

On graph paper → Graph

$$\textcircled{1} y = \frac{2}{3}x - 6$$

$$\textcircled{2} y = -3x + 9$$

LABEL  $x$ - &  $y$ -intercepts

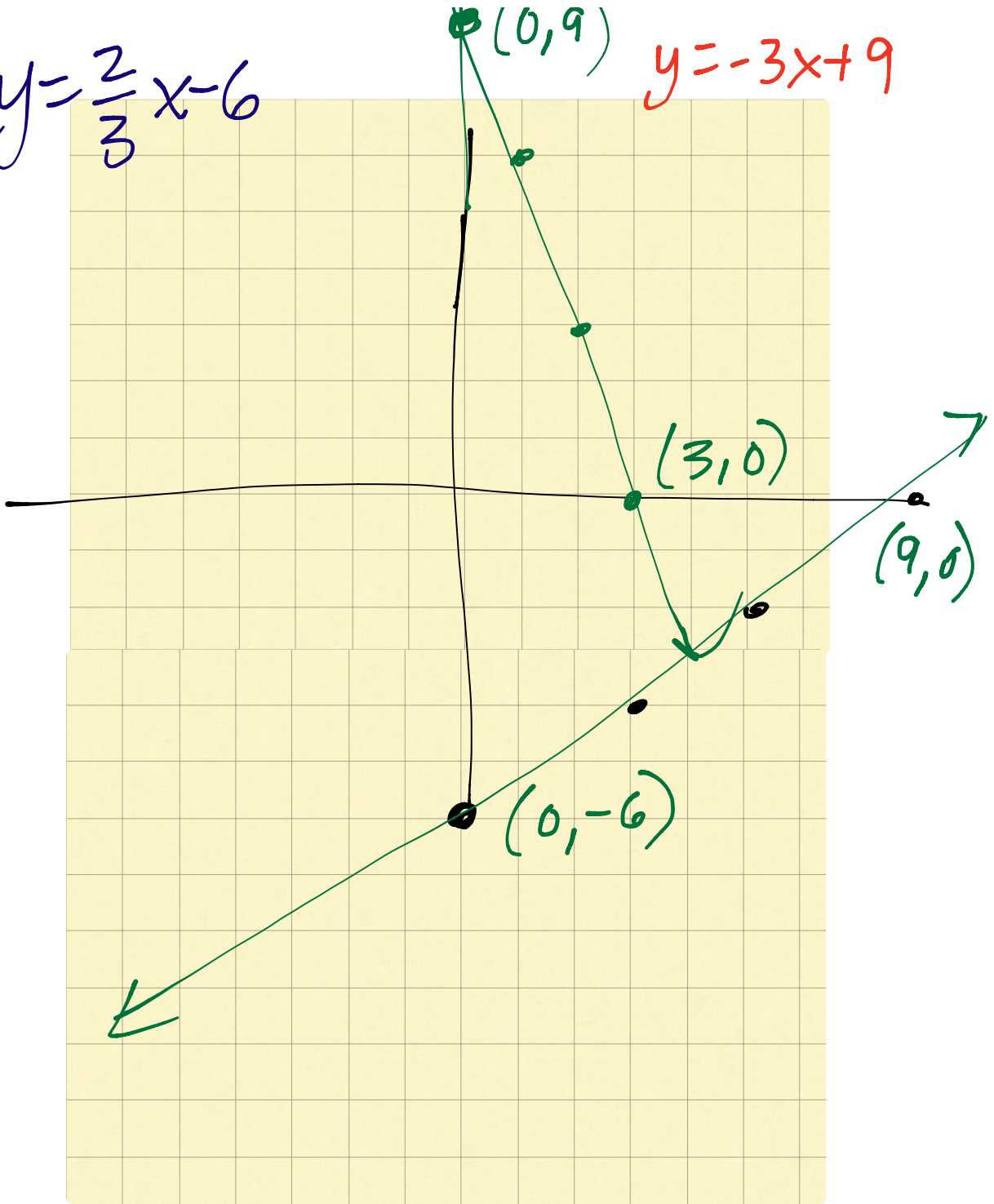
How do I graph lines in standard form? How do I find  $x$ - and  $y$ -intercepts?

$$2x - 3y = 18$$

→ ...

