

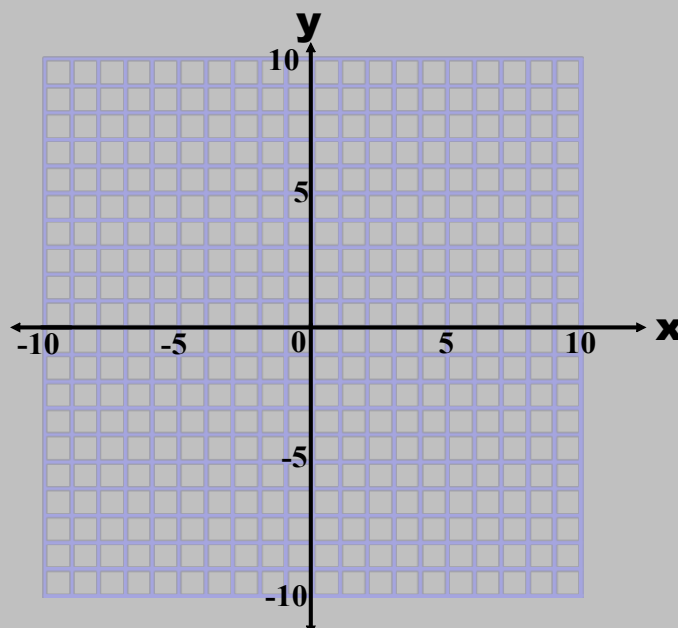
Mini-Lesson #1

Horizontal, Vertical, and Oblique Lines

Please get a piece of graph paper and do ALL of the mini-lesson on that page. You will also need something to make straight lines.

Jan 10-2:48 PM

Create a grid that goes 10 units in each direction



déc. 13-11:42

Create a table of values for $y = 2x + 1$ and then graph the coordinates on your grid.

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

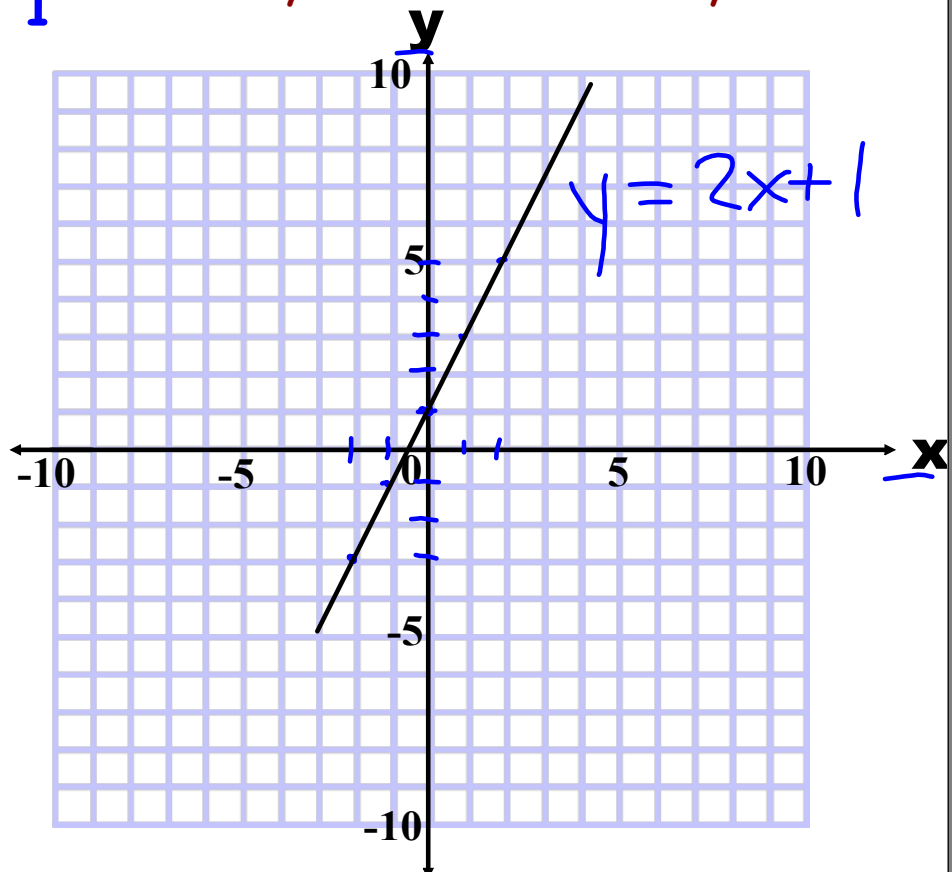
$$\begin{aligned}
 y &= 2x + 1 \\
 &= 2(-2) + 1 \\
 &= -4 + 1 \\
 &= -3 \\
 y &= 2(-1) + 1 \\
 &= -2 + 1 \\
 &= -1
 \end{aligned}$$

déc. 13-11:43

$y = 2x + 1$

Check your answers and label your line

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



déc. 13-11:45

Create a table of values for $y = -2x + 1$ and then graph the coordinates on your grid.

