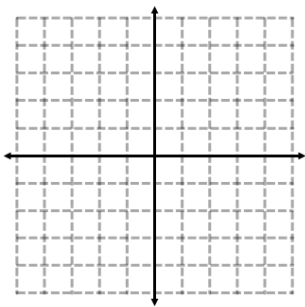


# Identifying Slope and y-intercept of a Line

1. For each linear equation, complete the table of values and graph the equation on the accompanying coordinate plane.

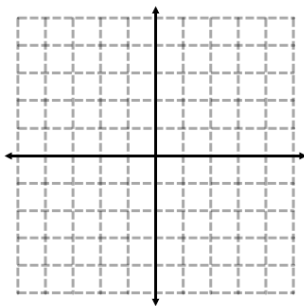
(a)  $y = 2x - 3$

$x$	$y$
-1	
0	
2	



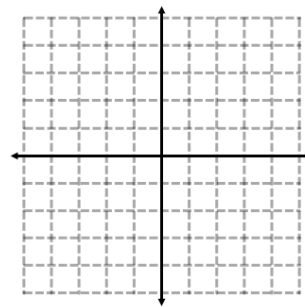
(b)  $y = -x + 3$

$x$	$y$
-1	
0	
3	



(c)  $y = \frac{2}{3}x + 2$

$x$	$y$
-3	
0	
3	



2. For each line graphed above, write the coordinates of any two points on the line and find the slope of the line using those two points.

(a)  $( \quad , \quad )$   
 $( \quad , \quad )$

(b)  $( \quad , \quad )$   
 $( \quad , \quad )$

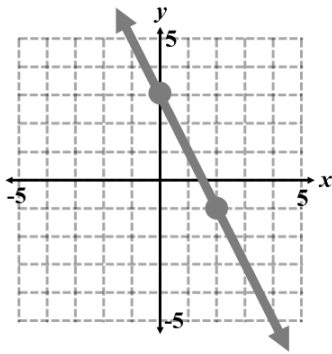
(c)  $( \quad , \quad )$   
 $( \quad , \quad )$

3. Complete the table below.

EQUATION	SLOPE	Y-INTERCEPT
$y = 2x - 3$		
$y = -x + 3$		
$y = \frac{2}{3}x + 2$		

4. Find the slope and  $y$ -intercept of each line graphed below.

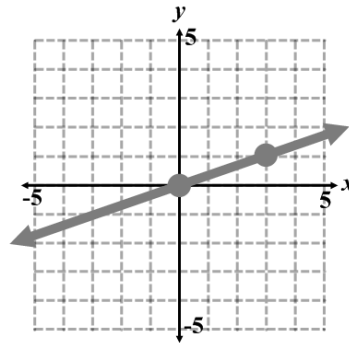
(a)  $y = -2x + 3$



$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

(b)  $y = \frac{1}{3}x$



$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

5. Find the slope and  $y$ -intercept for the following equations:

(a)  $y = 2x - 4$

$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

(b)  $y = \frac{1}{2}x + 6$

$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

6. Write an equation of a line satisfying the given conditions.

(a) slope = 5;  $y$ -intercept = 2

(b) slope =  $\frac{3}{2}$ ;  $y$ -intercept = -3

7. Find the slope and  $y$ -intercept for the following equations:

(a)  $y = 5x$

$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

(c)  $2y - 5x = 4$

$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

(b)  $3y = -2x - 9$

$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

(d)  $3x - 8y = 5$

$m =$  \_\_\_\_\_

$b =$  \_\_\_\_\_

8. A straight line with slope 5 contains the points  $(1, 2)$  and  $(3, K)$ . Find the value of  $K$ . [The use of the accompanying grid is optional.]

