NAME: Key Hr. _____

Slope Intercept Quiz Review

Given each equation of a line, find the slope and *y*-intercept.

1. $y = \frac{1}{4}x$

Slope: $\frac{1}{4}$

y-intercept: 0

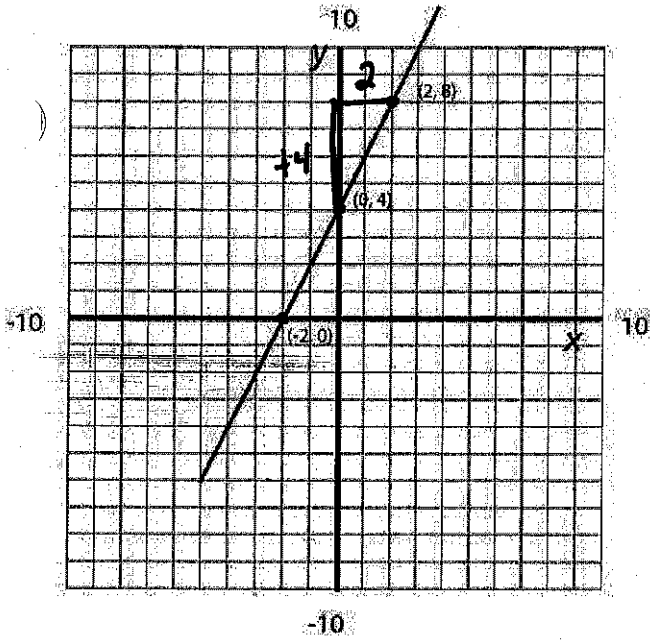
2. $y = -5x - 6$

Slope: -5

y-intercept: -6

Using the graphs below, write the equation of the line.

3.



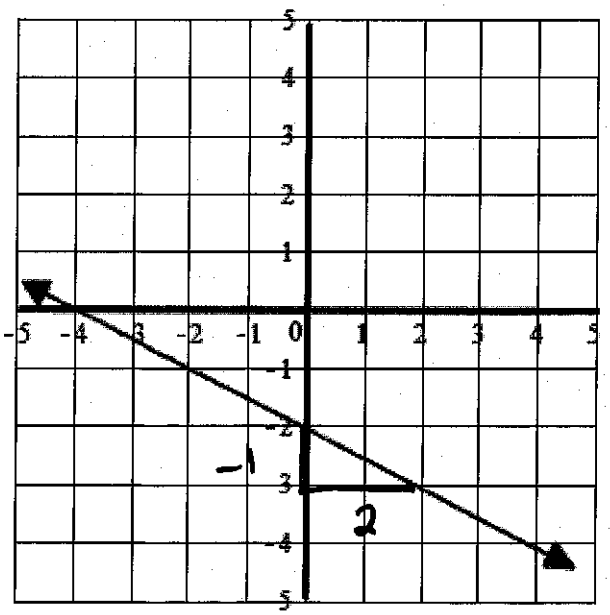
GOOD GRAPH of y = 2x + 4

Slope = $\frac{4}{2} = 2$

y-intercept = 4

Equation = $y = 2x + 4$

4.



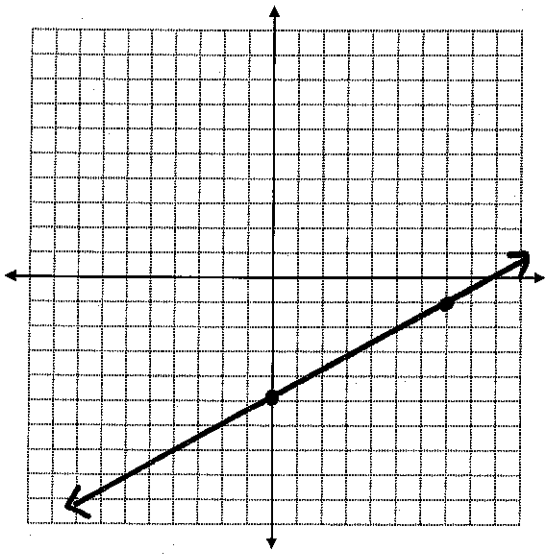
Slope = $-\frac{1}{2}$

y-intercept = -2

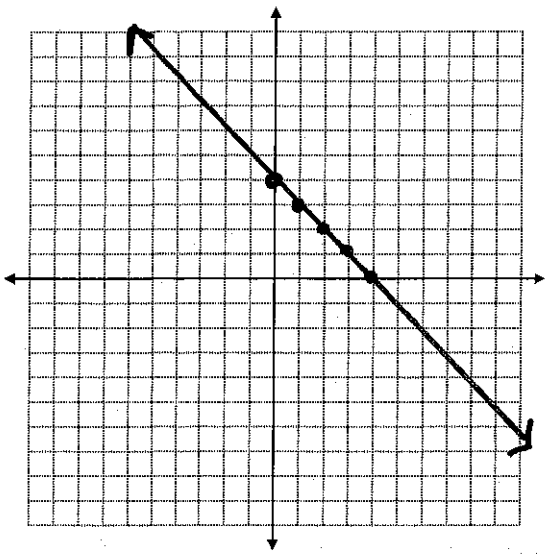
Equation = $y = -\frac{1}{2}x - 2$

Graph each line on the graph provided.

