

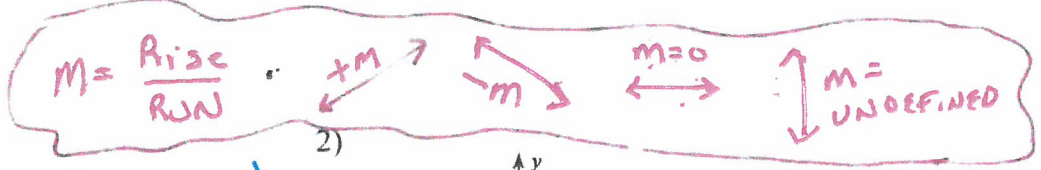
Chapter 4 Practice Quiz (2022)

Date \_\_\_\_\_

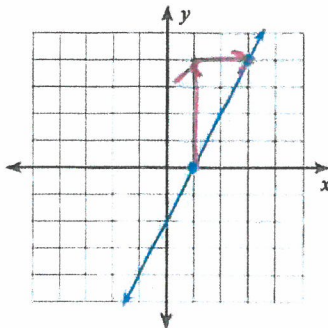
Period \_\_\_\_\_

#1-6 ARE 3 POINTS EACH

Find the slope of each line.

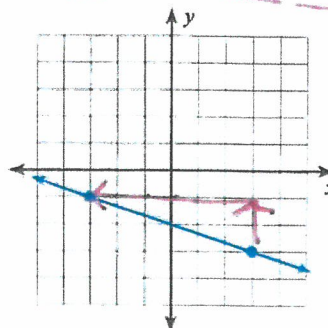


1)



most write variable!  
 $m = \frac{4}{2}$   
 $m = 2 \text{ or } \frac{2}{1}$

2)



$m = \frac{2}{-6} \rightarrow m = -\frac{1}{3}$

Find the slope of the line through each pair of points.

3)  $(-17, -8), (-2, -13)$

$$m = \frac{-8 - (-13)}{-17 - (-2)}$$

$$m = \frac{5}{-15}$$

$$m = -\frac{1}{3}$$

$$m = \frac{-13 - (-8)}{-2 - (-17)}$$

$$m = \frac{-5}{15}$$

$$m = -\frac{1}{3}$$

same

4)  $(1, -9), (-13, -19)$

$$m = \frac{-9 - (-19)}{1 - (-13)}$$

$$m = \frac{10}{14}$$

$$m = \frac{5}{7}$$

Must label Calc w/m

Go down

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

or

$$m = \frac{\Delta y}{\Delta x}$$

Write the slope-intercept form of the equation of each line. State the slope and -yintercept using the correct variable notation.

S/I  $\rightarrow y = mx + b$

5)  $y - 3 = \frac{6}{5}(x - 5)$

P/S example

$$y - 3 = \frac{6}{5}x - 6$$

$$y = \frac{6}{5}x - 3$$

$$m = \frac{6}{5}$$

$$b = -3$$

6)  $x - 7y = 35$

STANDARD FORM example

$$-7y = -x + 35$$

$$y = \frac{1}{7}x - 5$$

$$m = \frac{1}{7}$$

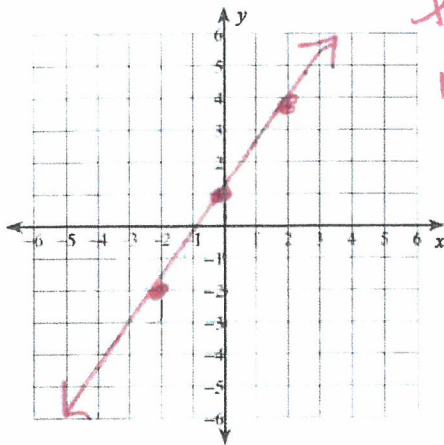
$$b = -5$$

#7-13 ARE 6 POINTS EACH

Graph: USE the TABLE METHOD (order pairs must be integers):

