

Graph

$$\begin{cases} 4x - 5y \leq 40 \\ 3x + 2y \leq 12 \end{cases}$$

$$\begin{array}{r} 4x - 5y = 40 \\ -4x \\ \hline -5y = 40 \\ y = -8 \end{array}$$

$$\begin{array}{r} 5y = 40 - 4x \\ y = 8 - \frac{4}{5}x \end{array}$$

Start 8
up & right

$$\begin{array}{r} x/y \\ 0/6 \\ 4/0 \end{array}$$

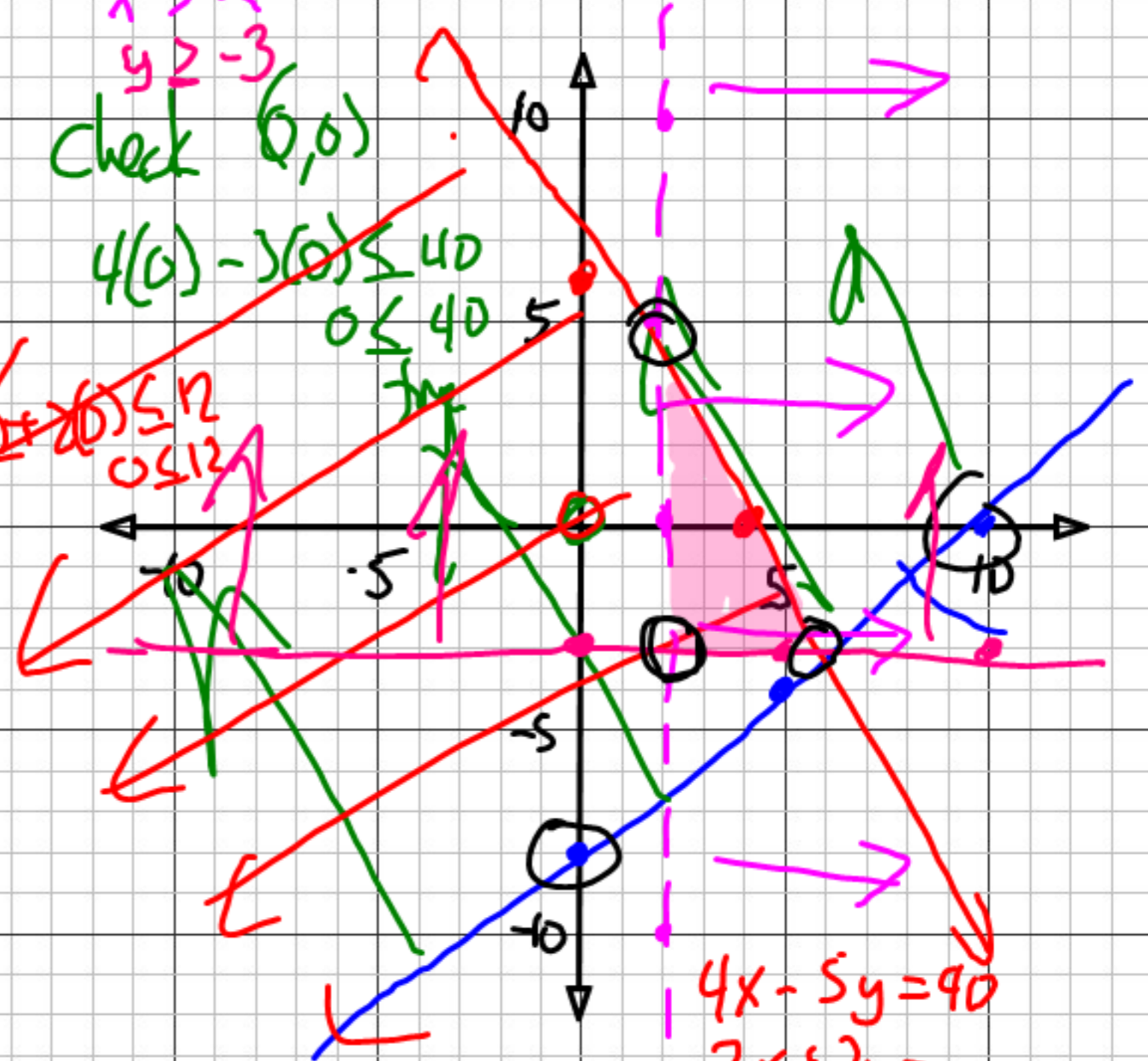
$x > 2$
 $y > -3$
check (6,0)

$$4(0) - 3(0) \leq 40$$

$$0 \leq 40$$

$$3(6) + 2(0) \leq 12$$

$$18 \leq 12$$



$$\begin{cases} 4x - 5y = 40 \\ 3x + 2y = 12 \end{cases}$$

	x	y
y-int	0	8
x-int	10	0

$$-5y = 40$$

$$4x = 40$$

graph

$$\begin{cases} 3x + 5y \leq 45 \\ 4x - 3y < 24 \\ x \geq -2 \end{cases}$$

$$3x + 5y = 45$$

$$3(0) + 5(0) \leq 45$$

$0 \leq 45$ true

	x	y	
x-int	15	0	$3x = 45$
y-int	0	9	$5y = 45$

x	y	
0	-8	$-3y = 24$
6	0	$4x = 24$

$$\begin{array}{r} 3x + 5y = 45 \\ -3x \qquad \qquad -3x \\ \hline 5y = 45 - 3x \\ \frac{5y}{5} = \frac{45 - 3x}{5} \\ y = 9 - \frac{3}{5}x \end{array}$$

$$\begin{array}{r} 4(0) - 3(0) < 24 \\ 0 < 24 \\ -3y = 24 - 4x \\ \frac{-3y}{-3} \rightarrow \frac{-3}{-3} \\ y = -8 + \frac{4}{3}x \end{array}$$