5. $y = \frac{4}{7}x - 5$



6. $y = -x + 4$



Using the tables below, find the slope, the y-intercept, and the equation of each line.

7.

x	y
0	-5
3	1
6	7
9	13

+3 +6 +3 +6 +3 +6

Slope: $\frac{6}{3} = 2$

y-intercept: -5

Equation: $y = 2x - 5$

8.

x	y
-1	10
0	6
1	2
2	-2

+1 -4 +1 -4

Slope: $\frac{-4}{1} = -4$

y-intercept: 6

Equation: $y = -4x + 6$

9. Is each ordered pair a solution of the equation $y = 4x - 1$? Show your work and write yes or no on the blank provided.

a. (0, 4)

$4 = 4(0) - 1$
$4 = 0 - 1$
$4 \neq -1$

1a. No

b. (2, 7)

$7 = 4(2) - 1$
$7 = 8 - 1$
$7 = 7$ ✓

1b. Yes

c. (-1, -5)

$-5 = 4(-1) - 1$
$-5 = -4 - 1$
$-5 = -5$ ✓

1c. Yes

10. Find the solution for the equation below when x = -3. Make sure your answer is an ordered pair.

y = -2x + 6

$y = -2(-3) + 6$
$y = +6 + 6$
$y = 12$

10. (-3,12)

For #'s 3 and 4, find the slope of the line through each pair of points.

11. (-4, 1) (-4, 3)

x	y
-4	1
-4	3

$\frac{\Delta y}{\Delta x} = \frac{2}{0}$

11. undefined

12. (0, -2) (7, 2)

x	y
0	-2
7	2

+7 +4

$\frac{\Delta y}{\Delta x} = \frac{4}{7}$

12. $\frac{4}{7}$

13. You really want to start your own lawn mowing service for the summer. You have decided you will charge a flat rate of $8 per yard and an additional $5 per hour. Find the equation to represent the amount of money you would charge for a single lawn mowed.

a. Define your variables

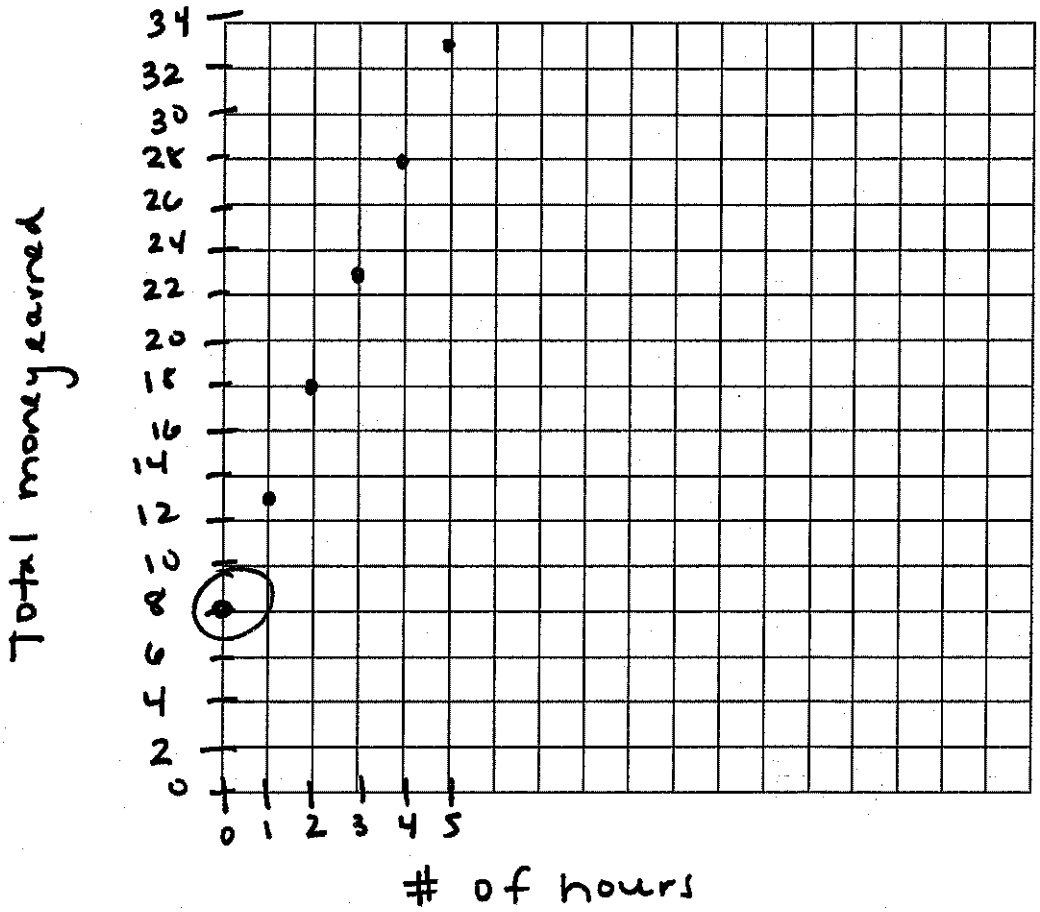
X = # of hours

y = total money earned

b. Write an equation to represent the situation.

$y = 5x + 8$

c. Graph the equation.



d. Circle the y-intercept on the graph.

e. What is the slope and what does it represent in this situation.

The slope is $\frac{5}{1}$, this represents $5 earned every 1 hour worked.