

March 27, 2017

Warm-Up

A) Graph the following equation:  
use -2 to 2

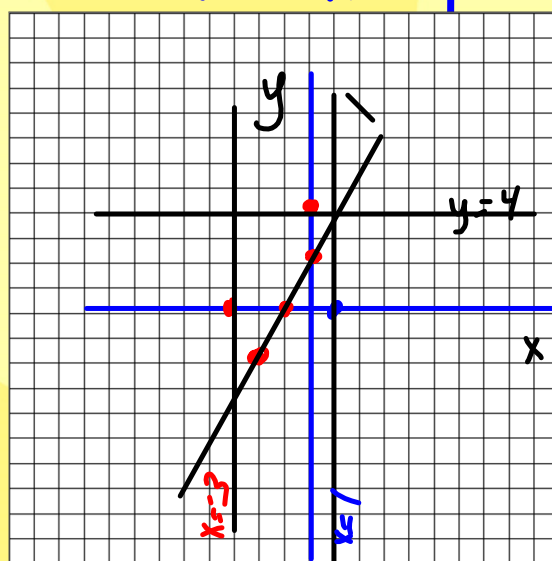
$$y = 2x + 2$$

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

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

$$\begin{aligned} x &= -1 \\ y &= 2x + 2 \\ y &= 2(-1) + 2 \\ y &= -2 + 2 \\ y &= 0 \end{aligned}$$

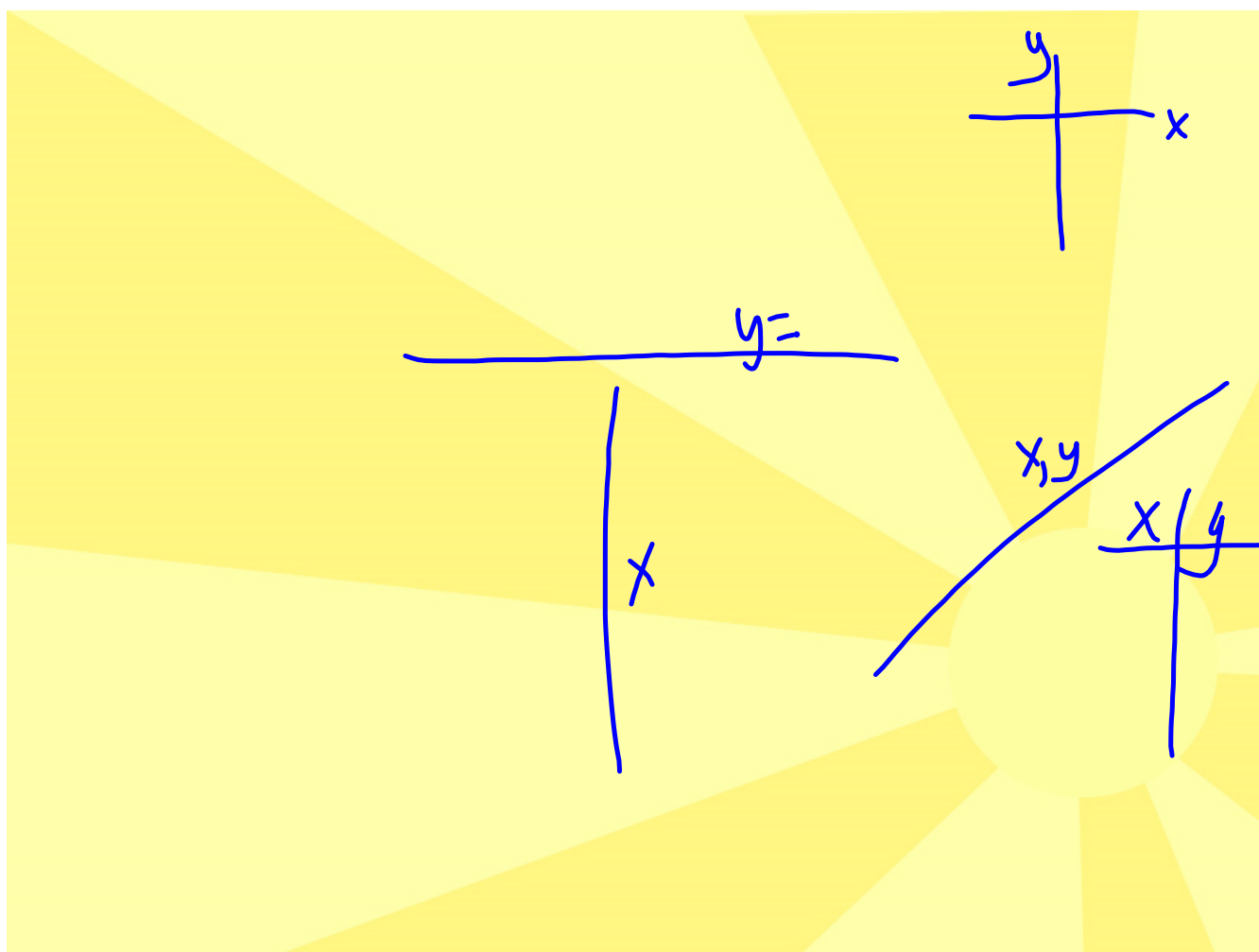
$$\begin{aligned} x &= 0 \\ y &= 2x + 2 \\ y &= 2(0) + 2 \\ y &= 0 + 2 \\ y &= 2 \end{aligned}$$



