

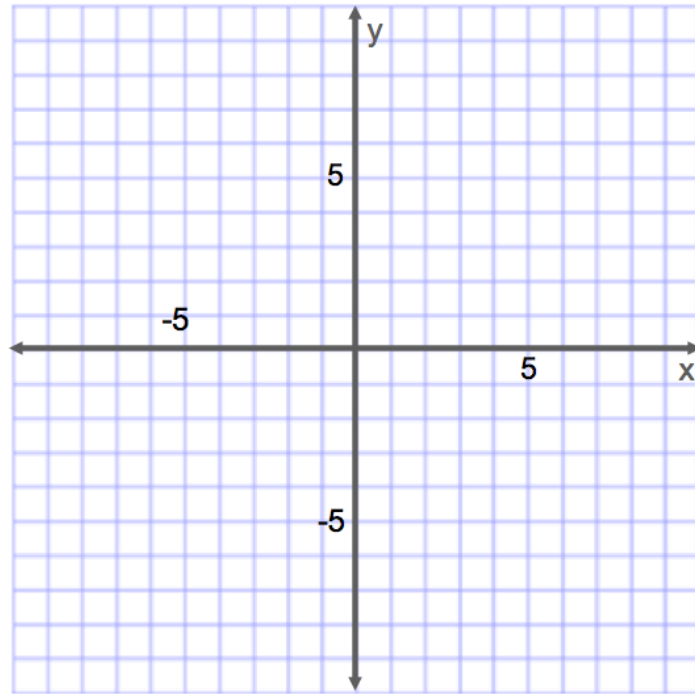
5.5 – Graphing Lines Using Slope and Y-Intercept

Using the phrase “The intercept shows you where to start and the slope shows you where to go” graph the following.

Class Notes – 1) Use the given information to graph a line. 2) State an equation for the line and label it on the graph.

