

Name: _____
 Period _____

Date: _____ **18**
 Henderson - Math 8

Homework for Week 18

Monday: HW#18A

Find the slope from the points given: (show your mathematical steps). Slope = $\frac{y_2 - y_1}{x_2 - x_1}$

1.) (-5, 6) (-8, 8)

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

2.) (2, 6) (2, 4)

$$\frac{4-6}{2-2} = \frac{-2}{0}$$

undefined

3.) (-2, 6) (5, 6)

$$\frac{6-6}{5-(-2)} = \frac{0}{7}$$

zero

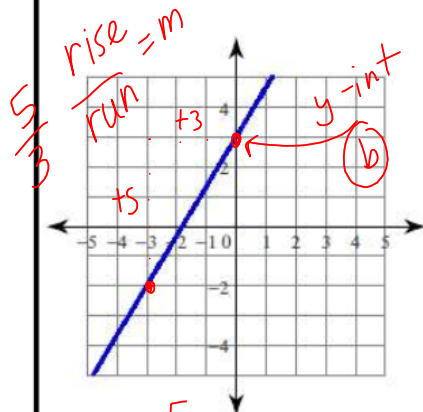
4.) (-6, 5) (7, 3)

$$\frac{3-5}{7-(-6)} = \frac{-2}{13}$$

Tuesday: HW# 18B

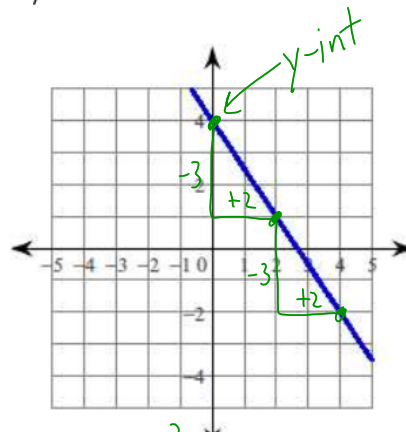
Write the equation of the line shown in the graph in slope-intercept form: $y = mx + b$.

5.)



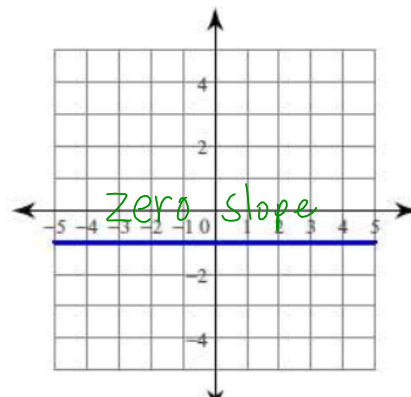
$$y = \frac{5}{3}x + 3$$

6.)



$$y = -\frac{3}{2}x + 4$$

7.)



$$y = -1$$

Solve the following equations:

8.) $10 = \frac{g}{3} + 2$

$$\begin{aligned} & -2 \quad -2 \\ \hline (3) 8 & = \frac{g}{3} (3) \\ & \frac{3}{3} \\ \hline & \boxed{g = 24} \end{aligned}$$

9.) $4 - 8y = -36$

$$\begin{aligned} & -4 \quad -4 \\ \hline -8y & = -40 \\ \hline \frac{-8}{-8} & \frac{-40}{-8} \\ \hline & \boxed{y = 5} \end{aligned}$$

10.) $13 - \frac{1}{5}p = -7$

$$\begin{aligned} & -13 \quad -13 \\ \hline (-\frac{5}{1}) & -\frac{1}{5}p = -20 (-\frac{5}{1}) \\ \hline & \boxed{p = 100} \end{aligned}$$

Wednesday: HW# 18C

Determine whether the equation has one solution, no solution or infinite solutions, then SOLVE

11.) $3x + 4 = 3x + 4$

both sides match

Infinite Solutions

12.) $2x = -14$

one solution

$$\frac{2x}{2} = \frac{-14}{2}$$

$x = -7$

13.) $4x + 7 = 4x - 6$

No Solution

$$4x + 7 = 4x - 6$$
$$\underline{-4x \quad -4x}$$

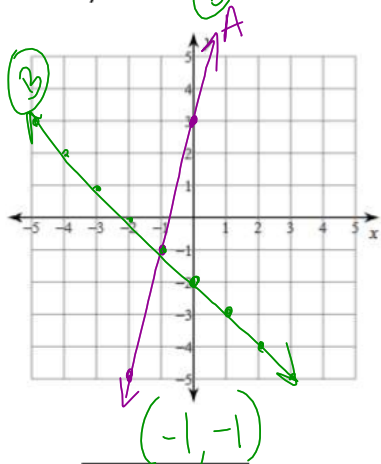
$$7 \neq -6$$

Thursday: HW# 18D

Graph the system of equations on the same coordinate graph. Find the solution.

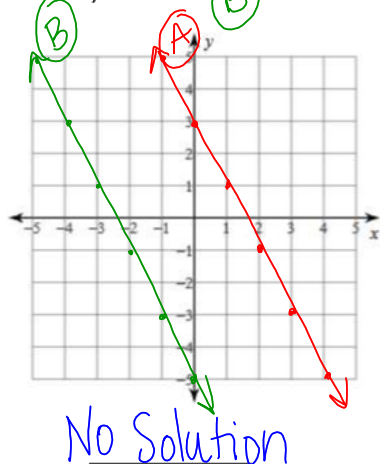
14.) $y = 4x + 3$ (A)

$y = -x - 2$ (B)

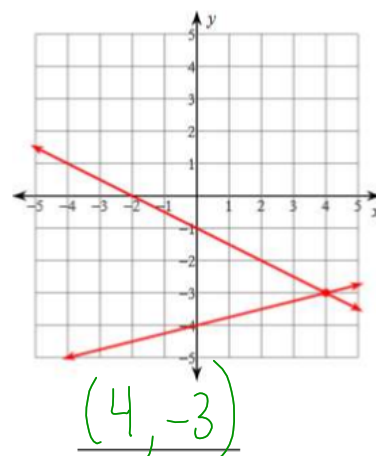


15.) $y = -2x + 3$ (A)

$y = -2x - 5$ (B)



16.) Name the solution point of the system shown.



Simplify each expression. Write using POSITIVE exponents.

17) $v^2 \cdot v^3 = v^5$

18) $w^{-4} = \frac{1}{w^4}$

19) $a^0 = 1$

Compute.

20) $\sqrt{225} = 15$

21) $\sqrt[3]{512} = 8$

22) $15^2 = 225$