B)  $x = -3$

C)  $y = 4$

D)  $x + 2 = 3$   
 $x = 1$

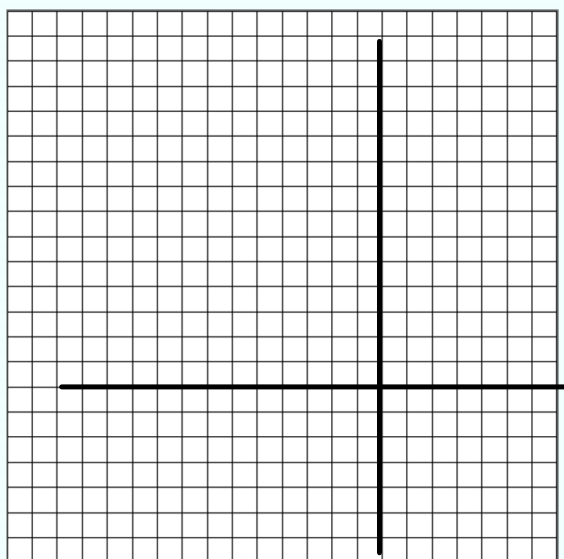


$x = \text{a constant}$  [vertical line]

$y = \text{a constant}$  [horizontal line]

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

has both  $x$  and  $y$   
in the equation

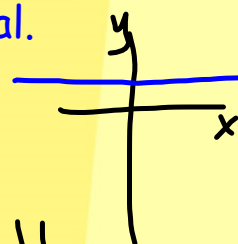


Classify each equation as oblique, horizontal or vertical.

$[x, y]$

$y =$

$x =$



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

G.  $2x - 3 = 4$

Graph Each of the Following:

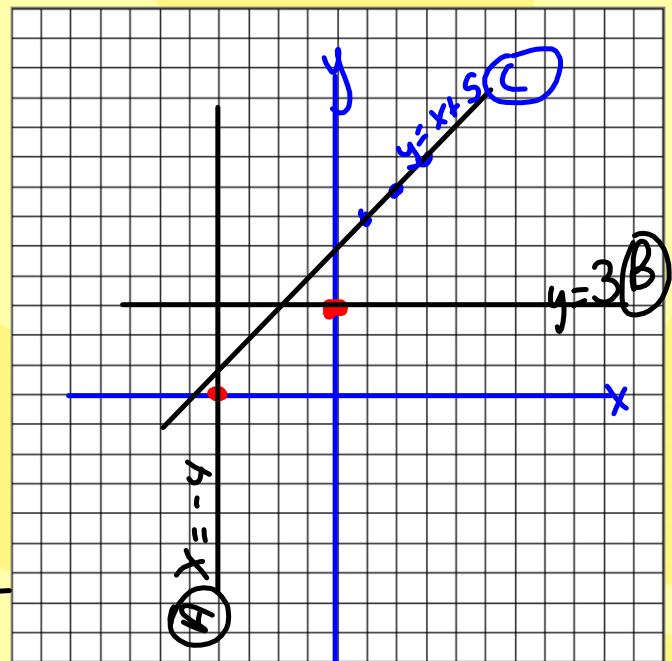
A.  $x = -4$  vertical

B.  $y = 3$  horizontal

C.  $y = x + 5$   $x = 1, 2, 3$

Show 3 calculations

x	y
1	6
2	7
3	8



$x = 1$

$$y = x + 5$$

$$y = 1 + 5$$

$$y = 6$$

$x = 2$

$$y = x + 5$$

$$y = 2 + 5$$

$$y = 7$$

$x = 3$

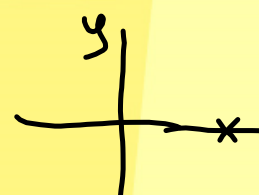
$$y = x + 5$$

$$y = 3 + 5$$

$$y = 8$$

Identify the type of line:

[horizontal, vertical or oblique]

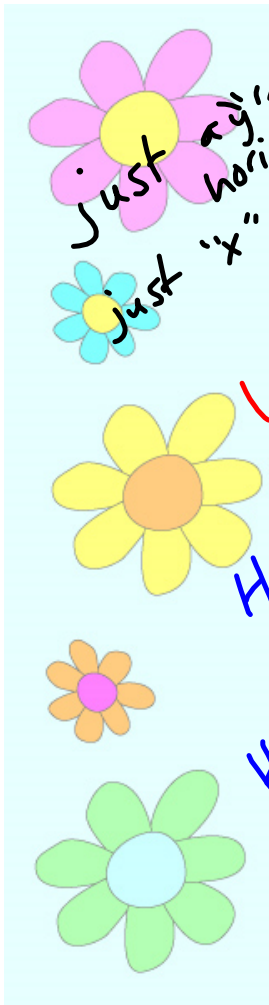


A.  $2x = 8$  V  
 $x = 4$

B.  $3x + 2y = 7$  O

C.  $4y + x = 3$  O

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



# Graph

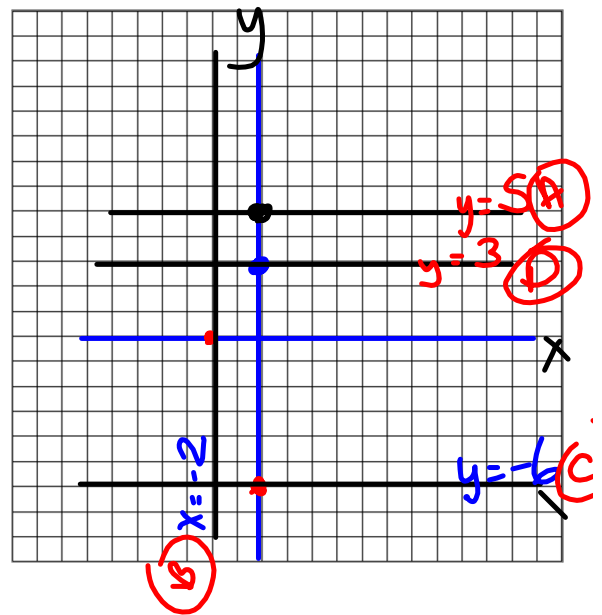
just a y!  
horizontal  
just 'x'  
vertical