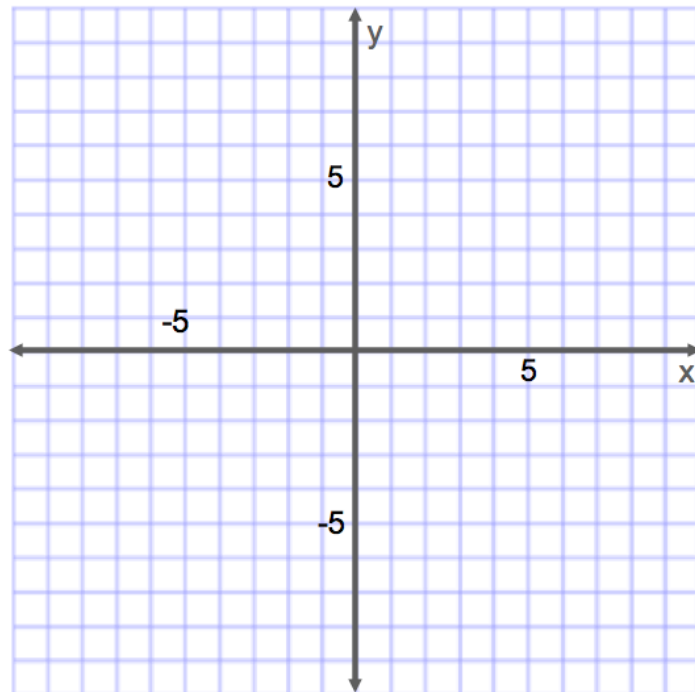
LP#1

$$m = 4$$
$$b = -7$$



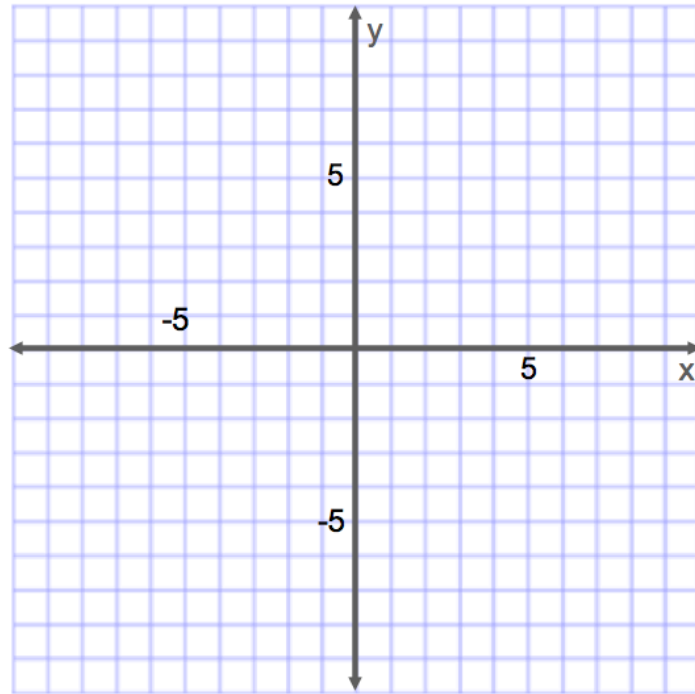
LP#2

$$m = 2$$
$$b = 5$$

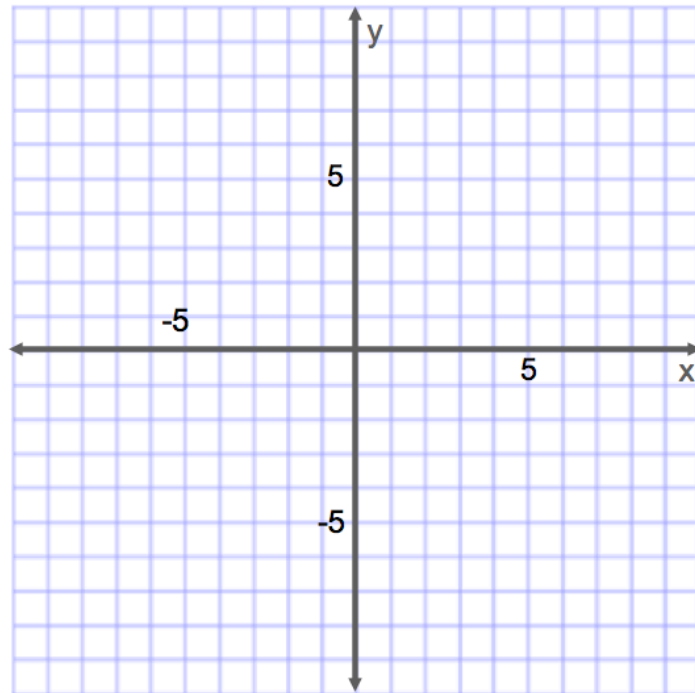


LP#3

