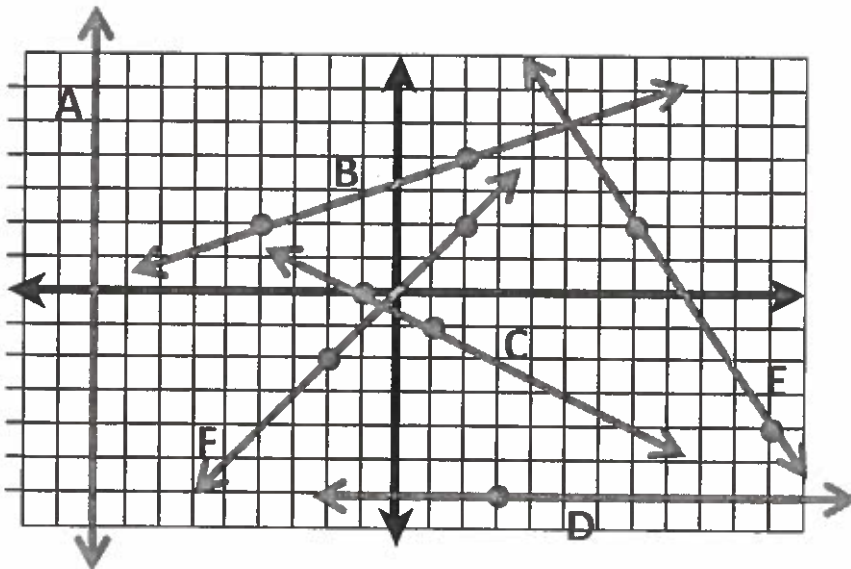


Find the slopes of the lines shown on the grid.

- 1) line A = undefined
 2) line B = $\frac{1}{3}$
 3) line C = $-\frac{1}{2}$
 4) line D = 0
 5) line E = $-\frac{3}{2}$
 6) line F = 1



Determine the slope of the line that passes through the given coordinates.

7) (-2, 11) & (-2, 5)

$$\frac{5-11}{-2-(-2)} = \frac{-6}{0} = \text{no slope}$$

8) (1, 7) & (-3, 5)

$$\frac{5-7}{-3-1} = \frac{-2}{-4} = \frac{1}{2}$$

9) (-5, 0) & (-3, 16)

$$\frac{16-0}{-3-(-5)} = \frac{16}{2} = 8$$

10) (-6.25, -6) & (10.75, -6)

$$\frac{-6-(-6)}{10.75-(-6.25)} = \frac{0}{17} = 0$$

Determine the x and y-intercepts for each equation.

11) $6y + 5x = 30$

$$5x = 30 \quad 6y = 30$$

x-int. = 6 (6, 0)

y-int = 5 (0, 5)

12) $\frac{1}{2}x = 3 - y$

$$\frac{1}{2}x = 3 \quad 0 = 3 - y$$

$$x = 6 \quad -3 = -y$$

$$y = 3$$

x-int. = 6

y-int. = 3

Put the following equations into slope-intercept form ($y = mx + b$). Then determine the slope and y-int. for each.

