

Name: _____

Date: _____

Day 5: Writing Linear Equations

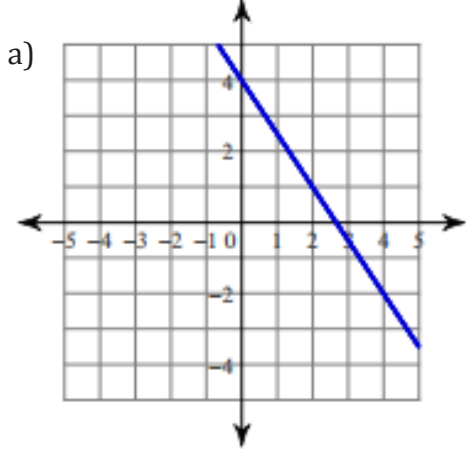
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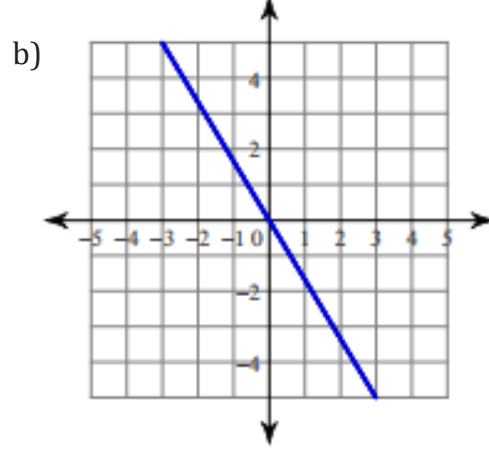
Writing Linear Equations

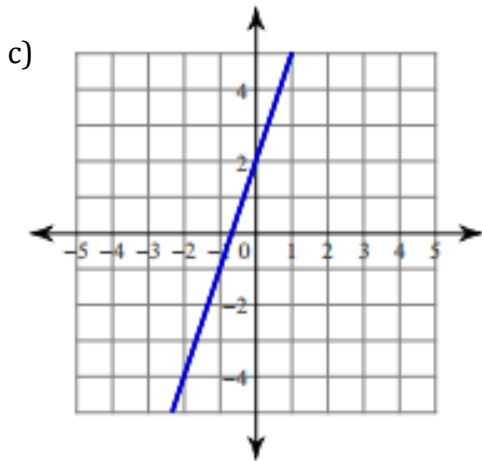
FROM A GRAPH:

1. identify **2 points**
2. use these 2 points to count the **slope**
3. identify the **y-intercept**
4. **substitute** these two values into the equation $y = mx + b$

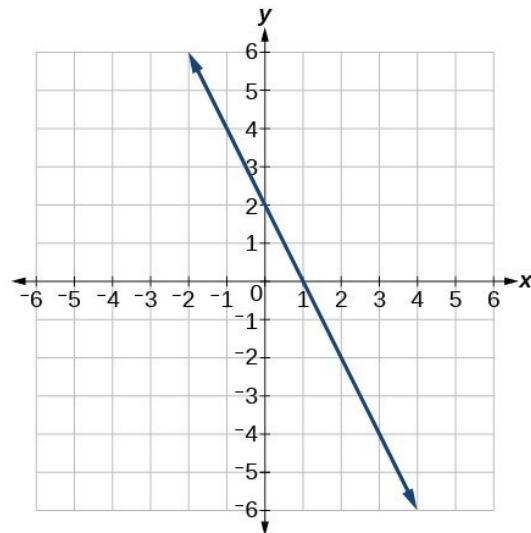
Example 1: Write the equation of the lines below in slope-intercept form.





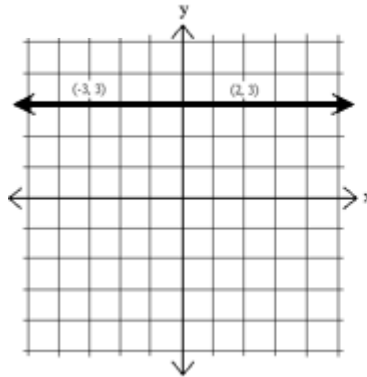


Try It: Write the linear equation of the following graph.

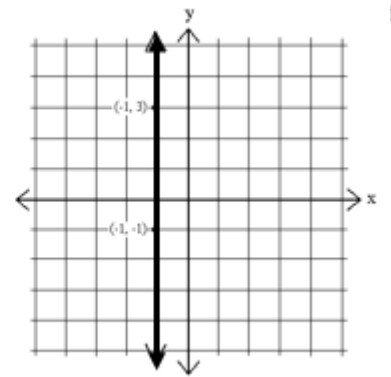


Horizontal lines:

- are parallel to the x-axis
- Will always be “ $y =$ “



The equation is: _____



The equation is: _____

Vertical lines:

- are parallel to the y-axis
- Will always be “ $x =$ “

FROM A TABLE:

1. use the **slope formula** and any 2 coordinates to find the slope
2. identify the **y-intercept**
3. **substitute** these two values into the equation $y = mx + b$

Example 2: Write the linear equation for each table below.

a)

x	0	1	2	3	4
y	3.5	4.5	5.5	6.5	7.5

b)

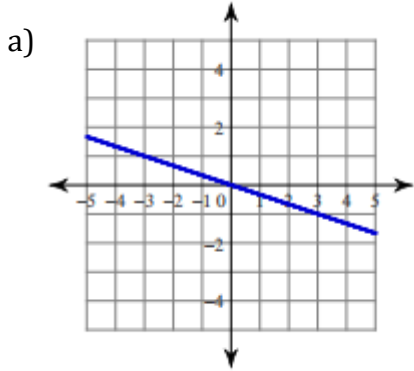
x	0	1	2	3	4
y	5	3	1	-1	-3

Try It: Write the linear equation from the table below.

x	y
0	-3
2	2
4	7
6	12

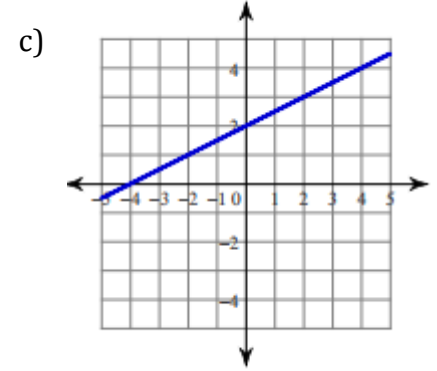
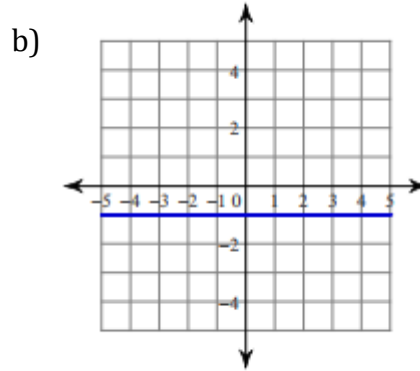
On your own!

1. Write the equation of each linear function shown in the coordinate plane below.



m =

b =



2. Write a linear equation from the following tables.

x	0	1	2	3	4
y	6	7	8	9	10

a)

x	0	1	2	3	4
y	3	-1	-5	-9	-13

b)