$$y = \frac{2}{3}x - 6$$

$$y = -3x + 9$$



x-intercept  $\rightarrow y = 0$

$$y = -3x + 9$$

Find x-int w/o making a graph

$$0 = -3x + 9$$

+3x

+3x

$$3x = 9$$

$$x = 3 \quad (3, 0)$$

y-int  $\rightarrow x = 0$

$$y = -3x + 9$$

$$y = -3 \cdot 0 + 9$$

$$y = 9$$

$$(0, 9)$$

EX. Graph by finding x- & y-intercepts.

$$2x - 5y = 10$$

$$\text{x-int} \rightarrow y = 0$$

$$2x - 5 \cdot 0 = 10$$

$$2x = 10$$

$$x = 5$$

$$(5, 0)$$

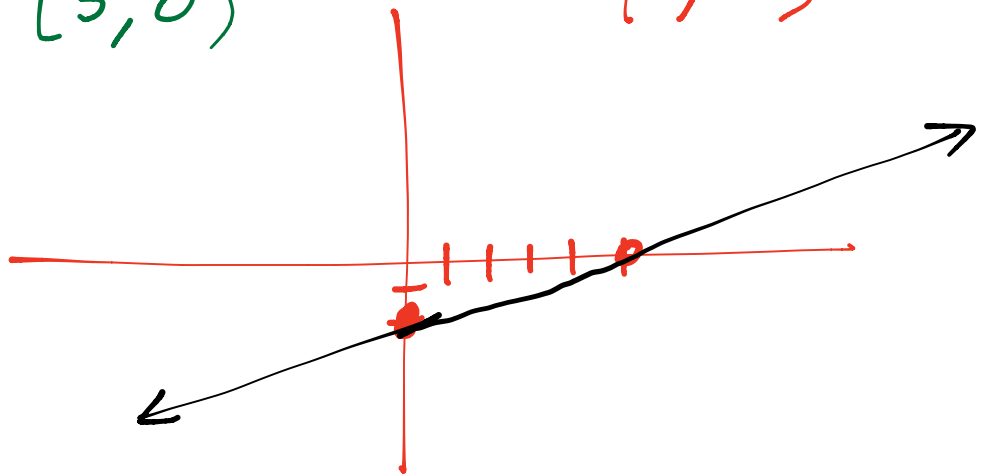
$$\text{y-int} \rightarrow x = 0$$

$$2 \cdot 0 - 5y = 10$$

$$-5y = 10$$

$$y = -2$$

$$(0, -2)$$



Ex. Graph  $3x + 4y = -24$  by finding  $x$ - &  $y$ -int.

