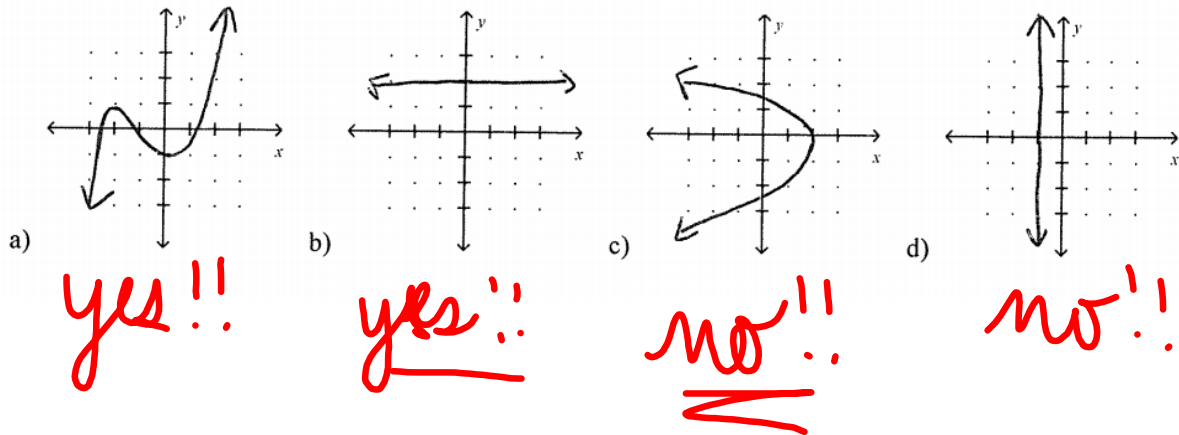


9.1 & 9.2 Quiz Review

1. Decide whether each graph is a function.



2. Decide whether each relation is a function. *x's cannot repeat!!*

x	<u>4</u>	<u>0</u>	<u>9</u>	<u>-3</u>
y	2	-5	6	-5

a)

yes!!

$$\{(-1, 5), (3, 2), (4, 6), (-9, 2)\}$$

b)

yes!!

x	<u>-7</u>	<u>3</u>	<u>1</u>	<u>-7</u>
y	8	-4	0	-1

c)

no!!

3. Evaluate each function.

a) Find $f(-3)$ if $f(x) = 6x + 1$.

$$\begin{aligned} f(-3) &= 6 \cdot -3 + 1 \\ &= -18 + 1 \end{aligned}$$

$$f(-3) = -17$$

b) Find $g(8)$ if $g(x) = \frac{1}{2}x - 4$.

$$\begin{aligned} g(8) &= \frac{1}{2} \cdot 8 - 4 \\ &= 4 - 4 \end{aligned}$$

$$g(8) = 0$$

$$y = 2x - 3$$

x	$y = 2x - 3$	y
0	$2 \cdot 0 - 3 = 0 - 3$	-3
1	$2 \cdot 1 - 3 = 2 - 3$	-1
2	$2 \cdot 2 - 3 = 4 - 3$	1

$$y = -3x + 2$$

x	$y = -3x + 2$	y
-1	$-3 \cdot -1 + 2 = 3 + 2$	5
0	$-3 \cdot 0 + 2 = 0 + 2$	2
1	$-3 \cdot 1 + 2 = -3 + 2$	-1

6. $y = 8x - 5$

x	y
3	19
5	35
-2	-21
1	3
4	27

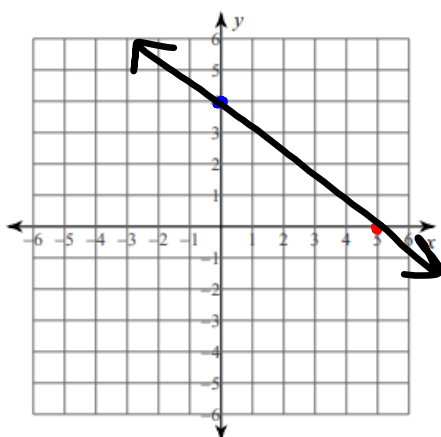
$8 \cdot 3 - 5 = 24 - 5$
 $8 \cdot 5 - 5 = 40 - 5$
 $8 \cdot (-2) - 5 = -16 - 5$
 $8 \cdot 1 - 5 = 8 - 5$
 $8 \cdot 4 - 5 = 32 - 5$

$y + 4 = 2x$
 $-4 \quad -4$
 $y = 2x - 4$

x	$y = 2x - 4$	y
0	$2 \cdot 0 - 4 = 0 - 4$	-4
1	$2 \cdot 1 - 4 = 2 - 4$	-2
2	$2 \cdot 2 - 4 = 4 - 4$	0

Find the x and y intercepts and graph the line.

1) $4x + 5y = 20$



$4x + 5y = 20$

x-int: $4x + 5 \cdot 0 = 20$
 $(y=0)$

$\frac{4x}{4} = \frac{20}{4}$

$x = 5$

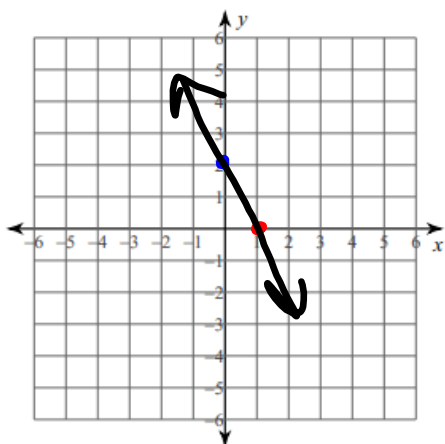
y-int: $4 \cdot 0 + 5y = 20$
 $(x=0)$

$\frac{5y}{5} = \frac{20}{5}$

$y = 4$

Find the x and y intercepts and graph the line.

2) $2x + y = 2$



$$2x + y = 2$$

$$\text{x-int: } 2x + 0 = 2$$

$$(y=0)$$

$$\frac{2x}{2} = \frac{2}{2}$$

$$\boxed{x = 1}$$

$$\text{y-int: } 2 \cdot 0 + y = 2$$

$$(x=0)$$

$$\boxed{y = 2}$$