

# HONORS CHAPTER REVIEW HW

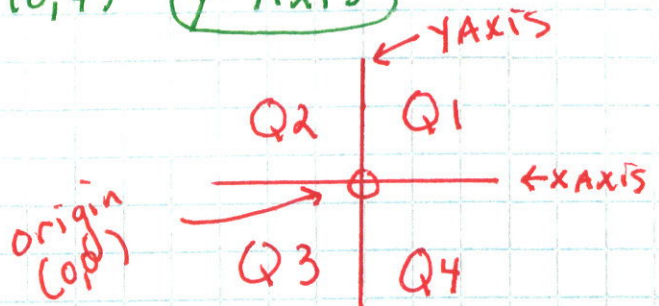
1)  $(-4, -2)$  Q3

5)  $(0, 4)$  Y-AXIS

2)  $(5, 0)$  X-AXIS

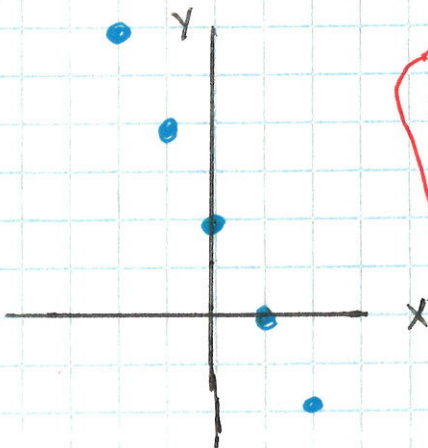
3)  $(3, -1)$  Q4

4)  $(-2, 2)$  Q2



9)  $y = -2x + 2$   
Domain  $x = -2, -1, 0, 1, 2$

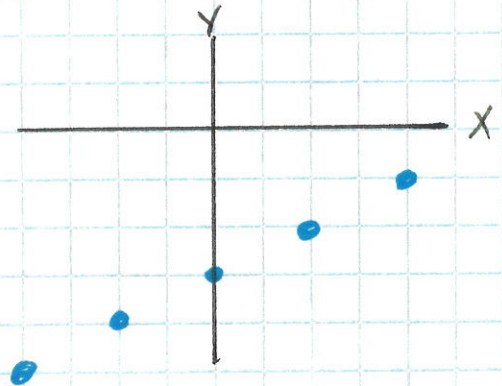
|   |    |    |   |   |    |
|---|----|----|---|---|----|
| x | -2 | -1 | 0 | 1 | 2  |
| y | 6  | 4  | 2 | 0 | -2 |



Range  $y = -2, 0, 2, 4, 6$

10)  $y = \frac{1}{2}x - 3$   
Domain:  $x = -4, -2, 0, 2, 4$

|   |    |    |    |    |    |
|---|----|----|----|----|----|
| x | -4 | -2 | 0  | 2  | 4  |
| y | -5 | -4 | -3 | -2 | -1 |



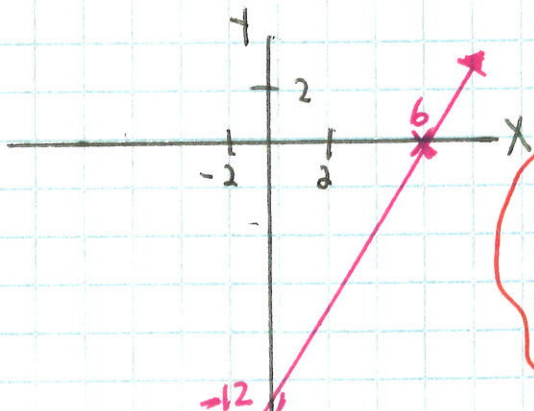
Range:  $y = -5, -4, -3, -2, -1$

DISCRETE FUNCTIONS DO NOT DRAW THE LINE

19)  $2x - y = 12$

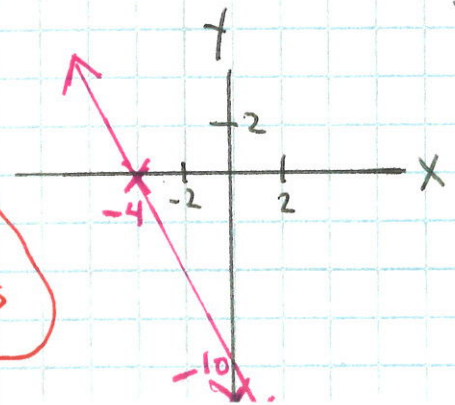
$x: 6$   $(6, 0)$   
 $y: -12$   $(0, -12)$

