

Name: _____
 Period _____

Date: _____
 Henderson - Math 8

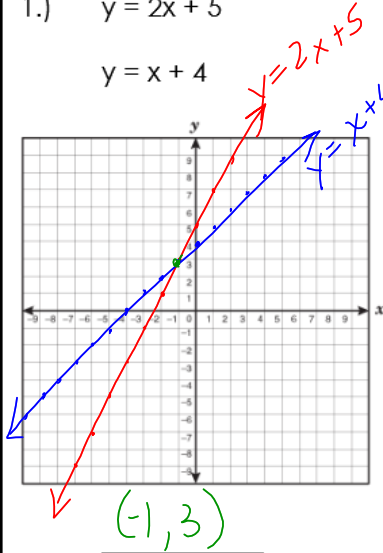
Homework for Week 11

Monday: HW# 11A (go to www.khanacademy.org or www.hendersonmath.com for review)

Graph BOTH equations on the same grid. Find the point where they intersect (solution).

1.) $y = 2x + 5$

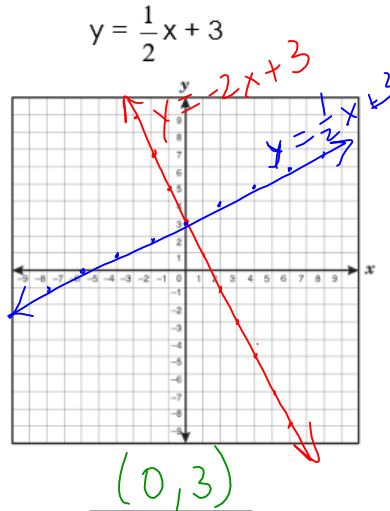
$y = x + 4$



Intersection point

2.) $y = -2x + 3$

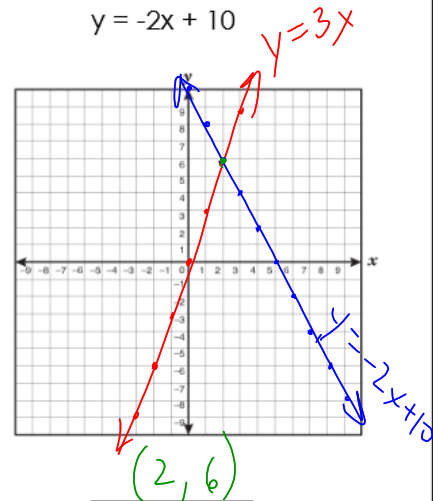
$y = \frac{1}{2}x + 3$



Intersection point

3.) $y = 3x + 0$

$y = -2x + 10$



Intersection point

Tuesday: HW# 11B (go to www.khanacademy.org or www.hendersonmath.com for review)

Find the solution to equations shown

4.) $5x - 7 = 3x - 9$
 $\begin{array}{r} 5x - 7 = 3x - 9 \\ -3x \quad -3x \\ \hline 2x - 7 = -9 \\ +7 \quad +7 \\ \hline 2x = -2 \\ \frac{2x}{2} = \frac{-2}{2} \\ x = -1 \end{array}$

5.) $2(x + 5) - 4x = 4$
 $\begin{array}{r} 2(x + 5) - 4x = 4 \\ 2x + 10 - 4x = 4 \\ -2x + 10 = 4 \\ -2x = -6 \\ \frac{-2x}{-2} = \frac{-6}{-2} \\ x = 3 \end{array}$

6.) $2x = 14 - 5x$
 $\begin{array}{r} 2x = 14 - 5x \\ +5x \quad +5x \\ \hline 7x = 14 \\ \frac{7x}{7} = \frac{14}{7} \\ x = 2 \end{array}$

State if the equation shown is linear or not linear.

7.) $y = 3x + 5$ linear

$4x - 3y = 9$ linear

8.) $y = 4x^2 - 9$ non linear

$\frac{x}{5} + y = 10$ linear

9.) $y = 7$ linear

$x^3 = 9$ non linear

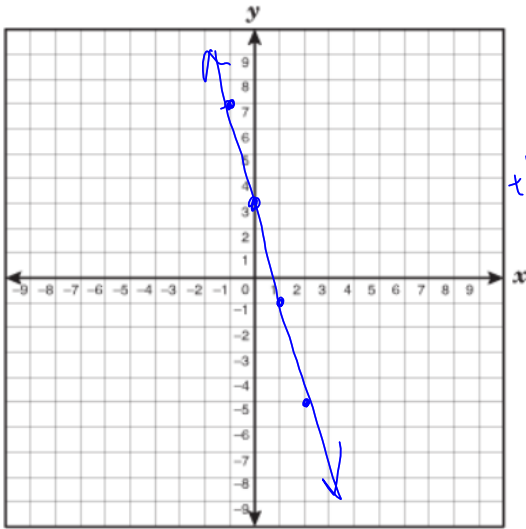
$x = y$ linear

10.) $y = \frac{2}{x} + 9$ non-linear

$y = \sqrt{x} + 6$ non-linear

Wed: HW#11C

11.) Graph the linear equation shown in the data table on the coordinate grid provided.



X	Y
-1	7
0	3
1	-1
2	-5

$m = -4$
 $b = 3$

Write the equation of the line shown in the table

and on the graph: $y = -4x + 3$

Thursday: HW#11D (go to www.khanacademy.org or www.hendersonmath.com for review)

12.) Find the rate of change for the following data:

(5, 6) and (8, 12)

$$\frac{12-6}{8-5} = \frac{6}{3} = 2$$

Answers

12) 2

13) 3

14) C

15) a

13.) Identify the rate of change in the following linear equation:

$y = 3x + 8$

14.) Which of the following is NOT a linear equation?

a) $y = 3x + 6$

b) $y = 2x - 9$

c) $y = x^2 + 5x + 2$

d) $2x + 5y = 12$

15.) Which of the following graphs is NOT a linear equation?

