Honors Algebra 1 Name KEY SELECTED ANSWERS ID: 2

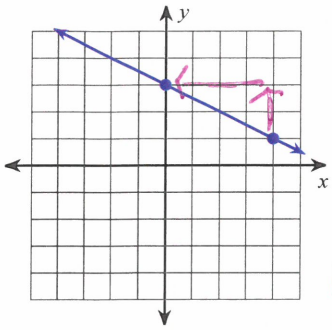
4.1-4.5 Review #2 (2022)

Date _____ Period ____

PAGE 1 - 4 PTS EACH

Find the slope. Clearly show work AND use the correct variable notation.

1)

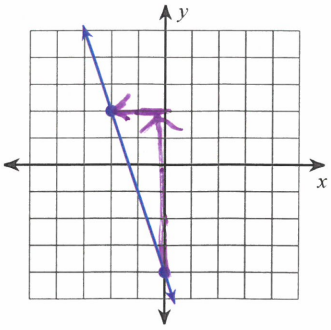


MUST WRITE

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

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

2)



$m = \frac{6}{-2}$

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

3) $(-11, -19), (-7, -1)$ PT2 − PT1

$m = \frac{-1+19}{-7+11} = \frac{18}{4}$

$m = \frac{9}{2}$

MUST BE A Reduced improper fraction

4) $(-17, 16), (15, 0)$

$m = \frac{16-0}{-17-15} = \frac{16}{-32}$

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

5) $(8, 12), (5, 3)$ OR PT1 − PT2

$m = \frac{12-3}{8-5} = \frac{9}{3}$

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

6) $(-17, 1), (-17, -16)$

$m = \frac{1+16}{-17+17} = \frac{17}{0}$

m = UNDEFINED

NOTE: $m = \frac{0}{17} \rightarrow m = 0$

y = mx + b

Rewrite in slope-intercept form. State the slope and yintercept using the correct variable notation.

7) $x - 6y = 24$

$-x \quad -x$

$\frac{-6y}{-6} = \frac{-x}{-6} + \frac{24}{-6}$

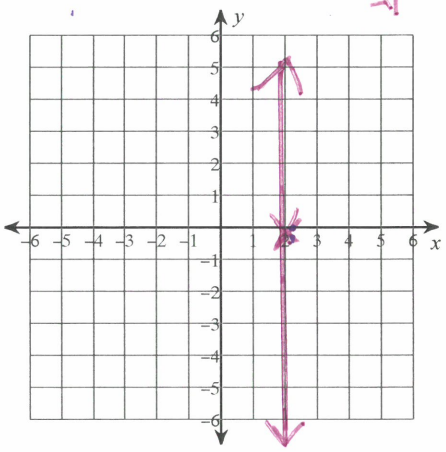
$y = \frac{1}{6}x - 4$ (m, B)

