

# Good Morning Happy Wednesday!

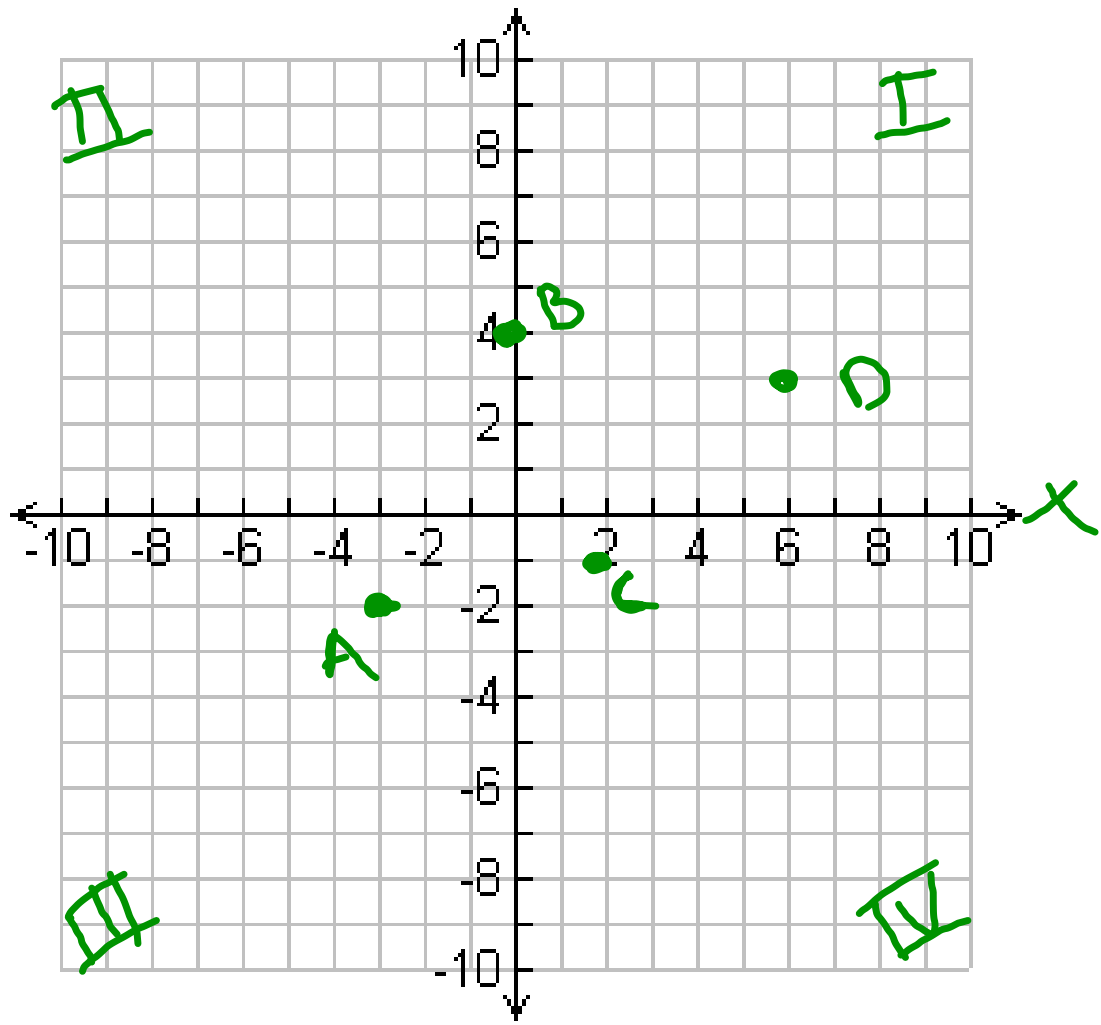
Agenda:

