2B. Graphing Linear Functions pages 9-10

Algebra 1: Graphing Linear Functions

Assignment

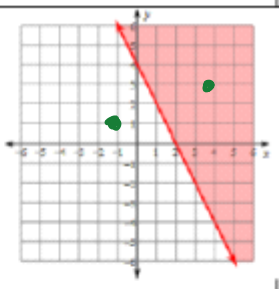
1. Find the rate of change given the two points:
$(1,-2)$ *and* $(3,-5)$

$m = \frac{-5+2}{3-1} = \frac{-3}{2}$

2. What is the slope and y-intercept of the equation?
$y = -3x + 2$

Slope $= -3$ $\quad$ y-int. $= 2$

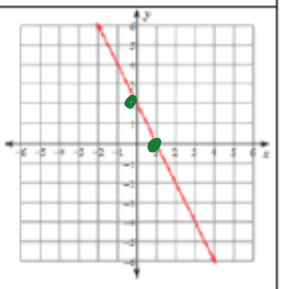
3. Name a point that is NOT a solution to the graph to the right. Name a point that is a solution to the graph to the right.



NOT $(-1,1)$

Soln $(4,3)$

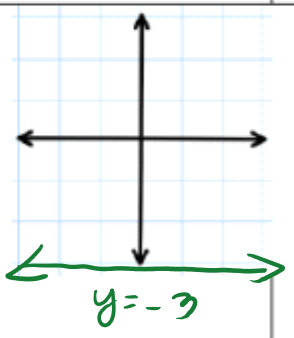
4. Name the x-intercept and the y-intercept.



X-int $= 1$

y-int $= 2$

5. Sketch a graph of: $y = -3$



6. Write an equation that has a y-inttercept of -2 and a slope of -3?

$y = -3x - 2$

7. Rewrite from Standard form to Slope – Intercept Form.
$4x + y = -2$

$-4x \quad -4x$

$y = -4x - 2$

8. Which pair of points has the slope of: $-\frac{3}{4}$?
$(-4,5)$ and $(0,2)$ OR $(2,5)$ and $(-2,2)$

$m = \frac{2-5}{0--4} = \frac{-3}{4}$ ✓ $\quad$ $m = \frac{2-5}{-2-2} = \frac{-3}{-4}$ $m = 3/4$ ND

Thursday, April 2, 2020 4:44 PM

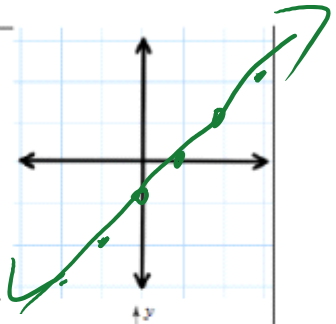
9. Write an equation that describes the situation: Josh is trying to save money. He started his saving with $15 and is able to save $12 a week.

$y = 12x + 15$

10. Sketch a graph of the equation $y = x - 1$.

$m = 1/1$

$b = -1$



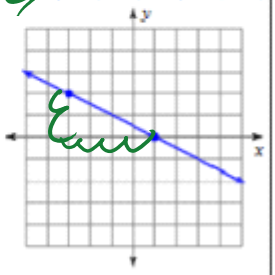
11. What is the x-intercept of the equation:

$3x + 2y = -6$

$\frac{3x}{3} \quad \frac{2y}{3} \quad \frac{-6}{3}$

$x = -2$

12. What is the the slope of the line graphed to the right?



$m = \frac{-2}{4} = \frac{-1}{2}$

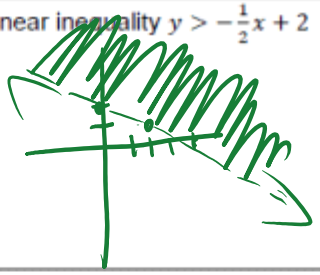
13. Sketch a graph of the linear inequality $y > -\frac{1}{2}x + 2$

$m = -1/2$

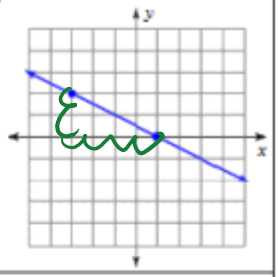
$b = 2$

dashed

$>$ TOP



14. What is the slope of the line graph to the right?



$m = \frac{-2}{4} = -1/2$

15. What is the value of r if the slope of the two points $(r, -3)$ and $(4, -2)$ is $\frac{1}{3}$?

$\frac{1}{3} = \frac{-2-(-3)}{4-R}$

$\frac{1}{3} = \frac{1}{4-R}$

$4 - R = 3$

$4 - R = 3$

$-4 \quad -4$

$-R = -1$

$\frac{-R}{-1} = \frac{-1}{-1}$

$R = 1$

16. Solve the Equation

$8x + 6x = 14 + 7x$

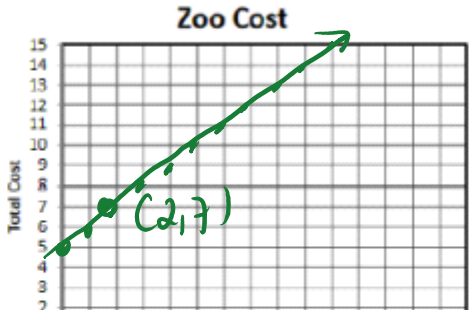
$14x = 14 + 7x$

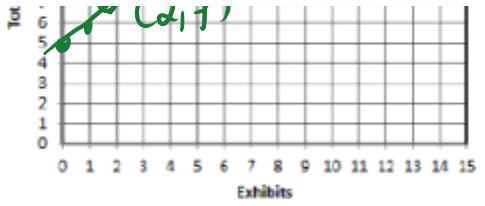
$-7x \quad -7x$

$\frac{7x}{7} = \frac{14}{7}$

$x = 2$

17. The zoo charges $5 admission fee along with a $1 charge for each exhibit you visit.

A	B	C
Write the equation based on this situation.	Graph the equation you created in part (A).	Explain the point (2,7) in terms of the situation presented.
$y = x + 5$		The person visits 2 exhibits and



exhibits and paid $7.00