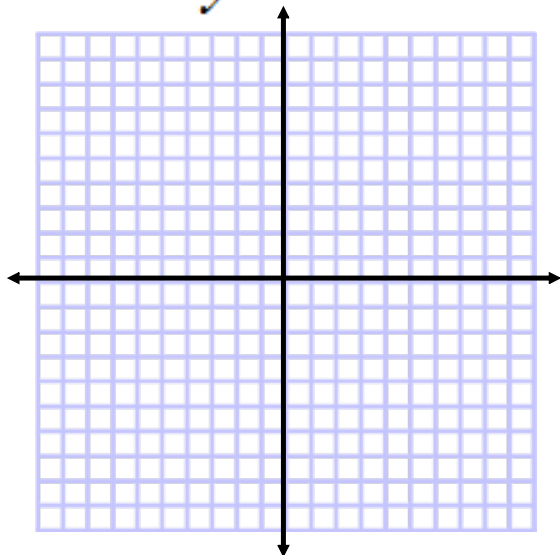Write each in slope intercept form

$$3x + 8y = 48$$
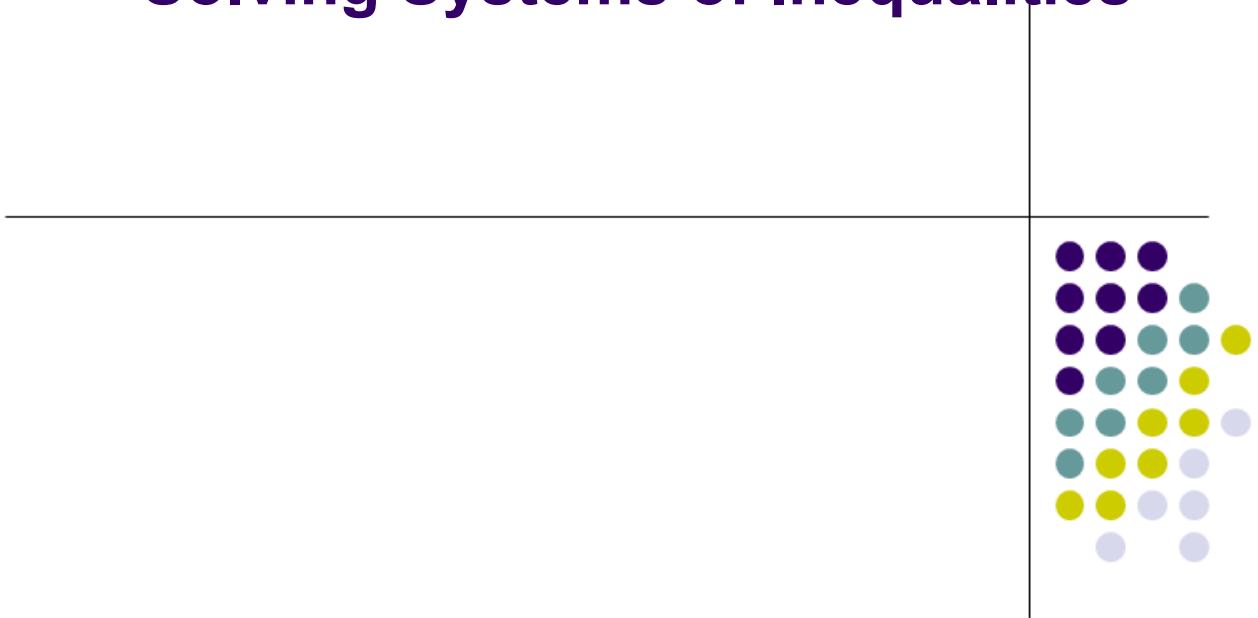$$7x + 4y = -20$$
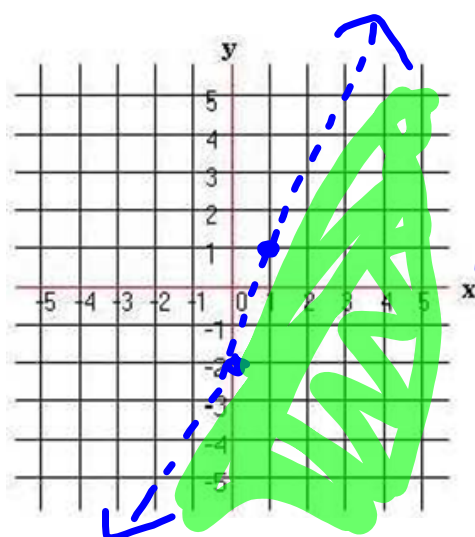
Graph and find the solution

classify the solution

Solving Systems of Inequalities
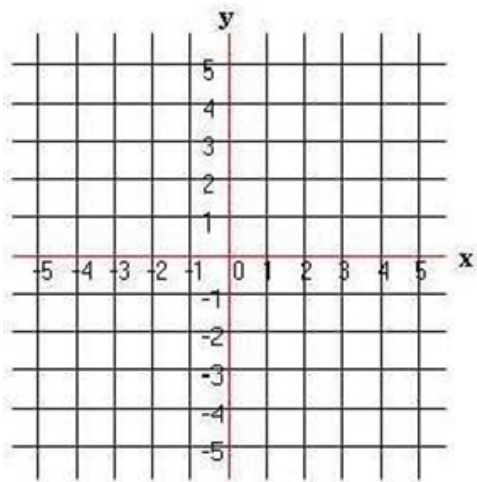
$$y < 3x - 2$$