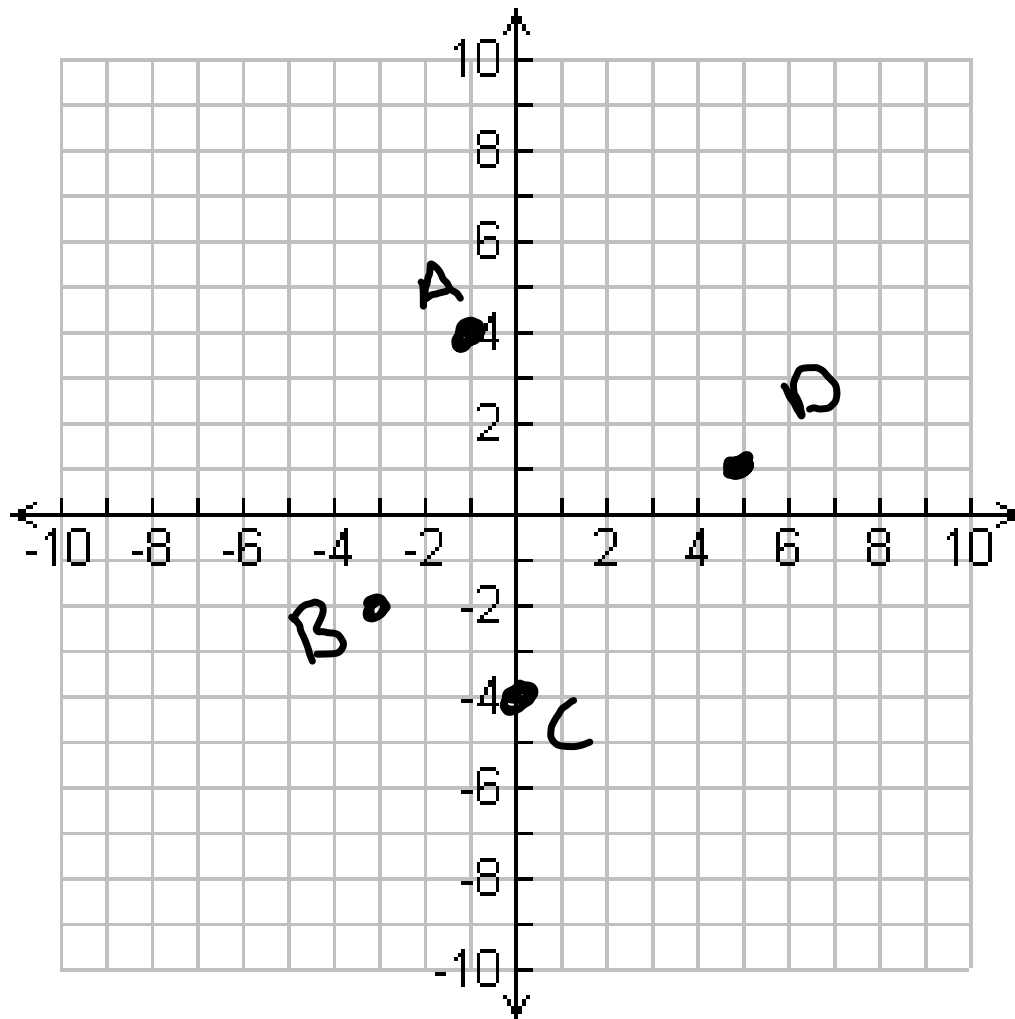
- Collect Signed Syllabus and Student information sheets.

- Class Web site

- Start Linear Functions

- Quotes and HW





$x, y$   
A (-1, 4)  
B (-3, -2)  
C (0, -4)  
D (5, 1)

$$X - 2y = 8 \quad -2 - 2y = 8$$

X	-2	0	2	4	7
Y	-5	-4	-3	-2	$-\frac{1}{2}$

Alt solve for y  $\frac{-2y}{-2} = \frac{8-X}{-2}$

$$y = -4 + \frac{1}{2}X$$

$$y = \frac{1}{2}X - 4$$

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

$$y = -1 - 4 = -5$$

$$\frac{1}{2}(7) - \frac{8}{2}$$

$$\frac{7}{2} - \frac{8}{2} = -\frac{1}{2}$$

④

$$2x + 3y = 6$$

X	-3	0	2	6
Y	4	2	$\frac{2}{3}$	-2

$$\textcircled{5} \quad \begin{array}{r} 8x+2y=2 \\ -8x \quad -8x \end{array} \quad \begin{array}{r} 2-8x \\ \end{array}$$