7)  $y = \frac{3}{2}x + 1$

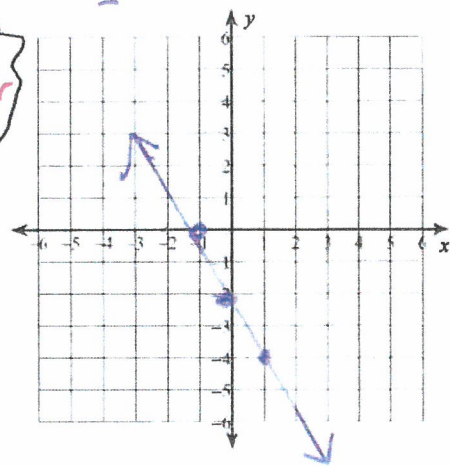
*use values of x that are multiples of denominator*



x	y
-2	0
0	1
2	2

8)  $y = -2x - 2$

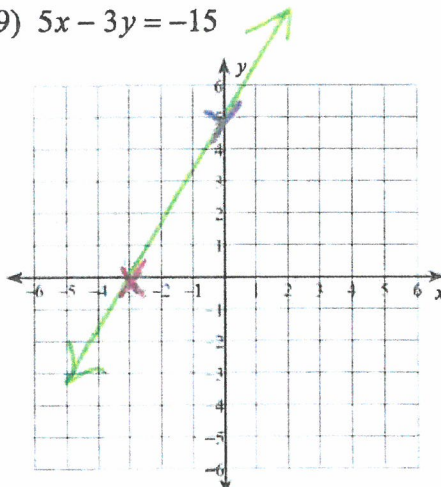
*INTEGER use x = -1, 0, 1*



x	y
-1	0
0	-2
1	-4

Graph: USE INTERCEPT METHOD: \* Label the x and y intercepts with their ordered pairs.

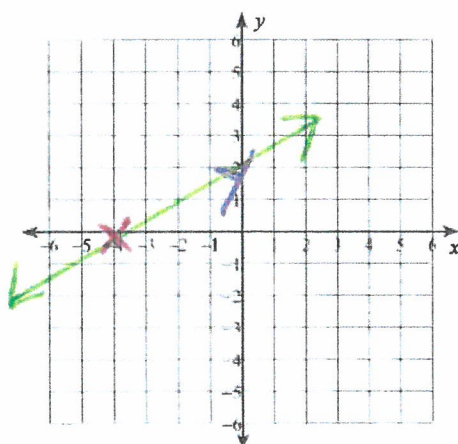
9)  $5x - 3y = -15$



X<sub>INT</sub> (x, 0)  
 $5x - 3(0) = -15$   
 $x = -3$

Y<sub>INT</sub> (0, y)  
 $5(0) - 3y = -15$   
 $y = 5$

10)  $x - 2y = -4$

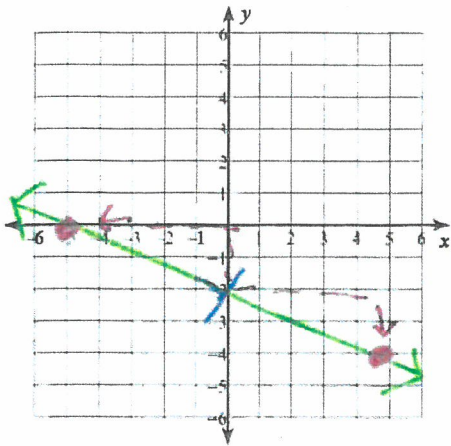


X<sub>INT</sub> (x, 0)  
 $x - 2(0) = -4$   
 $x = -4$

Y<sub>INT</sub> (0, y)  
 $0 - 2y = -4$   
 $y = 2$

Graph: USE SLOPE-INTERCEPT METHOD: (1) State the slope and -yintercept using the correct variable notation. (2) Clearly mark 3 points.

11)  $y = -\frac{2}{5}x - 2$

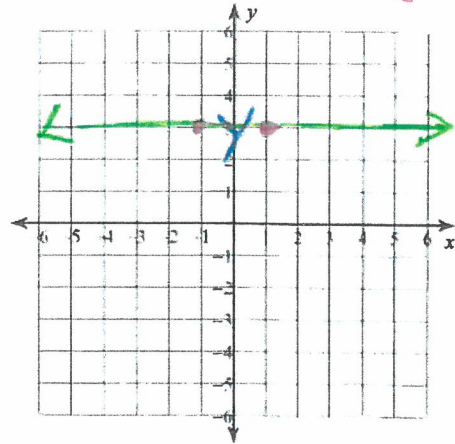


$m = -\frac{2}{5}$

For slope, use  $m = \frac{\text{Rise}}{\text{Run}}$

$B = -2$

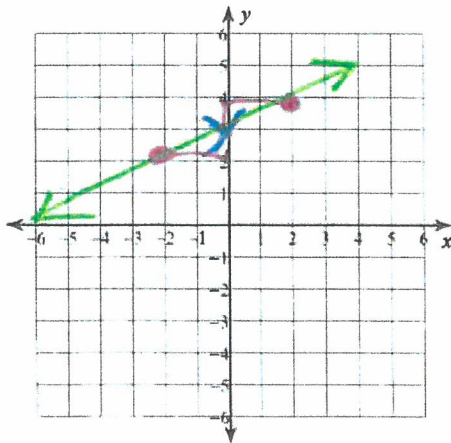
12)  $y = 3$   $\longleftrightarrow$   $y = 0x + 3$



