Rewrite to y = mx+b form

Ex. Find the slope and y-intercept:

*Must be in $y = mx + b$ form (the slope-intercept form of a line)

a) $4x + 10y = 20$

$-4x \quad -4x$

$\frac{10y}{10} = \frac{-4x}{10} + \frac{20}{10}$

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

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

$b = 2$

b) $6x - 10y = 10$

$-6x \quad -6x$

$\frac{-10y}{-10} = \frac{-6x}{-10} + \frac{10}{-10}$

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

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

$b = -1$

c) $8x - 12y + 6 = 0$

$+12y \quad +12y$

$mx + b = y$

$\frac{8x}{12} + \frac{6}{12} = \frac{12y}{12}$

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

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

$b = \frac{1}{2}$

d) $5x + 4y = -8$

$-5x \quad -5x$

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

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

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

$b = -2$

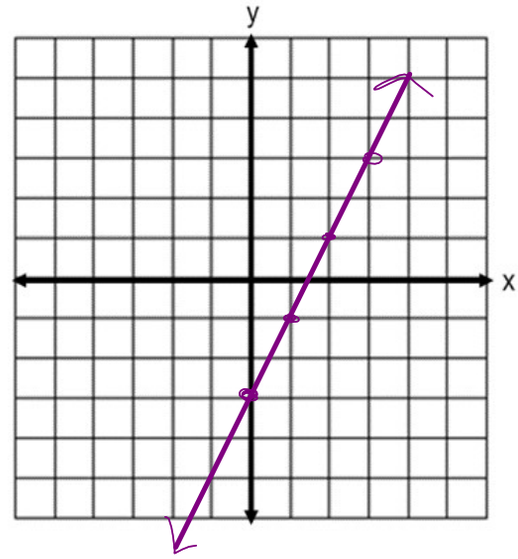
Graph: *Must be in $y = mx + b$ form

Ex 1) $2y = 4x - 6$

$\frac{2y}{2} = \frac{4x}{2} - \frac{6}{2}$

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

$\frac{2}{1}$ ↑ →

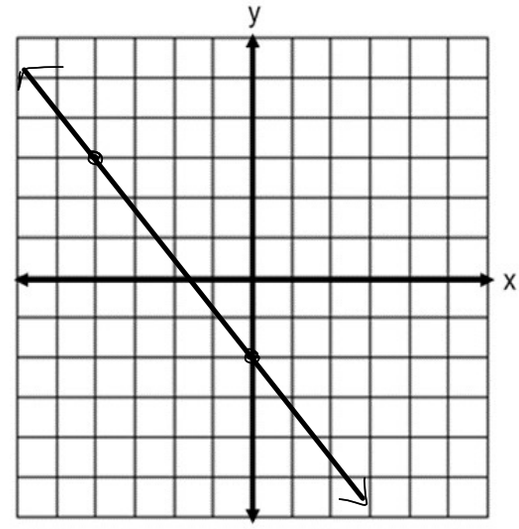


Ex 2) $5x + 4y = -8$

$-5x \quad -5x$

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

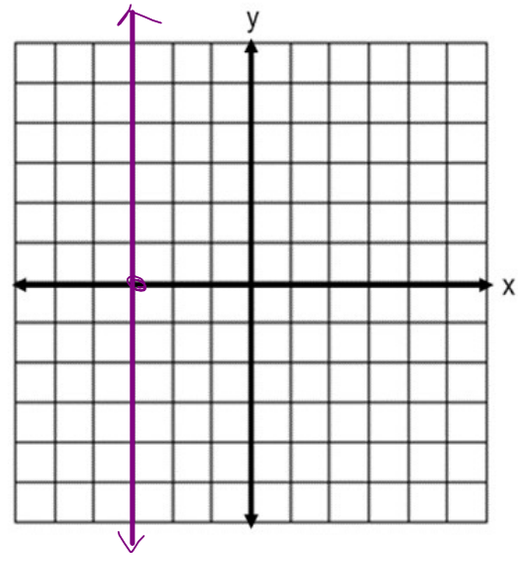
$y = -\frac{5}{4}x - 2$



Ex 3) $2x = -6$

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

$x = -3$



Gold WS

Quiz → monday
(Distance, Midpoint + Slope)