$$\frac{2y}{2} = \frac{-8x+2}{2} \quad \textcircled{y = -4x + 1}$$

$$\textcircled{6} \quad \begin{array}{r} 2x-y=8 \\ -2x \quad -2x \end{array}$$

$$\frac{-y}{-1} = \frac{8-2x}{-1} \Rightarrow \begin{array}{r} y = -8+2x \\ \textcircled{y = 2x-8} \end{array}$$

$$\textcircled{7} \quad \begin{array}{r} 6x - \frac{1}{2}y = 10 \\ -6x \quad -6x \end{array}$$

$$-2 \left( \frac{1}{2}y \right) = (10 - 6x) - 2 \quad \begin{array}{r} y = -20 + 12x \\ \textcircled{y = 12x - 20} \end{array}$$

8) slopes : 5  $\textcircled{-4}$  6  $\textcircled{2}$  7  $\textcircled{12}$

increase : positive slope

9)  $y = 12x - 20$  slope of  $\textcircled{12}$

$$\textcircled{10} \quad \frac{1}{3}x + 4y = 12$$

$$\textcircled{x + 12y = 36}$$

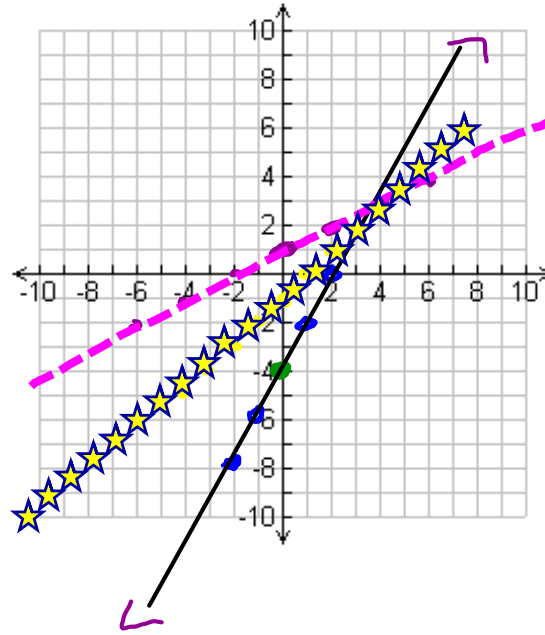
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$$\textcircled{y = -\frac{1}{12}x + 3}$$

$$y = 2x - 4$$

$$m = 2 = \downarrow \frac{2}{1} \uparrow$$

$$b = -4 \leftarrow (0, -4) \rightarrow$$

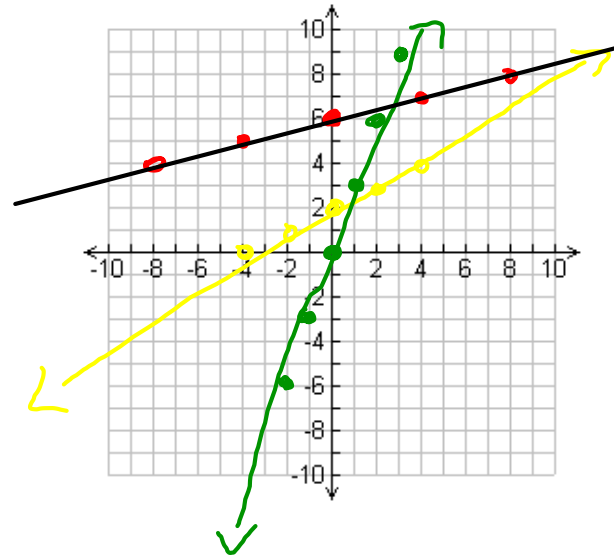


$$y = \frac{1}{2}x + 2$$

$$y = 3x$$

$$m = \frac{3}{1}$$

$$y = \frac{1}{4}x + 6$$



Parallel

Same  
Slope

Perpendicular

Opposite  
reciprocal  
slopes

$$m = \frac{3}{2} \rightarrow m = -\frac{2}{3}$$