INTERCEPTS



20)  $-5x - 2y = 20$

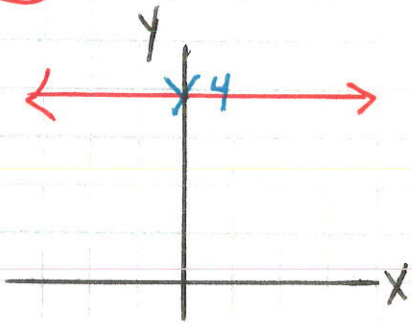
$x: -4$   $(-4, 0)$   
 $y: -10$   $(0, -10)$



CONTINUOUS FUNCTIONS DRAW LINES WITH ARROWS

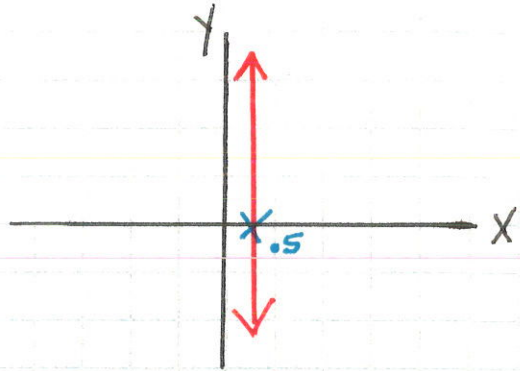
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$y = 4$



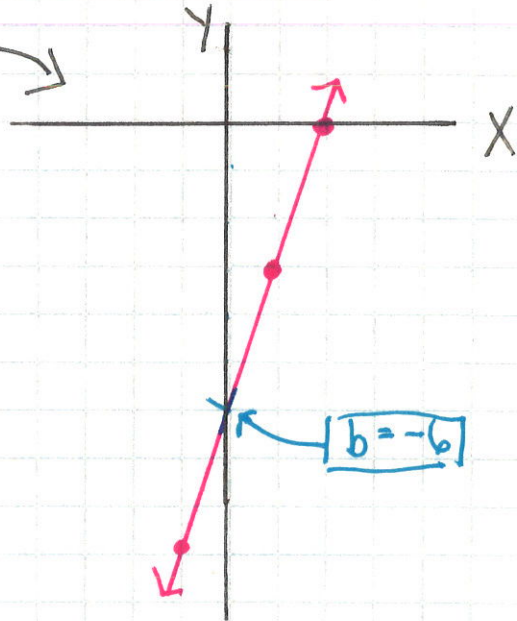
15

$x = 0.5$



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$y = 3x - 6$   
 $m = 3/1$   $b = -6$



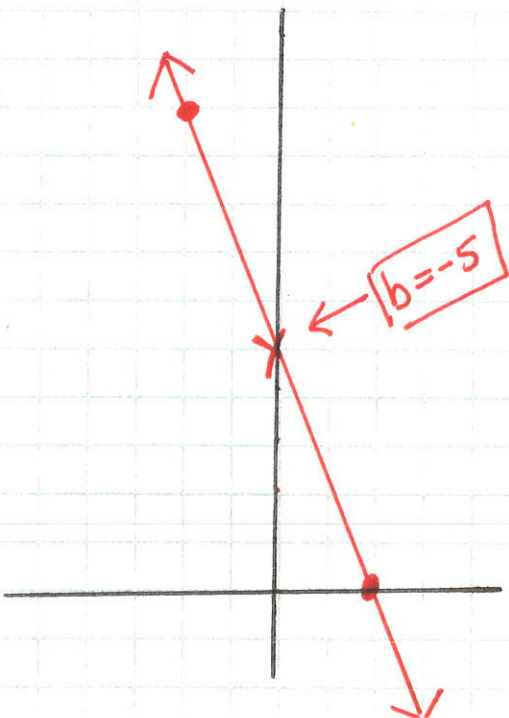
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$5x + 2y = 10$

$$\begin{array}{r} -5x \qquad -5x \\ \hline 2y = -5x + 10 \\ \hline \frac{2y}{2} = \frac{-5x}{2} + \frac{10}{2} \end{array}$$