13) $-2y + 4 = 3x$

$$-2y = 3x - 4$$

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

m (slope) = $-\frac{3}{2}$

b (y-int) = 2

14) $-5x - y = -3$

$$-y = 5x - 3$$

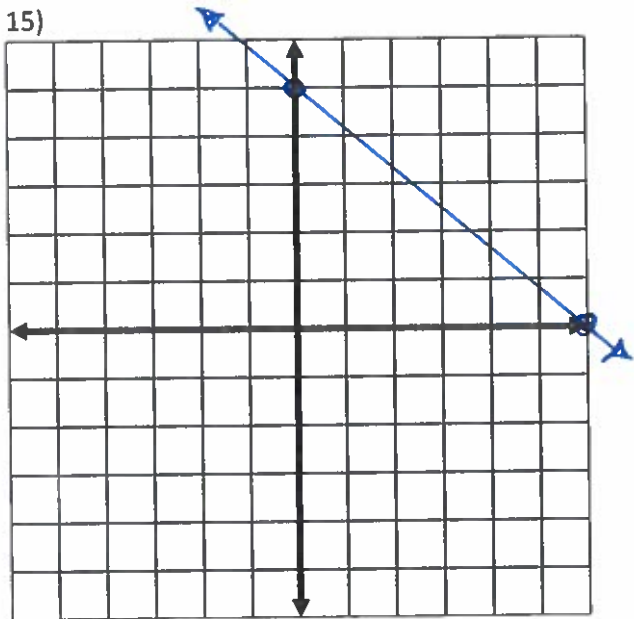
$$y = -5x + 3$$

m (slope) = -5

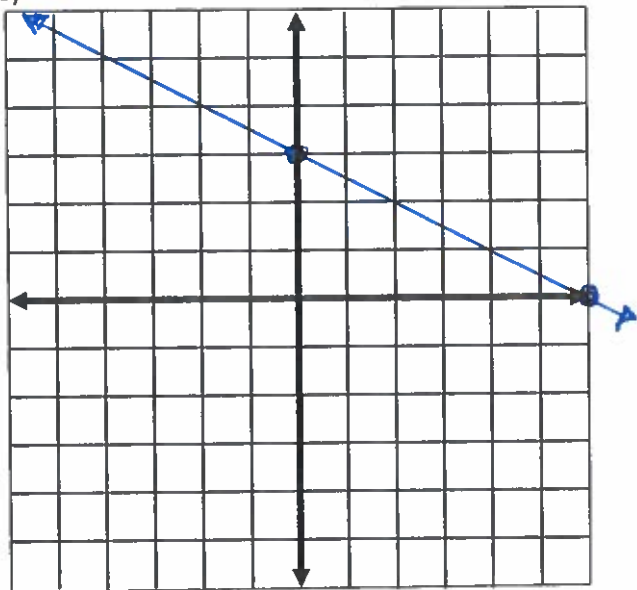
b (y-int) = 3

Use the information from number 11 & 12 to graph those equations on the grids below.

15)

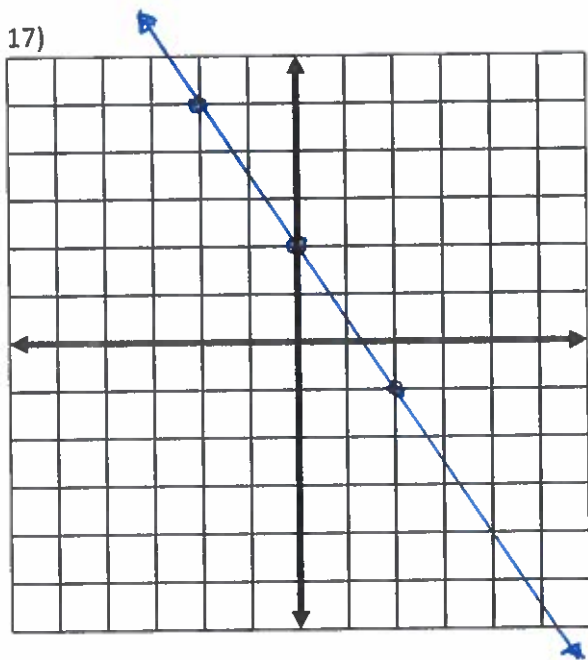


16)

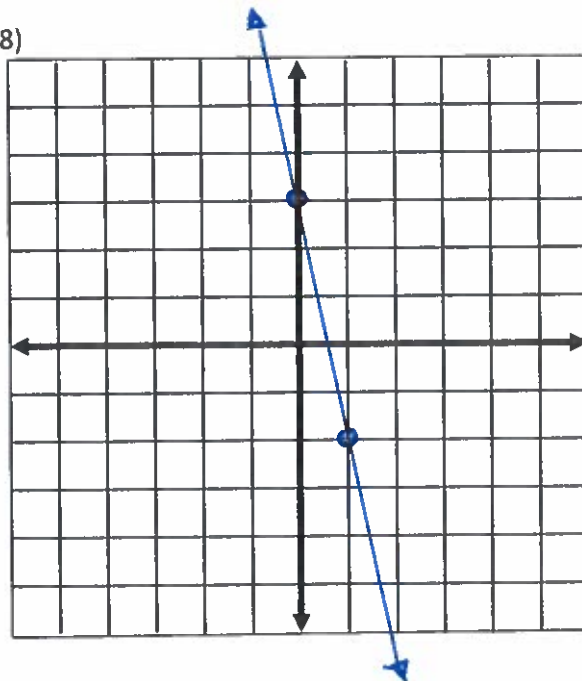


Use the information from number 13 & 14 to graph those equations on the grids below.