$$x\text{-int} \rightarrow y = 0$$

$$3x + 4 \cdot 0 = -24$$

$$3x = -24$$

$$x = -8$$

$$(-8, 0)$$

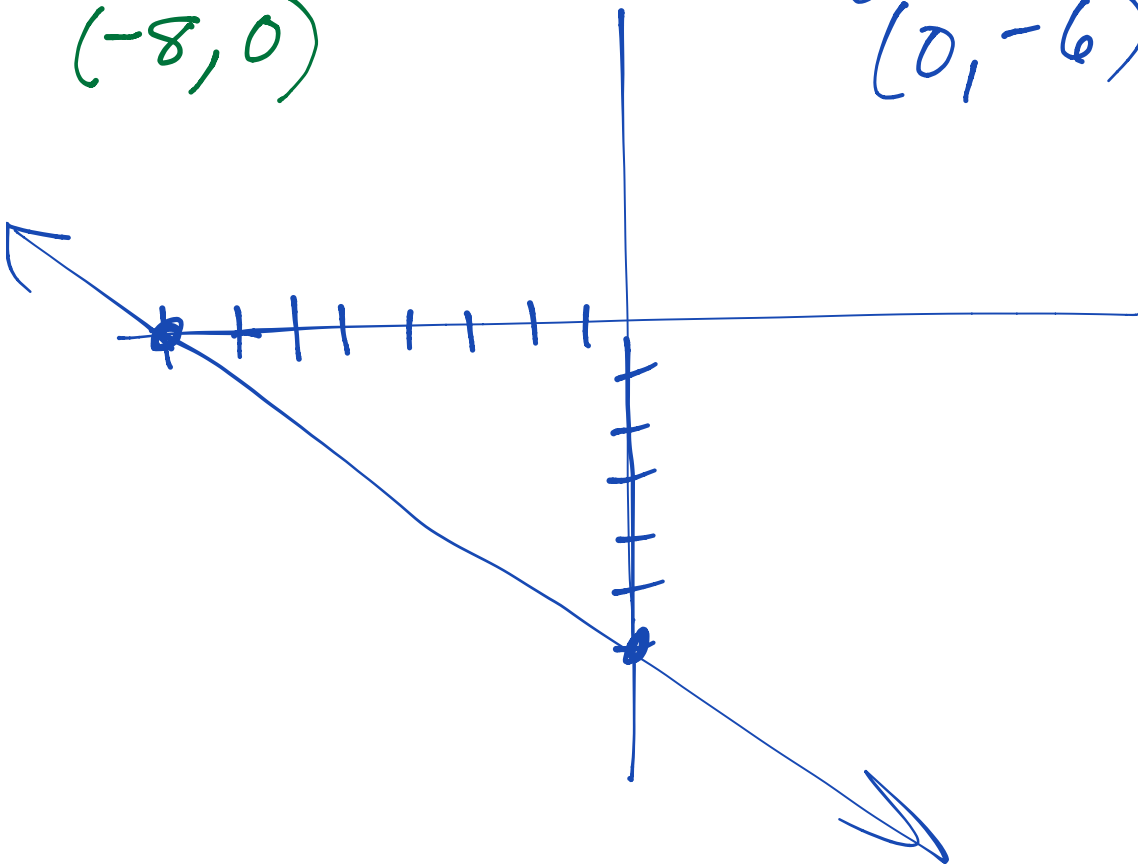
$$y\text{-int} \rightarrow x = 0$$

$$3 \cdot 0 + 4y = -24$$

$$4y = -24$$

$$y = -6$$

$$(0, -6)$$

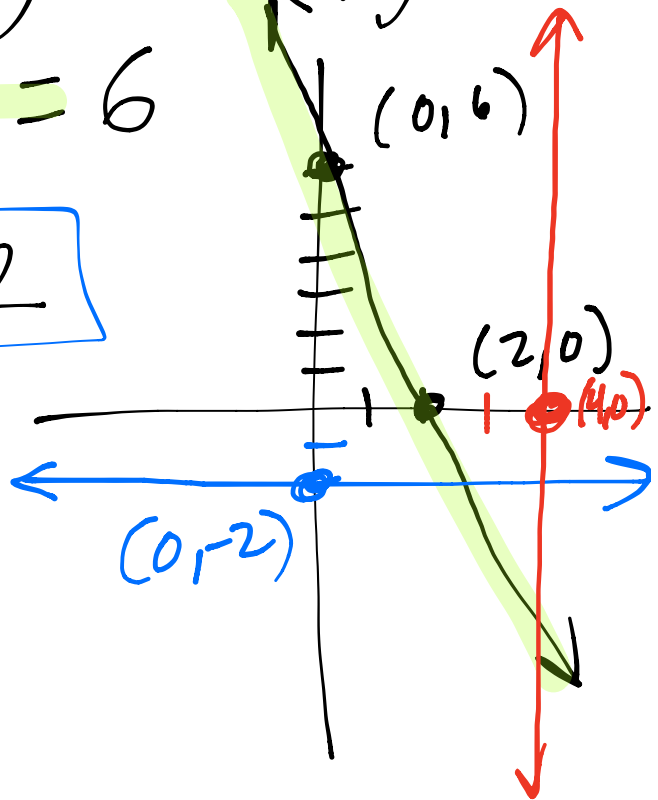


Graph by finding x-int & y-int

①  $3x + y = 6$

②  $y = -2$

③  $x = 4$



#27  $y = -3x + 4$   
 $+3x \quad +3x$

$3x + y = 4$

$$\textcircled{37} \quad \overset{30}{1} \left( \frac{5}{6}x + \frac{1}{15}y = \frac{3}{10} \right)$$

$$25x + 2y = 9$$

Standard form

$x$  &  $y$  on same side  
no fractions/decimals

$$\textcircled{33} \quad 2 \left( \frac{1}{2}x + \frac{1}{2}y = 6 \right)$$

$$x + y = 12$$