$$y = -\frac{5}{2}x + 5$$

slope =  $m = -5/2$   
y-intercept =  $b = 5$

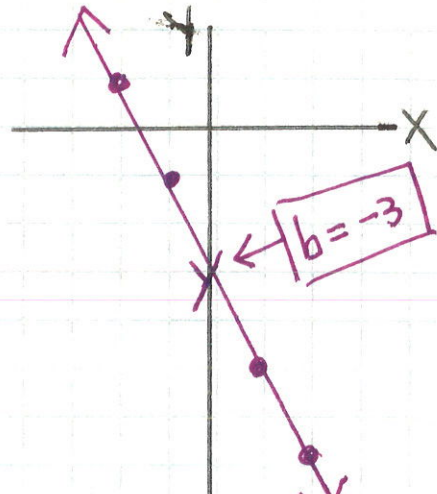


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$-2x - y = 3$

$$\begin{array}{r} +2x \qquad +2x \\ \hline -y = 2x + 3 \\ \hline \frac{-y}{-1} = \frac{2x}{-1} + \frac{3}{-1} \end{array}$$

$$y = -2x - 3$$
  
 $m = -2/1$   
 $b = -3$



PG 3 of 5

28 (-3, 0) (2, -5)

$$m = \frac{\Delta y}{\Delta x} = \frac{0 - (-5)}{-3 - 2} = \frac{5}{-5}$$

m = -1

29 (-5, 3) (-8, 10)

$$m = \frac{3 - 10}{-5 - (-8)} = \frac{-7}{3}$$

m = -7/3

30 (9, 4) (0, 1)

$$m = \frac{4 - 1}{9 - 0} = \frac{3}{9}$$

m = 1/3

31 (-2, 5) (-2, 10)

$$m = \frac{5 - 10}{-2 - (-2)} = \frac{-5}{0}$$

m = UNDEFINED  
VERTICAL LINE

32 (6, -4) (4, -4)

$$m = \frac{-4 - (-4)}{6 - 4} = \frac{0}{2}$$

m = 0

PG 219 #'s 5+7

5 x = 9 (9, 6)

substitute x with 9 → 9 = 9 ✓

(9, 6) is a solution

7 -7x - 4y = 1 (x, y) (-3, -5)

$$\begin{aligned} -7(-3) - 4(-5) &= 1 \\ 21 + 20 &= 1 \\ 41 &\neq 1 \end{aligned}$$

(-3, -5) is Not a solution

PG 248 #'s 30 AND 35

// lines have the same slopes

(30) BLUE LINE  $m = \frac{\text{Rise}}{\text{Run}}$

$m = \frac{4}{2}$   $m = -2$

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

GREEN LINE  $m = \frac{4}{-2}$   $m = -2$

BLUE AND GREEN LINES ARE // b/c  $m = -2$

(35)  $4x + y = 3$

$\frac{-4x}{-4x} \quad \frac{-4x}{-4x}$   
 $y = -4x + 3$   
 $m = -4$

$x + 4y = 3$

$\frac{-x}{-x} \quad \frac{-x}{-x}$   
 $\frac{4y}{4} = \frac{-x}{4} + \frac{3}{4}$   
 $y = -\frac{1}{4}x + \frac{3}{4}$   
 $m = -\frac{1}{4}$

NOT // b/c slopes are different

PG 5 of 5

PG 265 #'s 4, 10, 15, 16

x = -2, 0, 3

4)  $g(x) = -3x + 5$

$g(-2) = -3(-2) + 5$   
 $g(-2) = 11$

$g(0) = 5$

$g(3) = -3(3) + 5$   
 $g(3) = -4$

10)  $d(x) = -\frac{3}{2}x + 5$

$d(-2) = -\frac{3}{2}(-2) + 5$   
 $d(-2) = 8$

$d(0) = 5$

$d(3) = -\frac{3}{2}(3) + 5$   
 $= -\frac{9}{2} + 5$   
 $d(3) = \frac{1}{2}$  or  $.5$

15)  $g(x) = -x + 5; 2$

Set = to each other

$-x + 5 = 2$   
 $-5 -5$   
 $-x = -3$   
 $-1 -1$   
 $x = 3$

16)  $h(x) = -7x + 12; -9$

Set = to each other

$-7x + 12 = -9$   
 $-12 -12$   
 $-7x = -21$   
 $-7 -7$   
 $x = 3$

FIND X

check

$g(3) = -(3) + 5$   
 $= 2$  ✓  
Matches above value (2)

C:  $h(3) = -7(3) + 12$   
 $= -21 + 12$   
 $= -9$  ✓