$m = 0$

$B = 3$

13)  $x - 2y = -6$



Put into  $y = mx + b$

$$\begin{array}{r} x - 2y = -6 \\ -x \quad \quad -x \\ \hline \end{array}$$

$$\frac{-2y}{-2} = \frac{-x-6}{-2} \frac{-6}{-2}$$

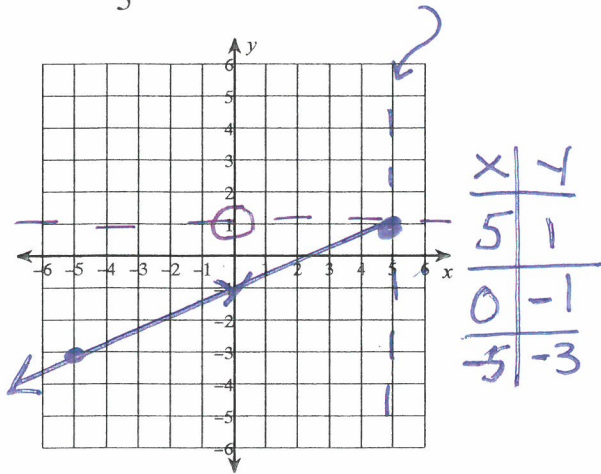
$y = \frac{1}{2}x + 3$

$m = \frac{1}{2}$

$B = 3$

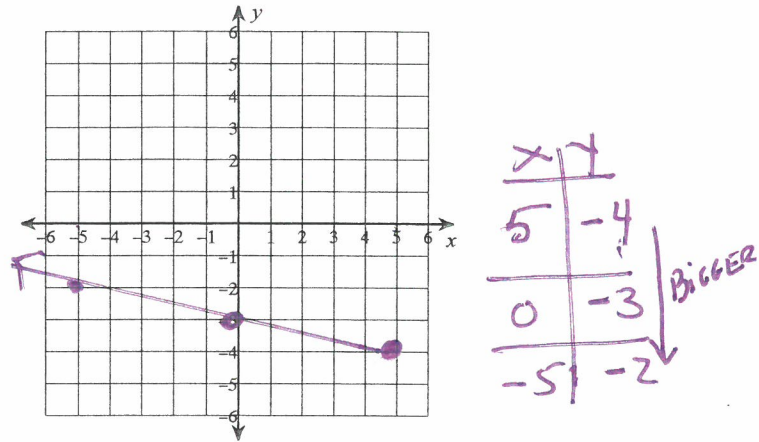
UPDATED 2022: Graph the line with the domain  $X \leq 5$  Then give the range.

14)  $y = \frac{2}{5}x - 1$       $D: x \leq 5$



$R: y \leq 1$

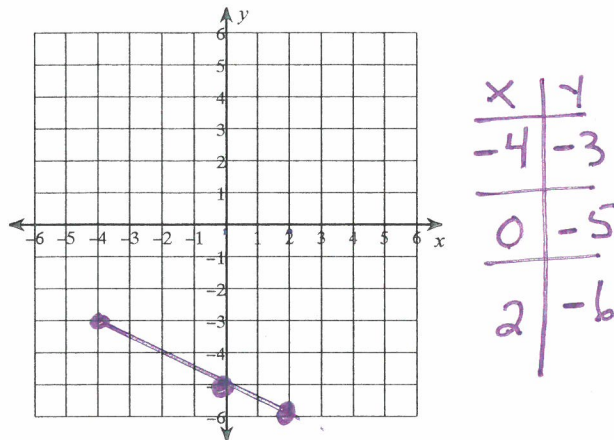
15)  $y = -\frac{1}{5}x - 3$       $D: x \leq 5$



$R: y \geq -4$

UPDATED 2022: Graph the line with the domain  $-4 \leq X \leq 2$  Then give the range.

