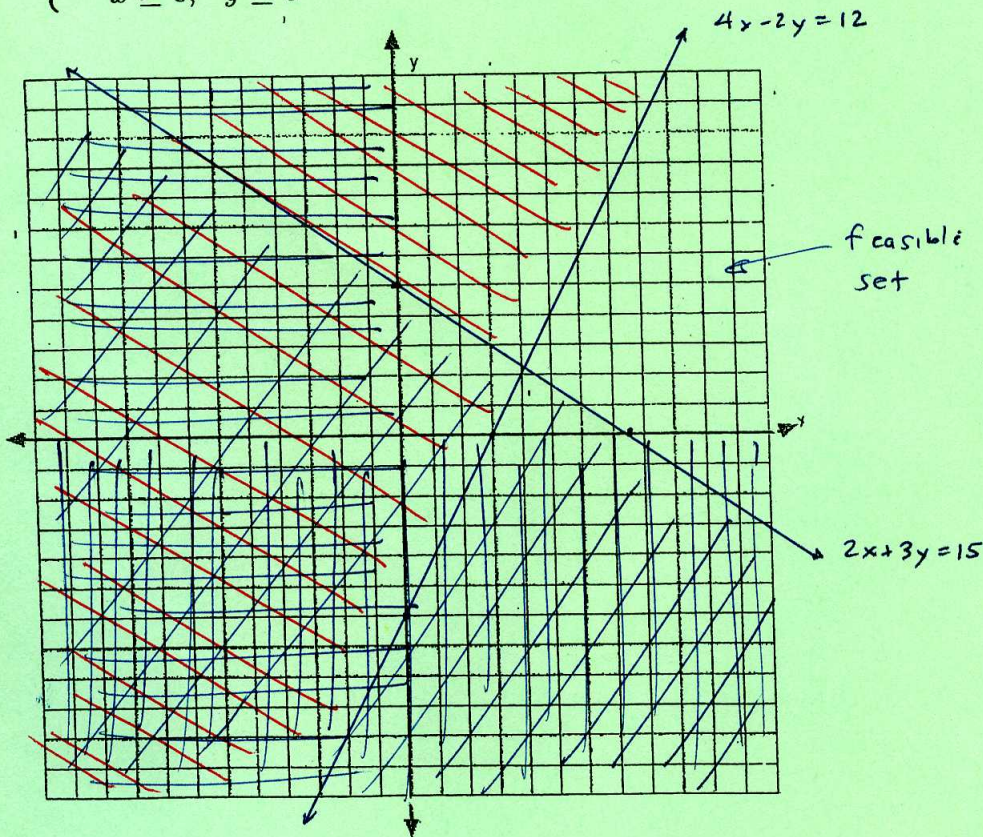


3. Graph the feasible set for the system of inequalities. Do not find the coordinates of the vertices. (10 pts)

$$\begin{cases} 2x + 3y \geq 15 & (\frac{15}{2}, 0) \quad (0, 5) \\ 4x - 2y \geq 12 & (3, 0) \quad (0, -6) \\ x \geq 0, y \geq 0 \end{cases}$$



test $(0, 0)$:

$$2(0) + 3(0) \geq 15$$

$$0 \geq 15 \quad F$$

$$4(0) - 2(0) \geq 12$$

$$0 \geq 12 \quad F$$

4. The rate y (in dollars) to insure a small car x years after 1997 is estimated by the linear equation $y = \frac{181}{3}x + 678$. (7 pts)

What is the y -intercept of the graph, and what is its interpretation?

y -int is $(0, 678)$

Rate is \$678 to insure a small car in 1997.

blue: y -int is $(0, 25)$

25 billion cans of Coke were sold in 1960.