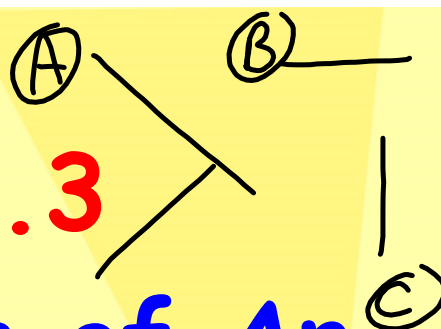
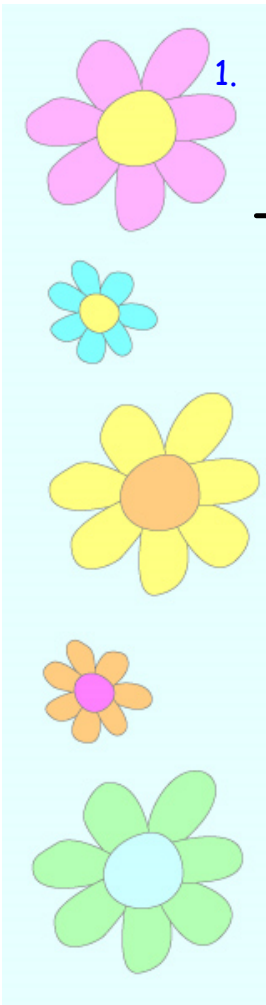


March 20, 2019



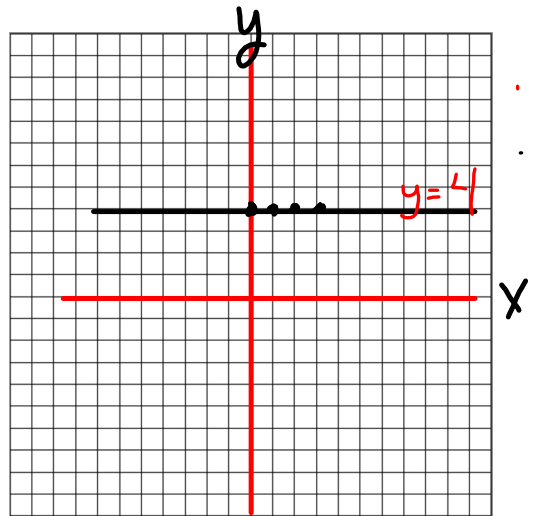
Section 4.3

Another Form of An Equation for a Linear Relation



1. Graph the Following:

x	y
0	4 >+0
1	4 >+0
2	4 >+0
3	4 >+0



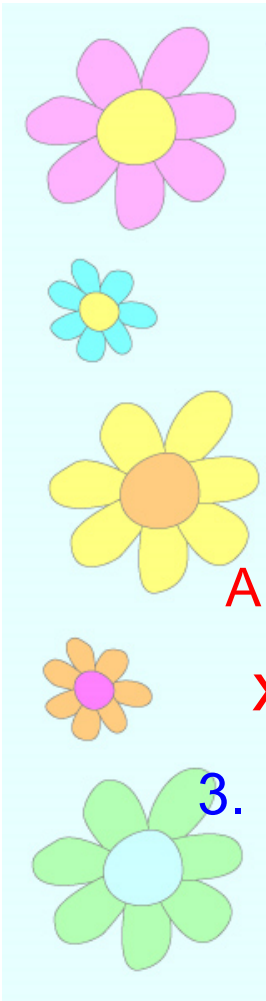
2. Write the equation:

$$y = 0x + 4$$

$$y = 4 \text{ [goes through] [cross]}$$

3. Describe the graph

A horizontal line that intersects the y axis at 4.



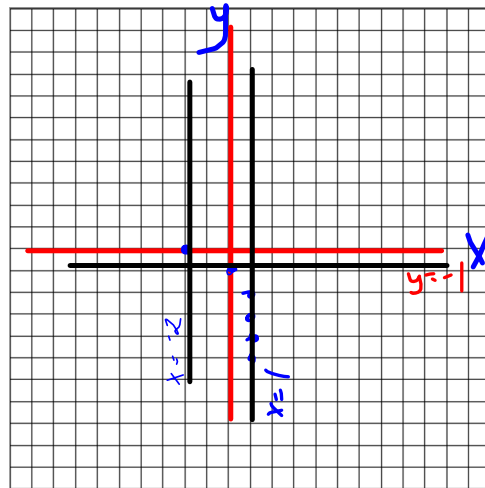
Graph the Following:

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

Describe the graph

A vertical line that intersects the
x-axis at 1

3. Draw a line where $x = -2$ $y = -1$



$x =$ a constant [vertical line]

$x = 4$

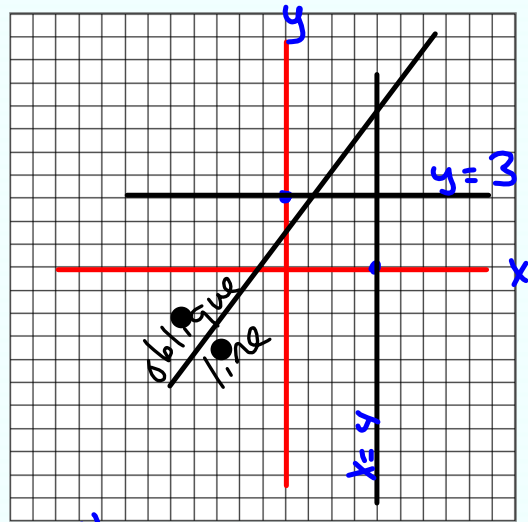
$y =$ a constant [horizontal line]