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

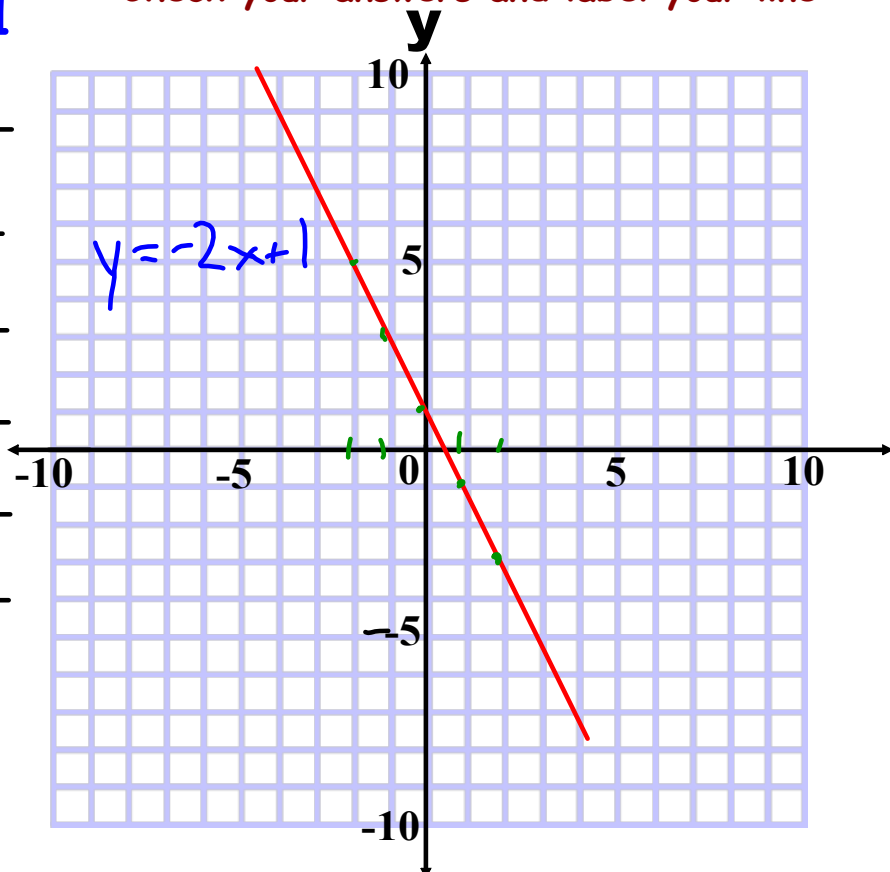
$$\begin{aligned}
 y &= -2x + 1 \\
 &= -2(-2) + 1 \\
 &= 4 + 1 \\
 &= 5
 \end{aligned}$$

déc. 13-11:43

$y = -2x + 1$

Check your answers and label your line

-2	5
-1	3
0	1
1	-1
2	-3



déc. 13-11:45

Put the following points on your grid:

$(4, 2)$

$(-6, 2)$

$(10, 2)$

$(7, 2)$

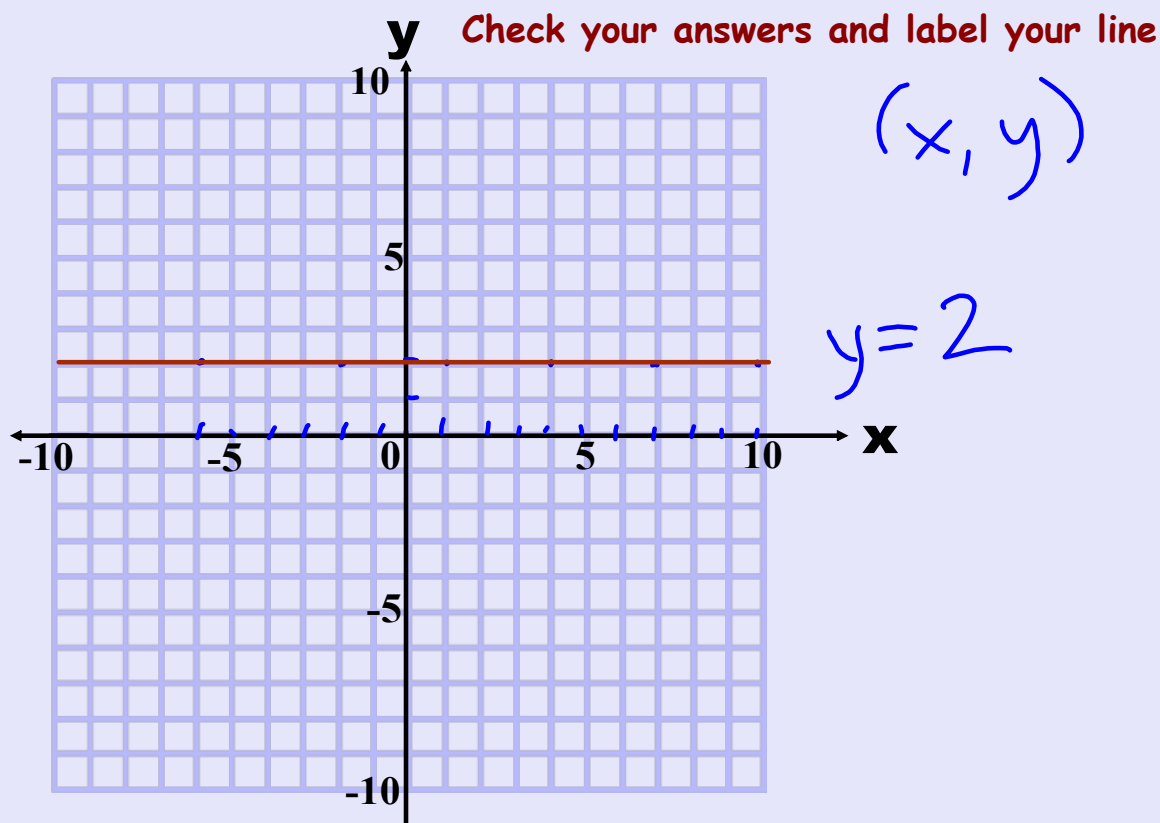
$(-2, 2)$

$(1, 2)$

Join the points using a ruler

déc. 13-11:48

What is the equation of this line?



déc. 13-11:45

Place these points on your grid:

$(5,4)$ $(-9,4)$ $(8,4)$

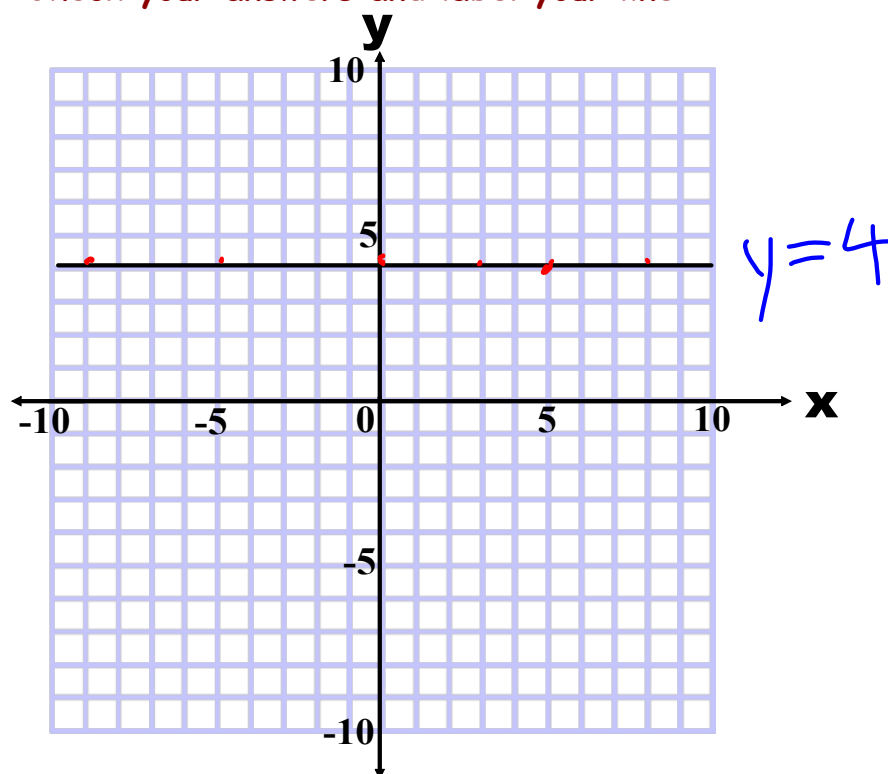
$(-5,4)$ $(0,4)$ $(3,4)$

Join them using a ruler

déc. 13-11:48

What equation would this make?

