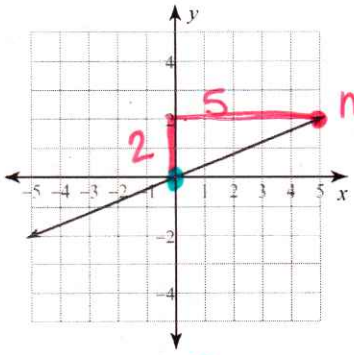
Foundations of Algebra Name KEY 10/31/19 ID: 1

Sub Work 10.31.19

Period____

Write the slope-intercept form of the equation of each line.

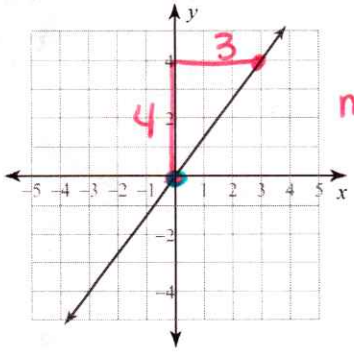
1)



$y = \frac{2}{5}x + 0$

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

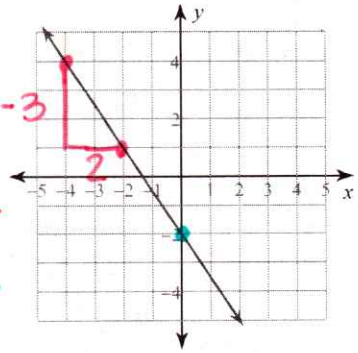
2)



$y = \frac{4}{3}x + 0$

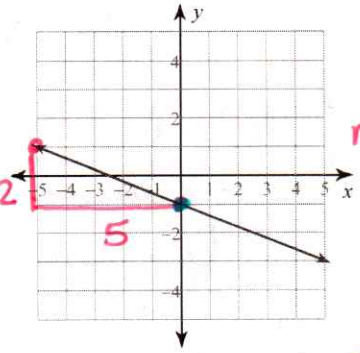
$y = \frac{4}{3}x$

3)



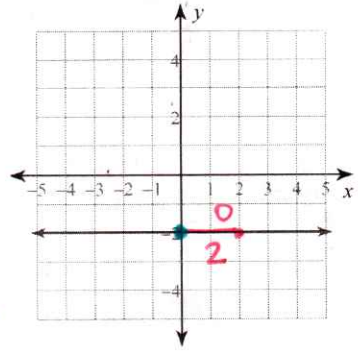
$y = -\frac{3}{2}x - 2$

4)



$y = -\frac{2}{5}x - 1$

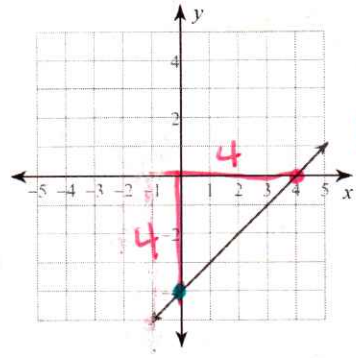
5)



$y = 0x - 2$

$y = -2$

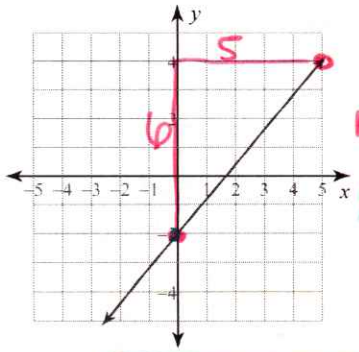
6)



$y = 1x - 4$

$y = x - 4$

7)

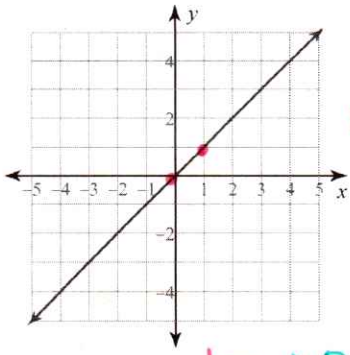


$m = \frac{6}{5}$

$b = -2$

$y = \frac{6}{5}x - 2$

8)



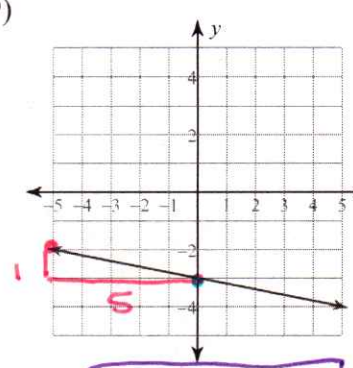
$m = \frac{1}{1} = 1$

$b = 0$

$y = 1x + 0$

$y = x$

9)

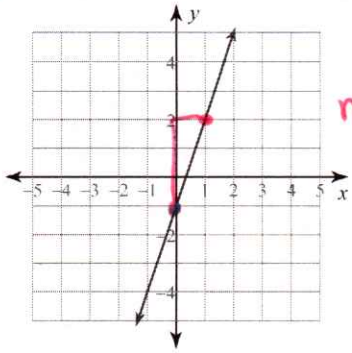


$m = \frac{-1}{5}$

$b = -3$

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

10)