Slope = $-1/2$
y-intercept = -1

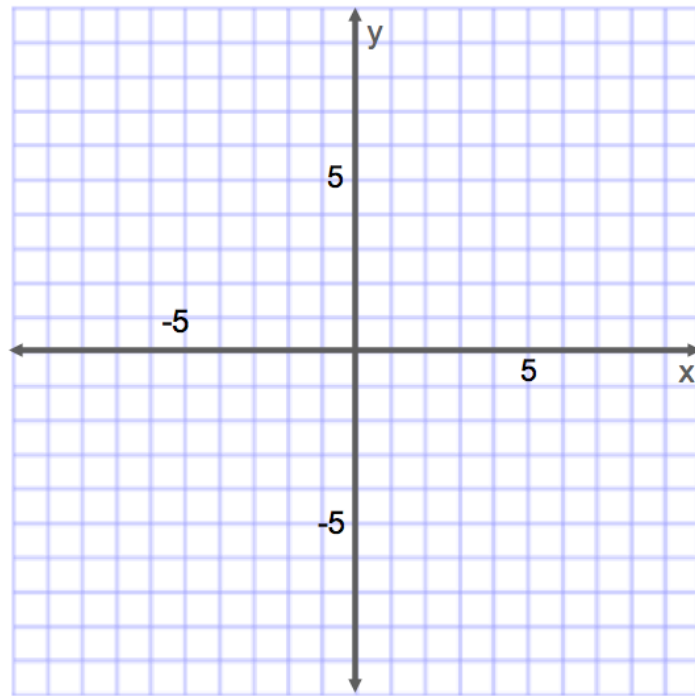
**LP#4**

Slope = $-3/4$
y-intercept = 6

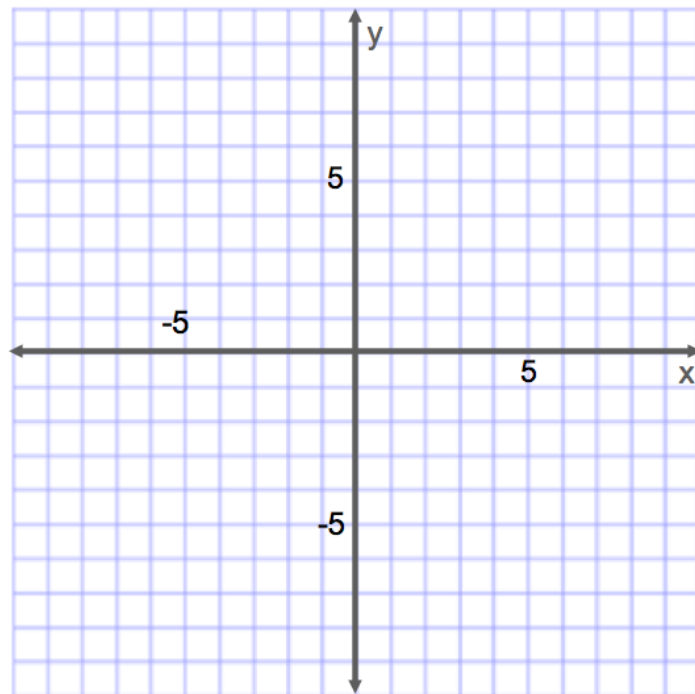


LP#5

Slope = -3
(0,8)