Check your answers and label your line



déc. 13-11:45

Put these points on a grid:

(6, 5)

(6, -2)

x, y
(6, 9)

(6, 1)

(6, -7)

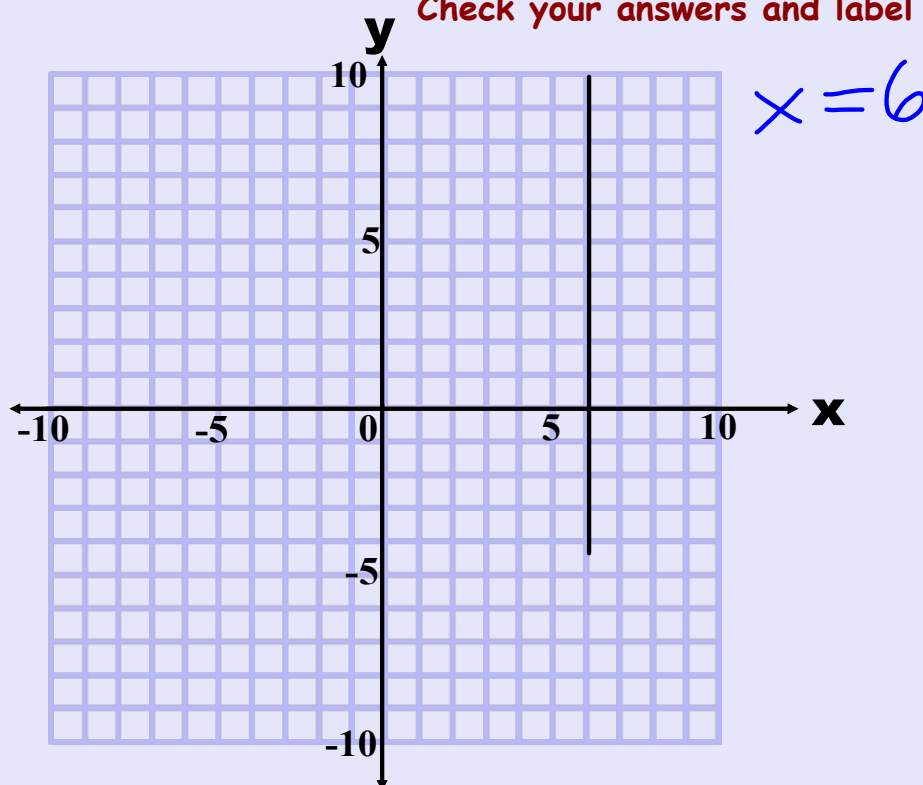
(6, 0)

Join them with a ruler

déc. 13-14:16

What is the equation of this line?

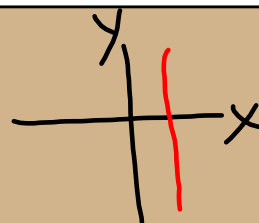
Check your answers and label your line



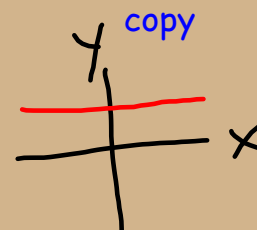
déc. 13-11:45

Vertical Lines:

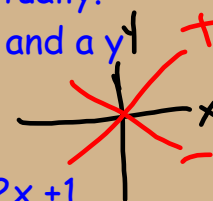
- Vertical lines cross only the x-axis
- Therefore their equations will always be $x=n$ (where n is the number on the x-axis)

Horizontal Lines:

- Horizontal lines cross only the y-axis
- Therefore their equations will always be $y=n$ (where n is the number on the y-axis)

Oblique Lines:

- These lines are slanted lines and cross both axes eventually.
- Therefore the equations for these lines will have an x and a y in them.
- These may have a positive or negative correlation:
 - > Positive: going upwards left to the right. Ex: $y = 2x + 1$
 - > Negative: going downwards left to the right. Ex. $y = -2x + 1$



Dec 18-10:21 PM