Linear Review

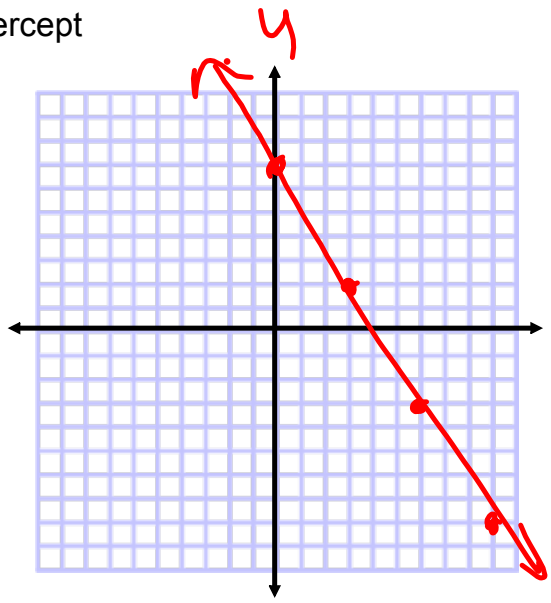
Graph the following using slope and y-intercept

$y = -\frac{5}{3}x + 7$

slope

$= \frac{\text{rise}}{\text{run}}$

y-int



Graph the following using x and y-intercept

$3x - 2y + 4 = 0$

x-int

$y = 0$

$3x - 2(0) + 4 = 0 - 4$

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

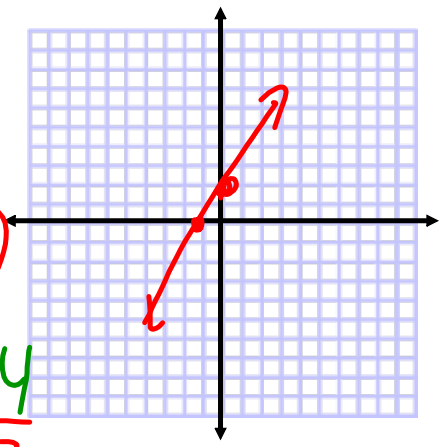
$x = -\frac{4}{3}$

y-int

$x = 0$

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

$y = 2$



Simplify

$5x + 7 - 2x - 9$

$3x - 2$

$3(x + 4) - 2(x - 5)$

$= 3x + 12 - 2x + 10$

$= 1x + 22$

Rearrange each equation to y = mx + b

$2x - y = 6$

$-y = 6 - 2x$ (×-1)

$y = 2x - 6$

$14 + 7y = 2x$ (-14)

$7y = 2x - 14$

$\frac{7y}{7} = \frac{2x}{7} - \frac{14}{7}$

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

Rearrange each equation to standard form (ax + by + c = 0)

$y = 3x - 2$

$0 = 3x - y - 2$

$y = \frac{1}{2}x + \frac{3}{4}$ (×4)

$4y = \frac{4}{2}x + \frac{12}{4}$

$4y = 2x + 3$

$0 = 2x - 4y + 3$

Solve

$x + 5 = 6$ -5

$x = 1$

$2q - 3 = 4$ +3

$\frac{2q}{2} = \frac{7}{2}$

$q = \frac{7}{2}$

$4r + 6 = 7r - 9$

-4r

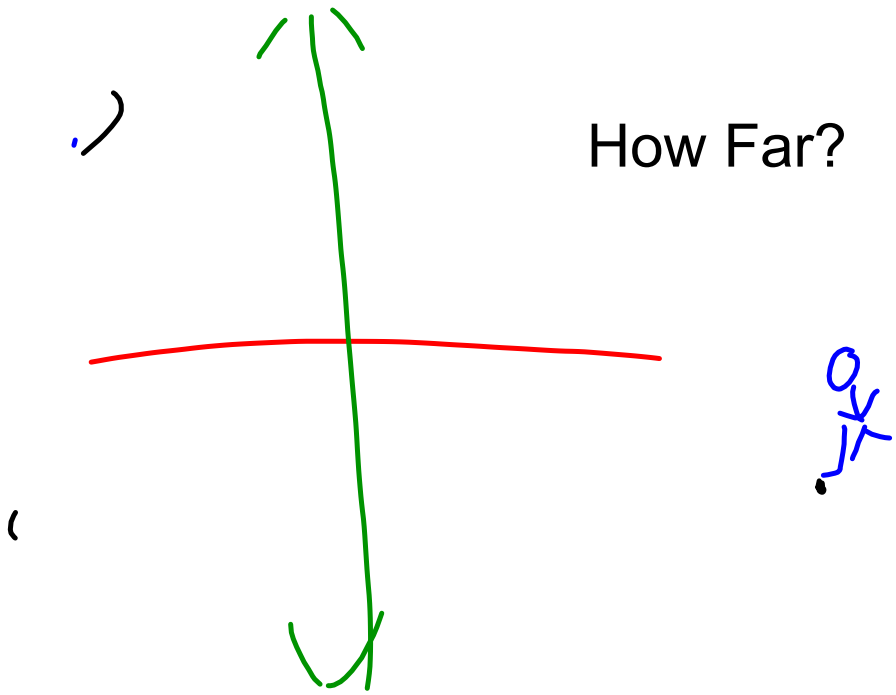
+9

$15 = 3r$

$5 = r$

$-3r = -15$

$r = 5$


How Far?

pg. 5

2, 3, 5, 6, 7, 11