

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?

$y = 4x - 3$ _____

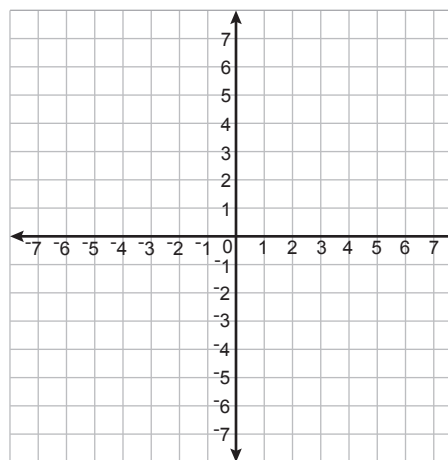
$y = -\frac{1}{3}x$ _____

3 Complete the table for this linear function.

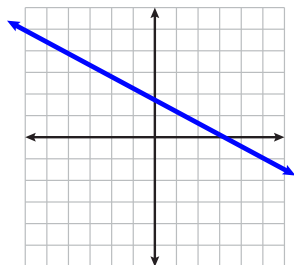
$$y = 2x - 3$$

Input x	Output y
5	
2	
1	
0	
-2	

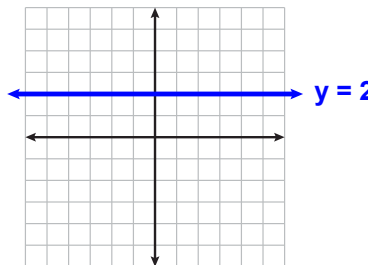
4 Graph the function from problem 3



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.)

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