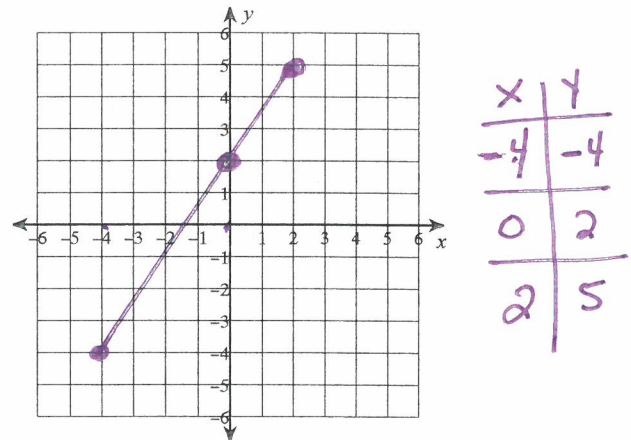
16)  $y = -\frac{1}{2}x - 5$       $D: -4 \leq x \leq 2$



$R: -6 \leq y \leq -3$

↑ small #     ↑ Big #

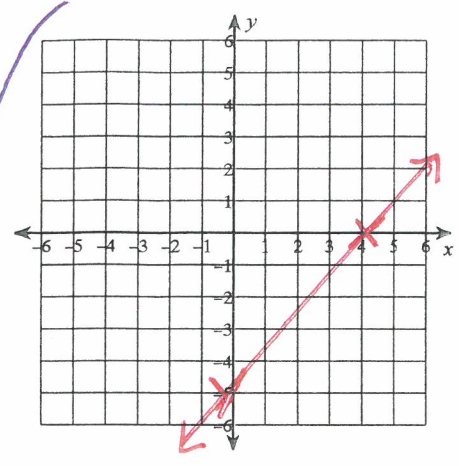
17)  $y = \frac{3}{2}x + 2$       $D: -4 \leq x \leq 2$



$R: -4 \leq y \leq 5$

**BONUS (4pts) Graph using any method. Show your work!**

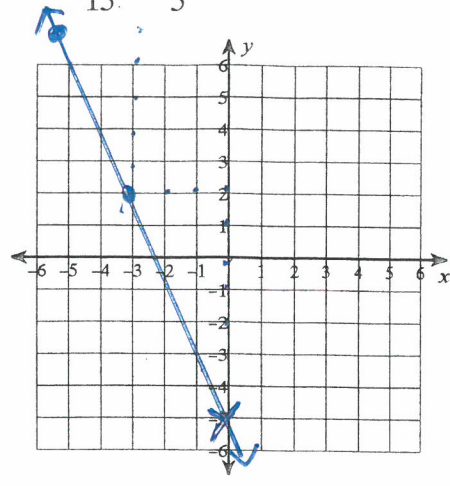
18)  $-20 + 5x - 4y = 0$



STANDARD FORM:  $AX + BY = C$

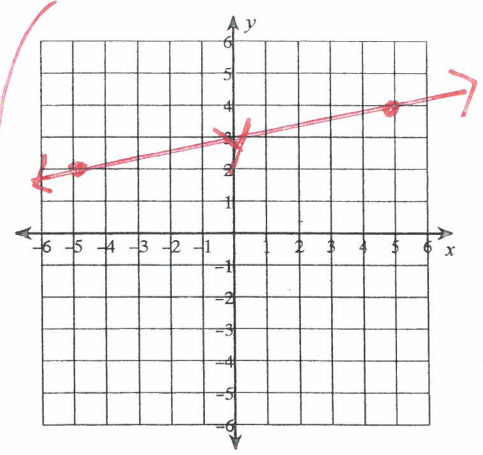
$5x - 4y = 20$   
 OR  
 $y = \frac{5}{4}x - 5$   
 x: 4  
 y: -5

19)  $-\frac{7}{15}x - \frac{1}{5}y = 1$



$-\frac{7}{15}x - \frac{1}{5}y = 1$   
 $-5(-\frac{1}{5}y = \frac{7}{15}x + 1)$

20)  $-15y + 45 + 3x = 0$



$y = -\frac{35}{15}x - 5$   
 $y = -\frac{7}{3}x - 5$

$-\frac{15y}{-15} = \frac{-3x - 45}{-15}$   
 $y = \frac{1}{5}x + 3$

Can't do the intercept method

$-15y + 3x = 45$

x: 15 ← will not fit on the graph  
y: -3