HA.  $y + 2 = 7$   
 $y = 5$

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

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

H D.  $y = 3$



# 1) Identify the type of graph

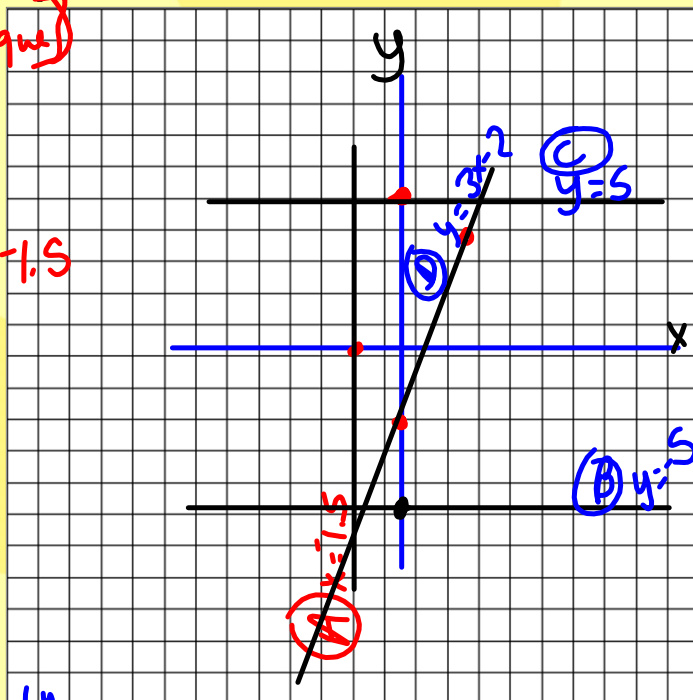
(vertical, horizontal, oblique)

## 2) Graph the following:

V A.  $\frac{2x}{2} = \frac{-3}{2}$   
 $x = \frac{-3}{2} = -1.5$

H B.  $y + 3 = -2$   
 $y + 3 - 3 = -2 - 3$   
 $y = -5$

H C.  $-y + 8 = 3$   
 $-y + 8 - 8 = 3 - 8$   
 $-y = -5$   
 $y = 5$



D.  $y = 3x - 2$ ,  $x = -2, 0, 2$

$x$	$y$	$x = -2$	$x = 0$	$x = 2$
$-\frac{2}{2}$	$-8$	$y = 3x - 2$	$y = 3x - 2$	$y = 3x - 2$
$0$	$-2$	$y = 3(-2) - 2$	$y = 3(0) - 2$	$y = 3(2) - 2$
$2$	$4$	$= -6 - 2$	$y = -2$	$y = 6 - 2$
		$= -8$		$y = 4$



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# 5 write the equation then identify the type

#6 A \_\_\_\_\_ line that intersects  
 \_\_\_\_\_ at \_\_\_\_\_

Don't Graph

#7.

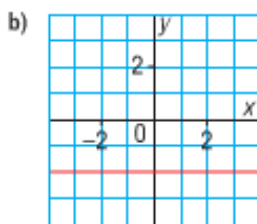
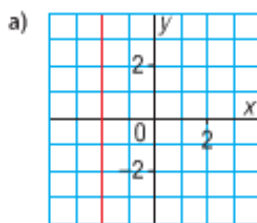
Extra help with the midunit  
 review...Finish Midunit Review

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 Graph

**Check**

4. Which equation describes each graph?

- i)  $x = -2$                       ii)  $x = 2$
- iii)  $y = -2$                       iv)  $y = 2$



5. Does each equation describe a vertical line, a horizontal line, or an oblique line? Describe each horizontal and vertical line.

- a)  $y = 7$                               b)  $x - y = 3$
- c)  $x = -5$                             d)  $x + 9 = 0$
- e)  $2y = 5$                             f)  $y = 6 - 2x$

**Apply**

6. Describe the graph of each line. Graph each line to check your description.

- a)  $y = 5$                               b)  $x = -1$
- c)  $x = -5$                             d)  $y = 7$

7. Write an equation to describe each line.

