N: Key D: _____ P: 1 2 3 4 5 6

Algebra 2 : Topic 2 // 2.3 Practice // ***Practice 1*** *Mission Hills Math 2013*

A. Find the slope (m) of the line that passes through the given points.

1. (3, 2) and (5, 7)

$m = \frac{7-3}{5-2} = \frac{4}{3}$

$m = 4/3$

2. (-1, 8) and (3, 4)

$m = \frac{4-8}{3--1} = \frac{-4}{4}$

$m = -1$

3. (3, -2) and (-5, 0)

$m = \frac{0--2}{-5-3} = \frac{2}{-8}$

$m = -1/4$

4. (1, -9) and (3, -6)

$m = \frac{-6--9}{3-1} = \frac{3}{2}$

$m = 3/2$

5. (5, 4) and (5, -1)

$m = \frac{-1-4}{5-5} = \frac{-5}{0}$

undefined

6. (-2, -7) and (4, -7)

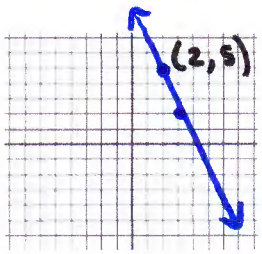
$m = \frac{-7--7}{4--2} = \frac{0}{6}$

$m = 0$

B. Graph each line given the slope and point on the line.

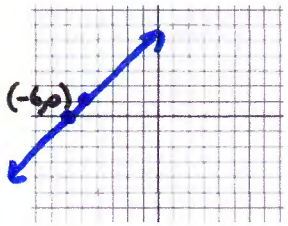
7. $m = -3 = \frac{-3}{1}$ rise / run

(2, 5)



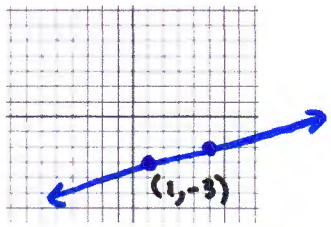

8. $m = 1 = \frac{1}{1}$

(-6, 0)



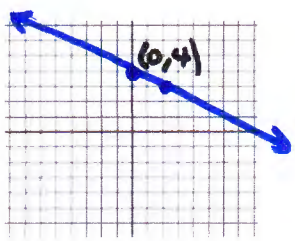

9. $m = \frac{1}{4}$

(1, -3)



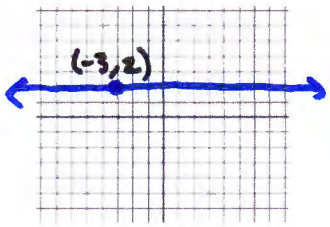

10. $m = -\frac{1}{2}$

(0, 4)



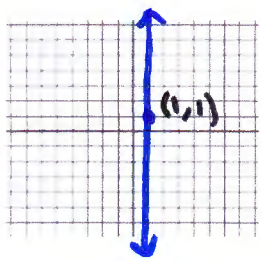

11. m = 0 horizontal

(-3, 2)



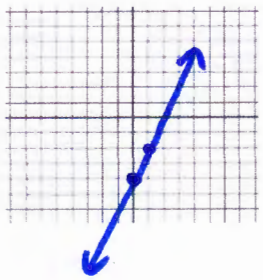

12. m = undefined vertical

(1, 1)

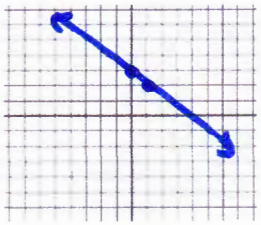


C. Graph the following lines in slope-intercept form.

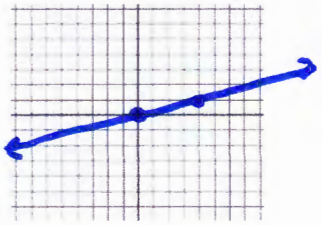
13. $y = 2x - 4$ (m, b)



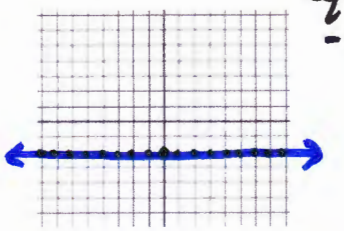
14. $y = -x + 3$



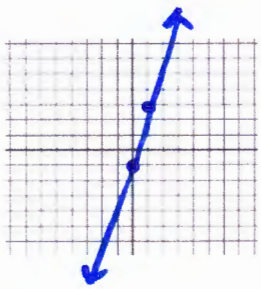
15. $y = \frac{1}{4}x + 0$



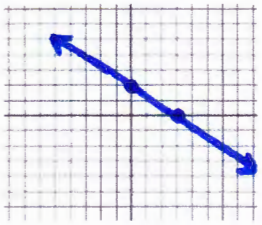
16. $y = -2$ where are all the y's equal to -2?



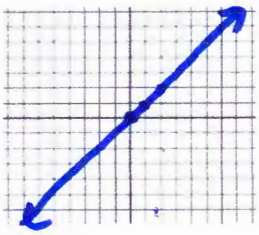
17. $y = 4x - 1$



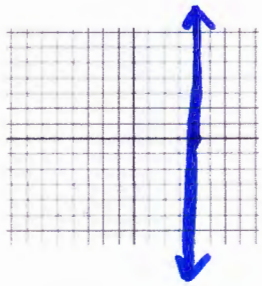
18. $y = -\frac{2}{3}x + 2$ (m, b)



19. $y = x + 0$ (m = 1)



20. $x = 4$ where are all the x's equal to 4?



21. $y = -3x + 4$