$m = \frac{1}{6}$

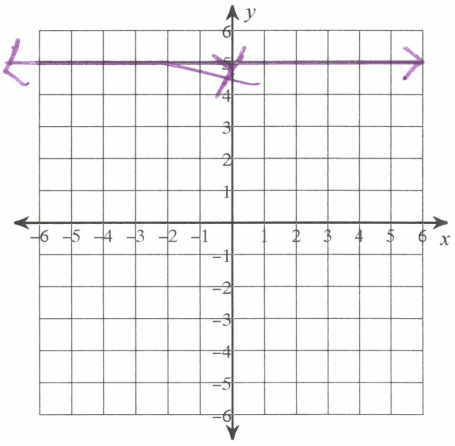
$B = -4$

Sketch the graph of each line using any method Remember to isolate the variable

8) $-x + 2 = 0$ → $\frac{-x}{-1} = \frac{-2}{-1}$ → $x = 2$

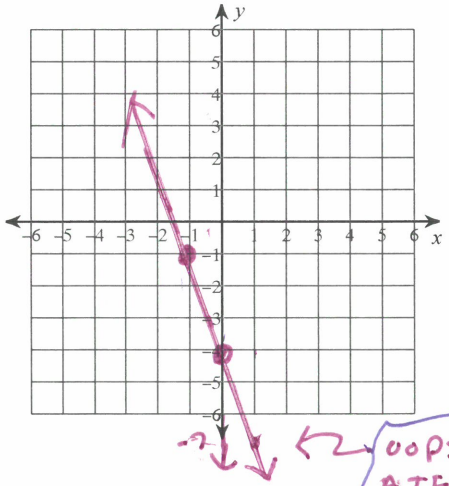


9) $0 = 5 - y$ → $y = 5$



Graph: USE TABLE METHOD (order pairs must be integers): **Pg 2: 8pts each**

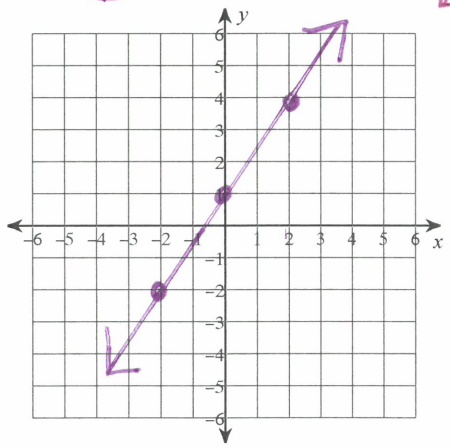
10) $y = -3x - 4$



oops. ON A TEST THIS will NOT Happen.

x	-1	0	1
y	-1	-4	-7

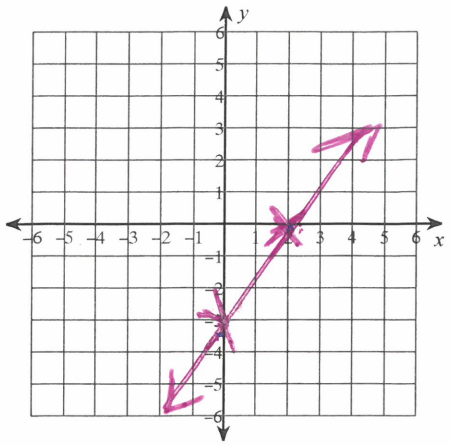
11) $y = \frac{3}{2}x + 1$ ← USE MULTIPLES OF THE DEN.



x	y
-2	-2
0	1
2	4

Graph: USE INTERCEPT METHOD: (1) give the ordered pairs for the intercepts, (2) Label the intercepts the graph with the correct variables.

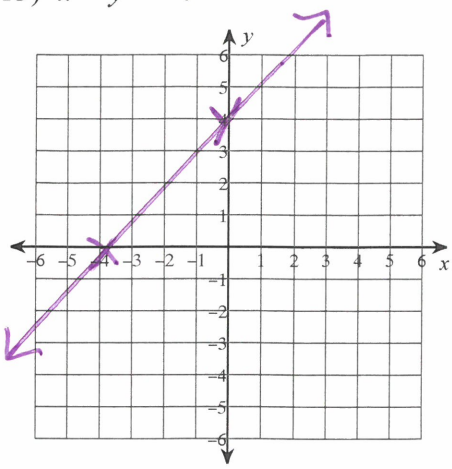
12) $3x - 2y = 6$



x: 2 (2, 0)

y: -3 (0, -3)

13) $x - y = -4$

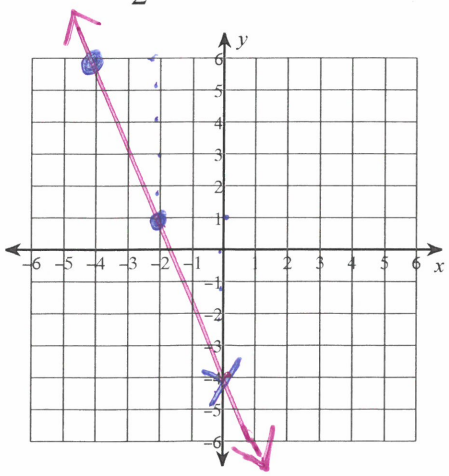


x: -4 (-4, 0)

y: 4 (0, 4)

(10pts each) Graph: USE SLOPE-INTERCEPT METHOD:
(1) State the slope & y-intercept using the correct variables. (2) Clearly mark 3 points.

