

## Basic Linear Functions

**1** Fill in the blank.

In the equation  $y = mx + b$ ,  
'm' is the \_\_\_\_\_ of the line  
and 'b' is the \_\_\_\_\_.

**2** What are the slopes of these linear functions?

$y = 4x - 3$  \_\_\_\_\_

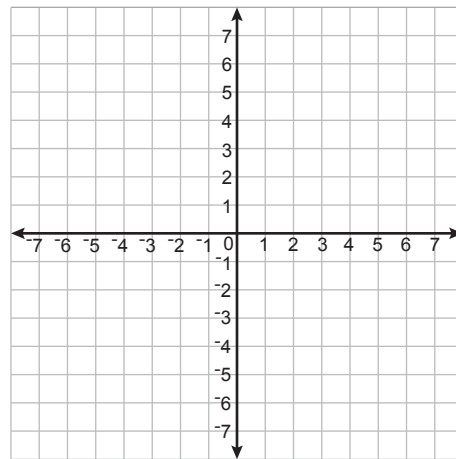
$y = -\frac{1}{3}x$  \_\_\_\_\_

**3** Complete the table for this linear function.

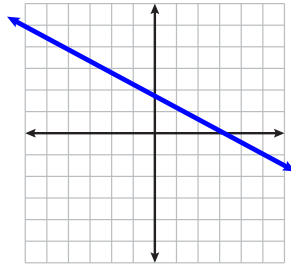
$$y = 2x - 3$$

Input x	Output y
5	
2	
1	
0	
-2	

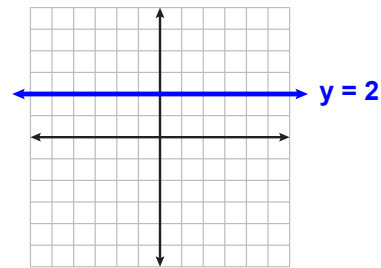
**4** Graph the function from problem 3



**5** Does this line have a positive or a negative slope?



**6** What is the slope of this line?



**7** Find the slope and y-intercept of this linear function.

(Hint: rearrange into  $y = mx + b$  form.)

$$2(x - 3) = y + 1$$

**8** Find the slope and y-intercept of this linear function.

(Hint: rearrange into  $y = mx + b$  form.)

$$2x + x = 4(y - 1)$$