$y = 3$

oblique line- [neither perpendicular or parallel to an axis]-slope or slant

has both x and y

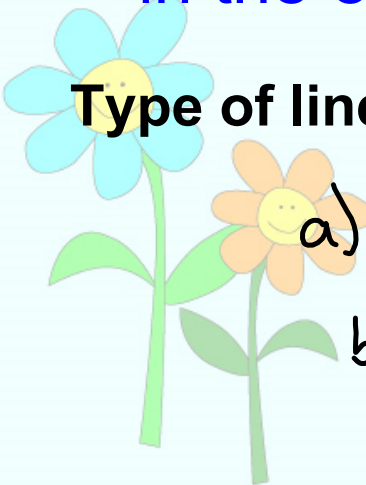
in the equation



Type of line: vertical, horizontal or oblique?

a) $2x = 6$ V c) $y = 4$ H f) $2y = 7$ H

b) $y = 2x - 1$ O d) $x + y = 7$ O $\frac{y}{x}$



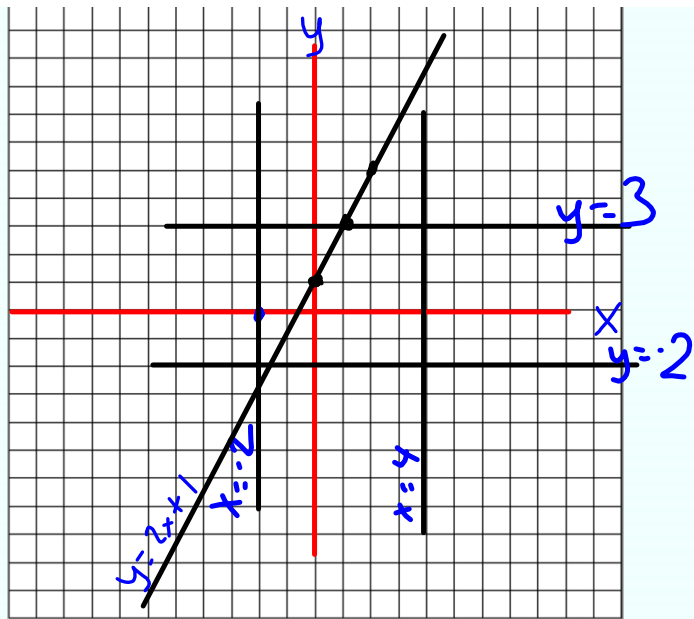
Graph the following:

V A. $x = -2$

H B. $y = 3$

H C. $y = -2$

V D. $x = 4$



What about $y = 2x + 1$???

x	y
0	1
1	3
2	5

$x = 0$
 $y = 2x + 1$
 $y = 2(0) + 1$
 $y = 1$

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

$x = 2$
 $y = 2x + 1$
 $y = 2(2) + 1$
 $y = 5$

Graph the following equation:
use -2 to 2 [3 calculations]

$$y = 2x + 2$$

x	y
-2	-2
-1	0
0	2
1	4
2	6

$$x=0$$

$$y=2x+2$$

$$y=2(0)+2$$

$$y=2$$

$$x=1$$

$$y=2x+2$$

$$y=2(1)+2$$

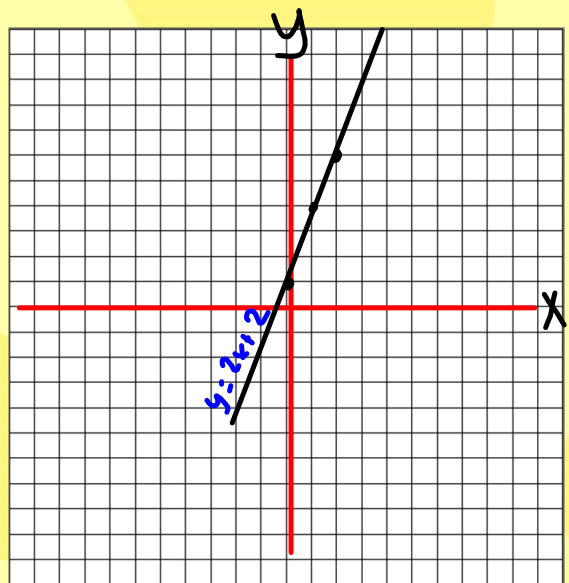
$$y=4$$

$$x=2$$

$$y=2x+2$$

$$y=2(2)+2$$

$$y=6$$



Classify each equation as oblique, horizontal or vertical.
[O] [H] [V]

A. $y + 2 = 3$ H

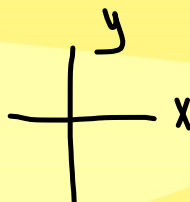
D. $y = -3$ H

B. $2y + 3x = 17$ O

E. $x = 4$ V

C. $-3y = 12$ H

F. $y = 2x + 1$ O



Identify the type of line:

[horizontal, vertical or oblique]

A. $\frac{2x}{2} = \frac{8}{2}$ (V)
 $x = 4$

B. $3x + 2y = 7$ (O)
 Table Values

C. $4y + x = 3$ (O)
 table of values

D. $\frac{4y}{4} = \frac{12}{4}$ (H)
 $y = 3$

Graph

(H) A. $y + 2 = 7$
 $y + 2 - 2 = 7 - 2$
 $y = 5$

(V) B. $\frac{2x}{2} = \frac{-4}{2}$
 $x = -2$

(H) C. $y + 4 = -2$
 $y + 4 - 4 = -2 - 4$
 $y = -6$

