

Standard Form

$$Ax + By = C$$

① What are the x- and y-intercepts and graph of $3x - 4y = 12$?

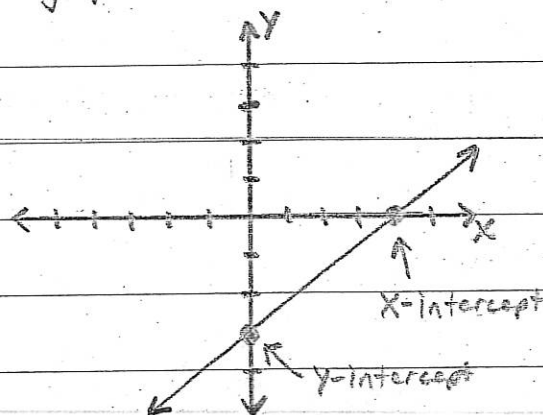
$$3x - 4y = 12$$

$$3x - 4(0) = 12 \quad 3(0) - 4y = 12$$

$$\frac{3x}{3} = \frac{12}{3} \quad \frac{-4y}{-4} = \frac{12}{-4}$$

$$x = 4 \quad y = -3$$

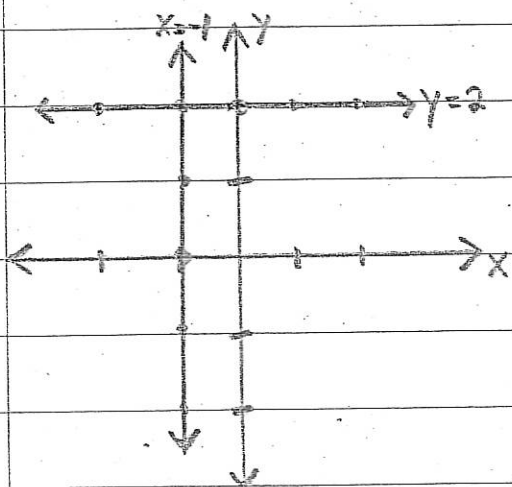
(x-intercept) (y-intercept)



② What is the graph?

A $x = -1$ B $y = 2$

$$x + 0y = -1 \quad 0x + y = 2$$



③ Write in standard form

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

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

$$7y = -3x + 35$$

$$+3x \quad +3x$$

$$3x + 7y = 35$$

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

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

$$3y - 6 = -x - 6$$

$$+x \quad +x$$

$$x + 3y - 6 = -6$$

$$+6 \quad +6$$

$$x + 3y = 0$$