Algebra 1 Name Guide

2.1 - Practice

Write the slope-intercept form of the equation of each line. Also, identify the slope and the y-intercept.

1) $x + 4y = 24$

$-x \quad -x$

$\frac{4y}{4} = \frac{-x}{4} + \frac{24}{4}$

$y = -\frac{1}{4}x + 6$

Slope = $-\frac{1}{4}$

y-int = 6

2) $11x + 7y = 21$

3) $4x + 5y = 20$

$-4x \quad -4x$

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

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

Slope = $-\frac{4}{5}$

y-int = 4

4) $7x - 2y = 14$

5) $3x - y = 4$

$-3x \quad -3x$

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

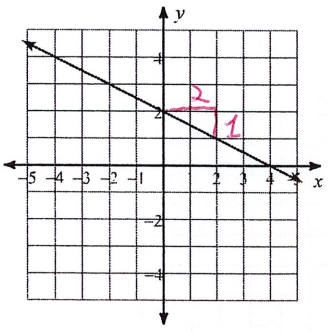
$y = 3x - 4$

Slope = 3

y-int = −4

6) $4x + 7y = -35$

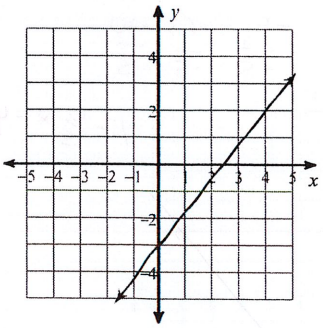
7)



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

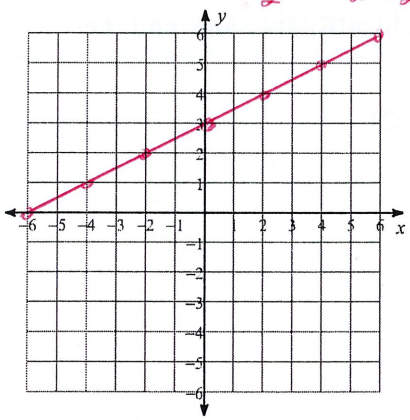
y-int = 2

8)

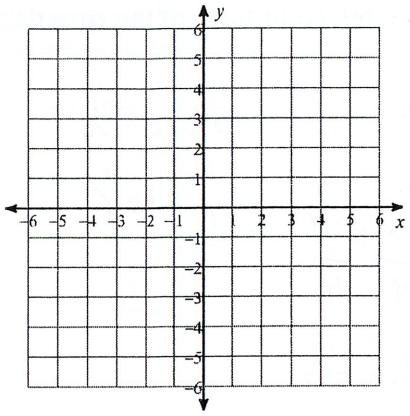


Sketch the graph of each line.

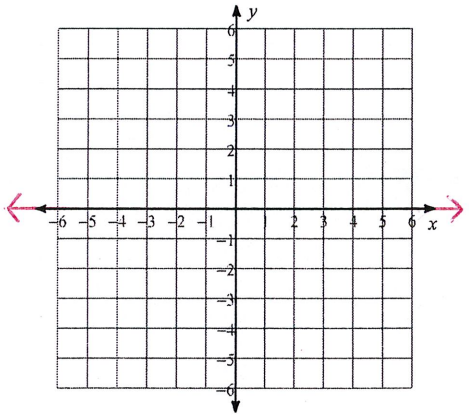
9) $x - 2y = -6$ $\frac{-2y}{-2} = \frac{-x}{-2} - \frac{6}{-2}$ $y = \frac{1}{2}x + 3$



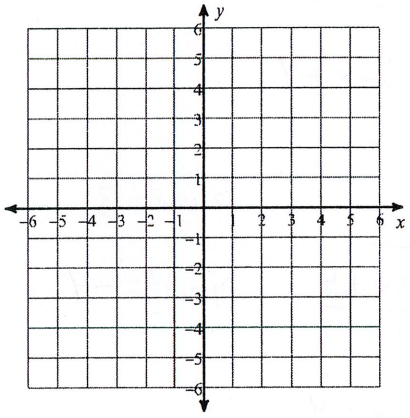
10) $y = -4$



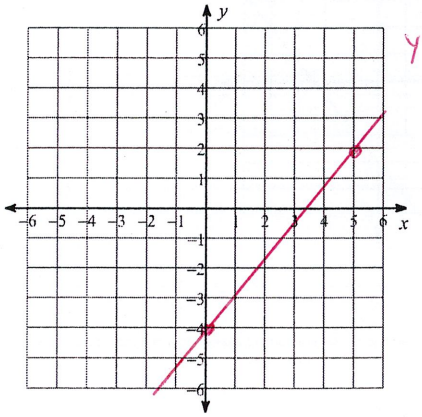
11) $y = 0$



12) $5x - 2y = -4$



13) $6x - 5y = 20$ $\frac{-5y}{-5} = \frac{-6x}{-5} + \frac{20}{-5}$ $y = \frac{6}{5}x - 4$



14) $3x - 2y = -2$