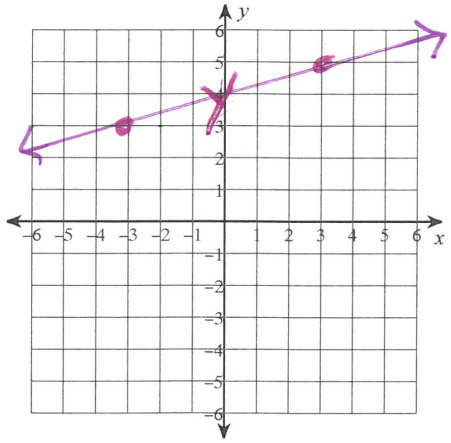
14) $y = -\frac{5}{2}x - 4$



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

$B = -4$

15) $y = \frac{1}{3}x + 4$

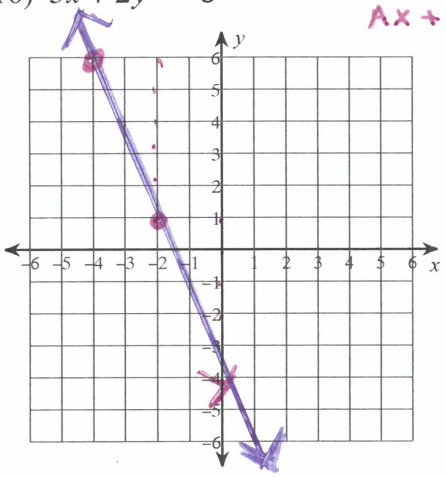


$m = 1/3$

$B = 4$

(12pts each) Graph: USE SLOPE-INTERCEPT METHOD:
(1) Clearly show your work
(2) State the slope & y-intercept using the correct variables.
(2) Clearly mark the y-intercept and 2 additional points.

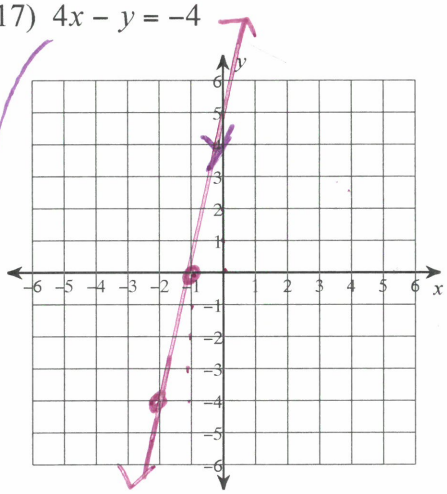
16) $5x + 2y = -8$ ← STANDARD FORM $Ax + By = C$



$5x + 2y = -8$
$-5x \quad -5x$
$\frac{2y}{2} = \frac{-5x}{2} - \frac{8}{2}$
$y = \frac{-5}{2}x - 4$

$m = \frac{-5}{2}$
$b = -4$

17) $4x - y = -4$

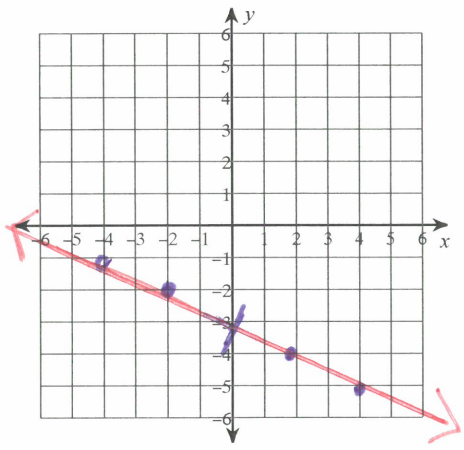


$4x - y = -4$
$-4x \quad 0 \quad -4x$
$-y = -4x - 4$
$\frac{-y}{-1} = \frac{-4x}{-1} - \frac{4}{-1}$
$y = 4x + 4$

$m = 4/1$
$b = 4$

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

18) $-1 - \frac{1}{3}y - \frac{1}{6}x = 0$



$-3\left(-\frac{1}{3}y = \frac{1}{6}x + 1\right)$

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

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

$m = -1/2 \quad b = -3$