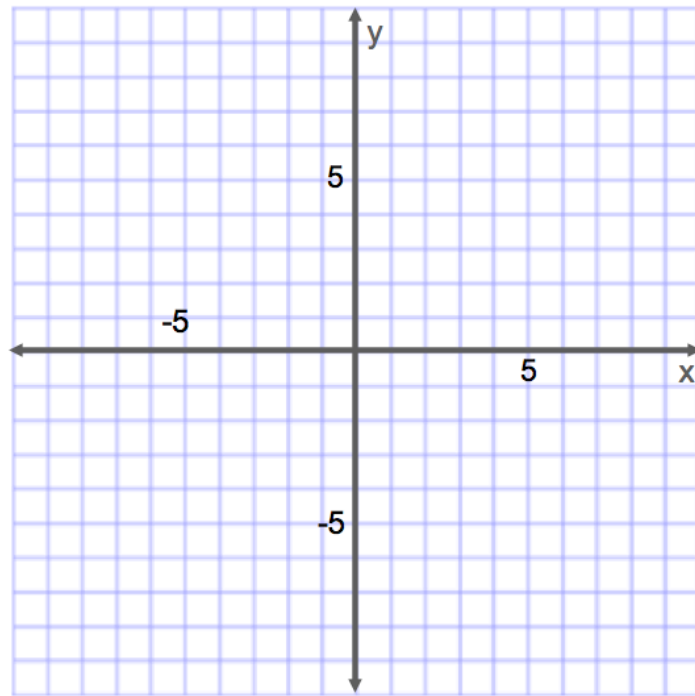
**LP#6**

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



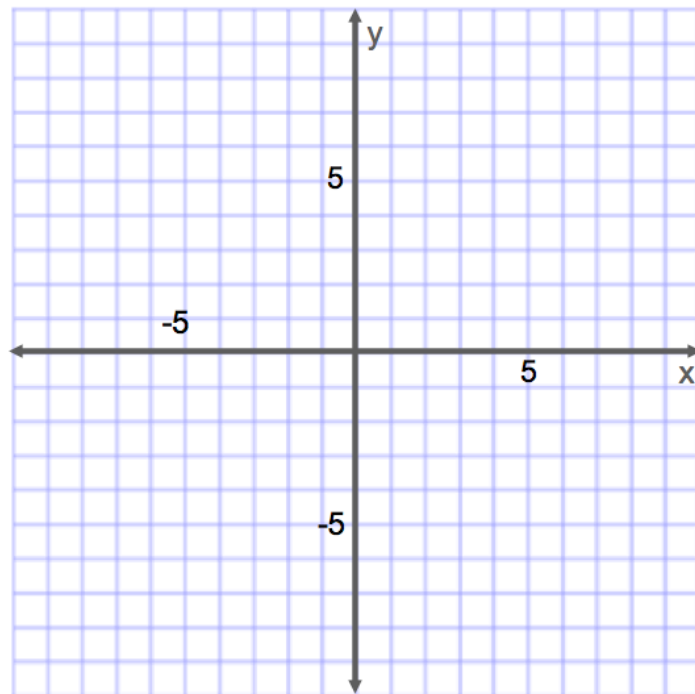
LP#7

$$y = -4x + 9$$



LP#8

$$y = \frac{5}{2}x - 5$$

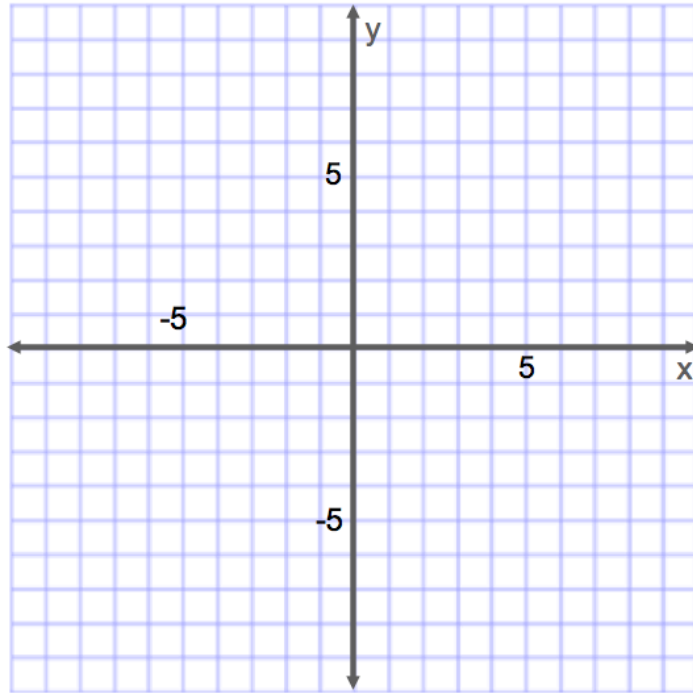


Using the phrase “The intercept shows you where to start and the slope shows you where to go” graph the following.

Review – 1) Use the given information to graph a line. **2)** State an equation for the line and label it on the graph.

