Each section of the homework corresponds to a section on the notes walkthrough! Use the examples from the notes walkthrough to help you!

SECTION 1: Find the slope of the line through each pair of points

1) (-15,-6), (-14,18)

2) (19, -17), (-6, -9)

SECTION 2: Identify the slope of the line and the y-intercept from the following equations.

3)
$$y = \frac{4}{5}x - 5$$

4)
$$y = -\frac{6}{5}x - 4$$

5)
$$y = 2x - 1$$

6)
$$y = -5$$

SECTION 3: Write the equation of a line given the slope and y-intercept.

7)
$$m = -2, b = 3$$

8)
$$m = \frac{1}{4}, b = -\frac{2}{3}$$

SECTION 4 : Write the slope-intercept form of the equation of the line through the given point with the given slope.

9) Through:
$$(-1,4)$$
, slope = -6

10) Through:
$$(5,2)$$
, slope = $-\frac{1}{5}$

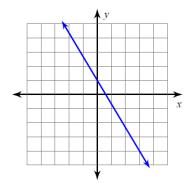
SECTION 5 : Write the slope-form of the equation of the line through the given points.

11) Through: (-5,-2) and (-3,-4)

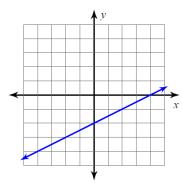
12) Through: (3,-20) and (5,8)

SECTION 6: Write the slope-intercept form of the equation of each line.

13)

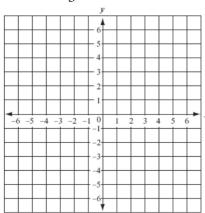


14)

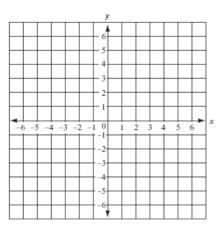


Please graph the following two equations on the coordinate plane.

15)
$$y = -\frac{4}{3}x + 4$$

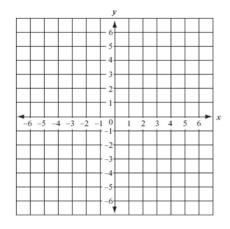


16)
$$y = 1$$

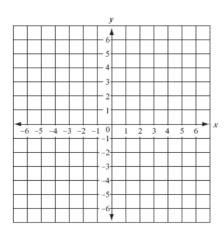


Sketch the graph of each line using the provided intercepts.

17) x-intercept =
$$3$$
 , y-intercept = -5



18) x-intercept =
$$-5$$
 , y-intercept = 2



Answer Key:

2)
$$-\frac{8}{25}$$

3)
$$m = \frac{4}{5}, b = -5$$

4)
$$m = -\frac{6}{5}$$
, $b = -4$

5)
$$m=2, b=-1$$

6)
$$m = 0, b = -5$$

7)
$$y = -2x + 3$$

8)
$$y = \frac{1}{4}x - \frac{2}{3}$$

9)
$$y = -6x - 2$$

10)
$$y = -\frac{1}{5}x + 3$$

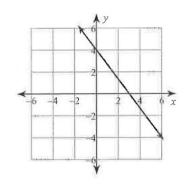
11)
$$y = -x - 7$$

12)
$$y = 14x - 62$$

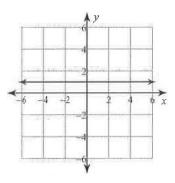
13)
$$y = -\frac{5}{3}x + 1$$

14)
$$y = \frac{1}{2}x - 2$$

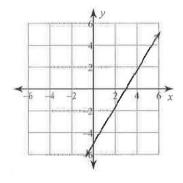
15)



16)



17)



18)