17)



18)



For the following equations, find the slope, then name the slope parallel // and perpendicular \perp to it.

19) $y = \frac{4}{9}x - 13$

// $\frac{4}{9}$

$\perp -\frac{9}{4}$

20) $2 - 9y = 3x$

$-9y = 3x - 2$
 $y = -\frac{1}{3}x + \frac{2}{9}$

// $-\frac{1}{3}$

$\perp 3$

22) $3y = 21$

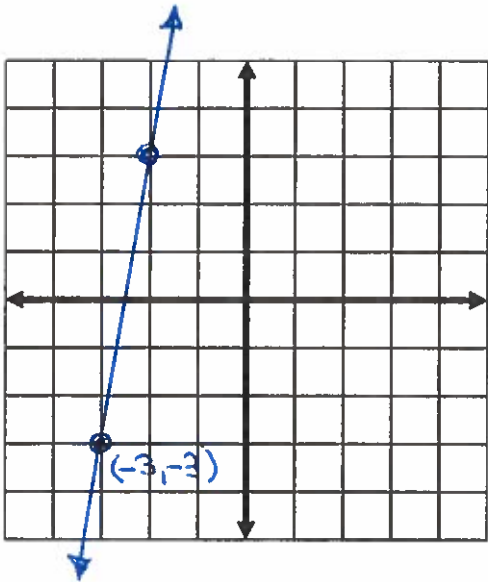
$y = 7$
 $y = 0x + 7$

// 0

\perp undefined

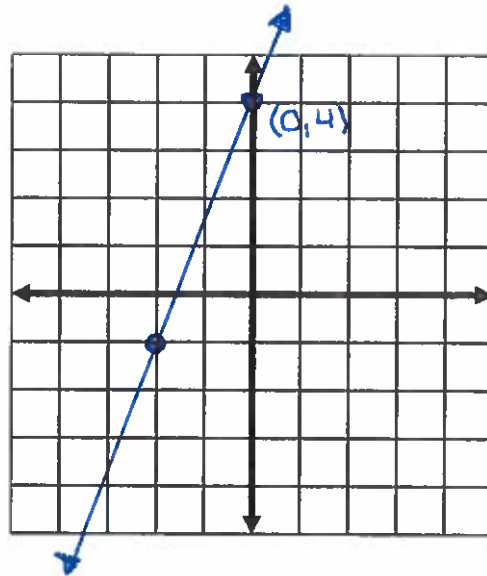
Graph each line using the information provided. Remember to check the "tilt" of the line.

23) passes thru $(-3, -3)$ with slope = $\frac{6}{1}$



24) passes thru $(0, 4)$ and is parallel to the line

with equation: $y = \frac{5}{2}x - 19$ $y = \frac{5}{2}x - 19$
 $m = \frac{5}{2}$



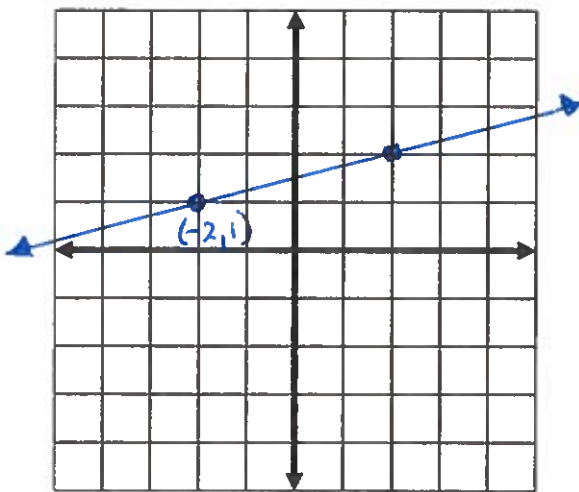
25) passes thru $(-2, 1)$ and is perpendicular to the line with equation: $2x + \frac{1}{2}y = -3$

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

(2) (2)

$$y = -4x - 6$$

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



College Prep Only) passes thru the x-intercept of the

equation: $5x - 3y = 10$ and is perpendicular to

the line that passes thru $(-5, 2)$ & $(3, 8)$

$$\frac{y_2 - y_1}{x_2 - x_1}$$

$$5x = 10$$

$$x = 2$$

(2, 0)

$$\frac{y_2 - y_1}{x_2 - x_1}$$

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

$$= \frac{6}{8}$$

$$= \frac{3}{4}$$

$\perp = -\frac{4}{3}$