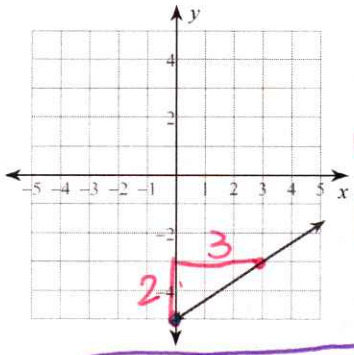


$m = \frac{3}{1} \rightarrow 3$

$b = -1$

$y = 3x - 1$

11)

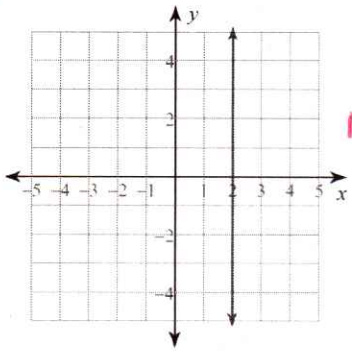


$m = \frac{2}{3}$

$b = -5$

$y = \frac{2}{3}x - 5$

12)

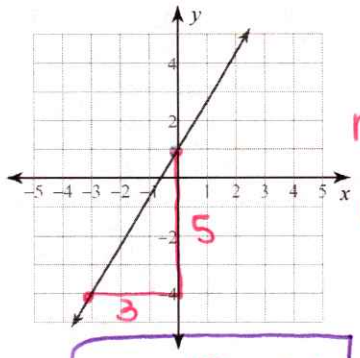


$m =$ undefined

$b =$ none

$x = 2$

13)

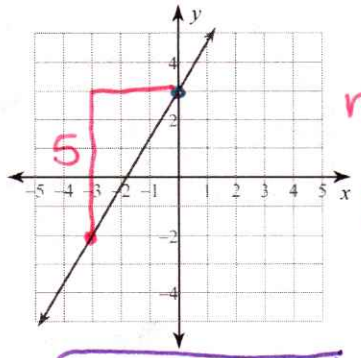


$m = \frac{5}{3}$

$b = 1$

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

14)



$m = \frac{5}{3}$

$b = 3$

$y = \frac{5}{3}x + 3$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

15) Slope = 9, y-intercept = –5

$y = 9x - 5$

16) Slope = –8, y-intercept = –3

$y = -8x - 3$

17) Slope = $\frac{1}{2}$, y-intercept = –2

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

18) Slope = $\frac{7}{3}$, y-intercept = –4

$y = \frac{7}{3}x - 4$

19) Slope = 5, y-intercept = –2

$y = 5x - 2$

20) Slope = 3, y-intercept = 4

$y = 3x + 4$

21) Slope = $\frac{3}{2}$, y-intercept = 4

$y = \frac{3}{2}x + 4$

22) Slope = $-\frac{1}{3}$, y-intercept = –4

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

23) Slope = 2, y-intercept = –3

$y = 2x - 3$

24) Slope = 0, y-intercept = 4

$y = 0x + 4$

$y = 4$

Write the slope-intercept form of the equation of each line.

25) $x - y = -8$

$-x \quad -x$

$\frac{-y}{-1} = \frac{-x}{-1} - \frac{8}{-1}$

$y = x + 8$

26) $y = 8$

$y = 8$

27) $3x + 2y = 21$

$-3x \quad -3x$

$\frac{2y}{2} = \frac{-3x}{2} + \frac{21}{2}$

$y = -\frac{3}{2}x + \frac{21}{2}$

28) $4x + y = -4$

$-4x \quad -4x$

$y = -4x - 4$

29) $2x - 7y = -48$

$-2x \quad -2x$

$\frac{-7y}{-7} = \frac{-2x}{-7} - \frac{48}{-7}$

$y = \frac{2}{7}x + \frac{48}{7}$

30) $3x - 2y = -2$

$-3x \quad -3x$

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

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

31) $x + 7y = 42$

$-x \quad -x$

$\frac{7y}{7} = \frac{-x}{7} + \frac{42}{7}$

$y = -\frac{1}{7}x + 6$

32) $13x - y = -8$

$-13x \quad -13x$

$\frac{-y}{-1} = \frac{-13x}{-1} - \frac{8}{-1}$

$y = 13x + 8$

33) $3x - 8y = 32$

$-3x \quad -3x$

$\frac{-8y}{-8} = \frac{-3x}{-8} + \frac{32}{-8}$

$y = \frac{3}{8}x - 4$

34) $7x - 8y = 48$

$-7x \quad -7x$

$\frac{-8y}{-8} = \frac{-7x}{-8} + \frac{48}{-8}$

$y = \frac{7}{8}x - 6$

35) $x - 2y = 10$

$-x \quad -x$

$\frac{-2y}{-2} = \frac{-x}{-2} + \frac{10}{-2}$

$y = \frac{1}{2}x - 5$

36) $9x - y = -2$

$-9x \quad -9x$

$\frac{-y}{-1} = \frac{-9x}{-1} - \frac{2}{-1}$

$y = 9x + 2$

37) $x + 3y = -15$

$-x \quad -x$

$\frac{3y}{3} = \frac{-x}{3} - \frac{15}{3}$

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

38) $4x + y = -9$

$-4x \quad -4x$

$y = -4x - 9$

39) $3x - 2y = 0$

$-3x \quad -3x$

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

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

40) $6x + 7y = -7$

$-6x \quad -6x$

$\frac{7y}{7} = \frac{-6x}{7} - \frac{7}{7}$

$y = -\frac{6}{7}x - 1$