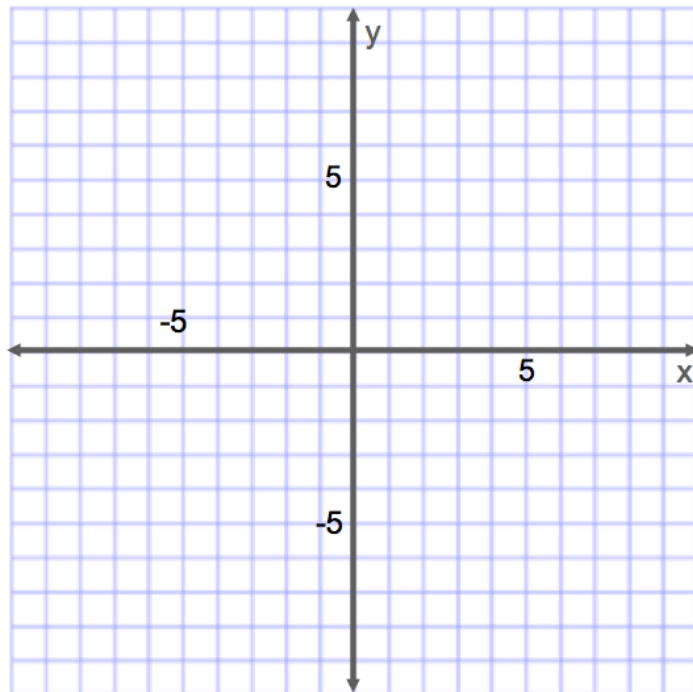
R#1

$$m = 3$$
$$b = -6$$



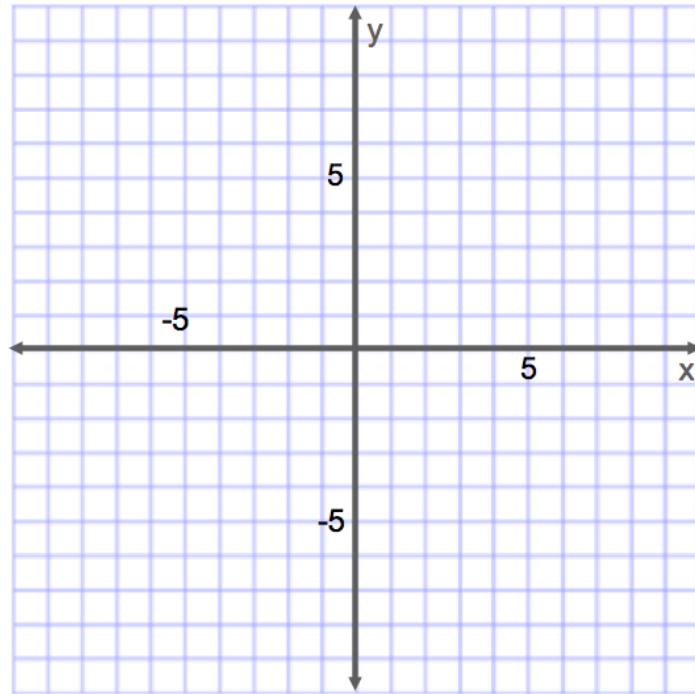
R#2

$$\text{Slope} = -2/5$$
$$\text{y-intercept} = 1$$



R#3

$$y = \frac{3}{2}x - 7$$

**Homework**

On a piece of graph paper, graph each line using the information given. Label each line with its equation.

1) $m = -2$
 $b = 3$

2) $m = 3/2$
 $b = -4$

3) $m = 1/3$
 $b = 5$

4) $m = -1$
 $b = -5$

5) $m = 2$
 $b = -8$

6) $m = 0.25$
 $b = -3$

7) $m = -5/4$
 $b = 9$

8) $m = 1$
 $b = 0$

9) Slope = $1/2$
y-intercept = -3

10) Slope = 5
y-intercept = -9

11) Slope = $-1/2$
y-intercept = 4

12) Slope = $-5/3$
y-intercept = -2

13) Slope = 0.5
y-intercept = -4

14) Slope = 0.2
y-intercept = 3

15) Slope = -3
y-intercept = -1

16) Slope = $1/5$
y-intercept = 0

17) $y = \frac{7}{2}x - 9$

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

19) $y = \frac{4}{3}x + 1$

20) $y = x - 4$

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

22) $y = 3x - 1$

23) $y = 4x - 10$

24) $y = \frac{5}{6}x$

Synthesis