0)$ and a slope of $\frac{1}{4}$



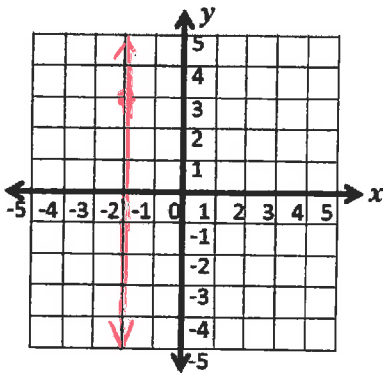
11. Draw a line with a y-int of $(0, 3)$ and a slope of -2



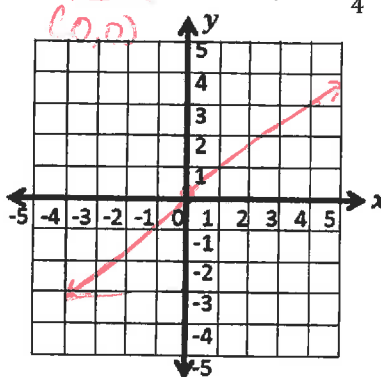
12. Draw a line through $(2, -3)$ with a slope of $-\frac{3}{2}$



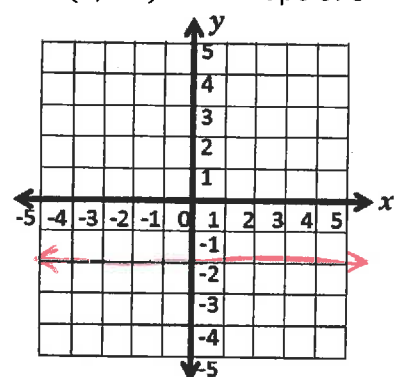
13. Draw a line through $(-2, 3)$ with an undefined slope



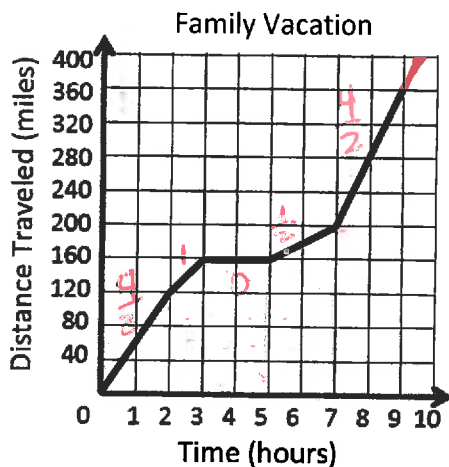
14. Draw a line through the origin with a slope of $\frac{3}{4}$



15. Draw a line with a y-int of $(0, -2)$ and a slope of 0



Directions for 16-21: Use the graph below to answer questions 16-21.



16. Between what hours did they stop for food?

Hour 3 → Hour 5

17. Between what hours were they traveling at the slowest rate?

Hour 5 → Hour 7

18. What does the rate of change represent for this graph?

The RoC represents how fast the family was travelling

19. Between what hours were they traveling the fastest?

They were traveling the fastest

20. Find the rate of change: *from Hour 7 to Hour 9.*

-For the first 2 hours:

60 mph

-From hour 2-3:

40 mph

-Between hours 3-5:

0 mph

-Between hours 5-7:

20 mph

-Between hours 7-9:

80 mph

21. If they continue traveling at the same rate they have been from hours 7-9, how far will they have traveled total by hour 10 of their trip?

*Challenge Question!
Solve has an answer @ his desk*