① decide solid
or dotted
≥ ≤ solid
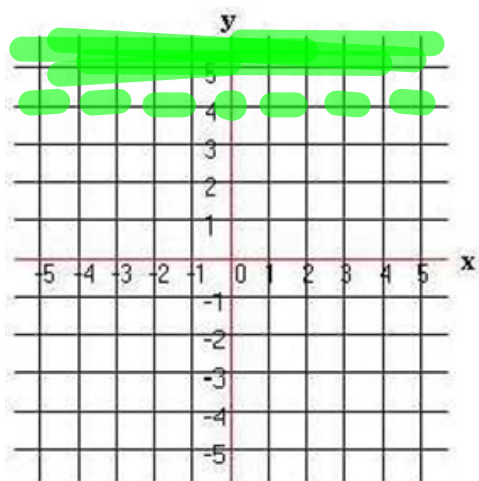> < dotted

② Graph

③ Shade

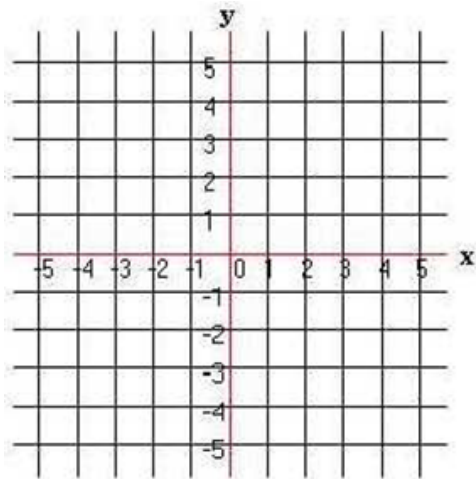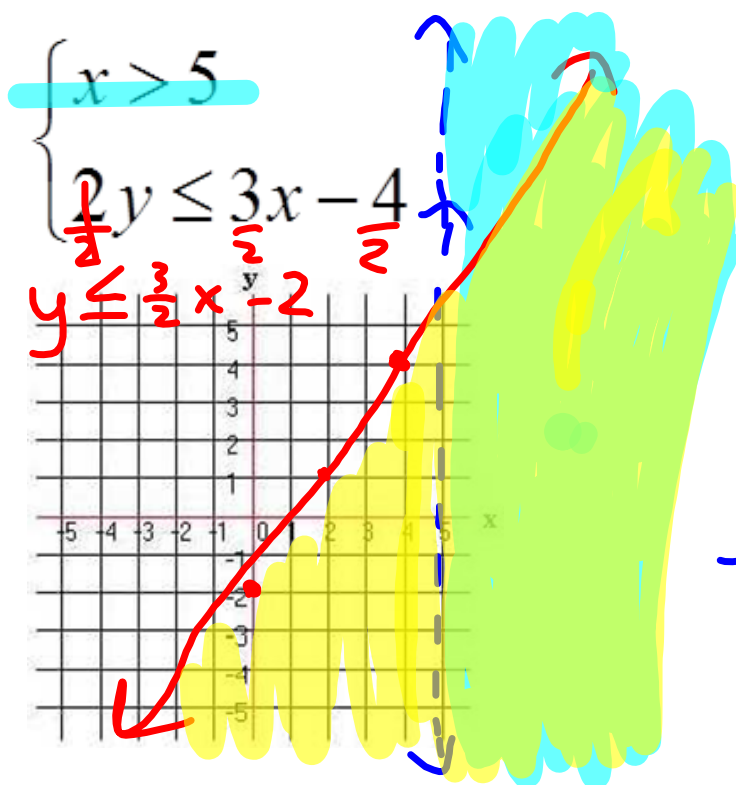$$y \geq \frac{2}{3}x + 1$$

$$y > 4$$

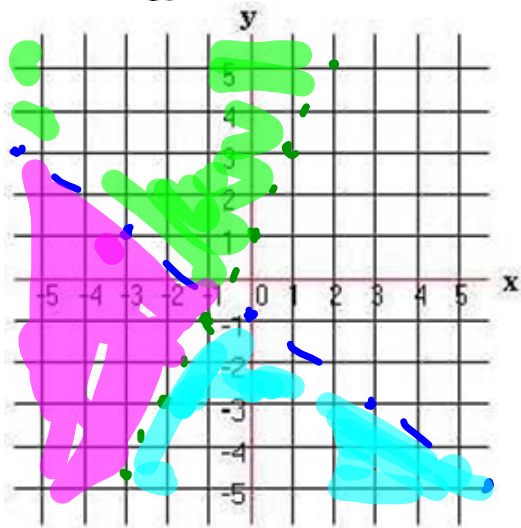$$2x - 4y > 12$$
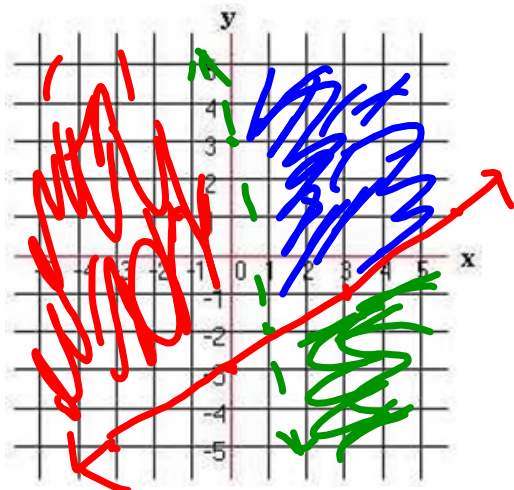
$$x \leq -3$$

$$\begin{cases} x > 5 \\ 2y \le 3x - 4 \end{cases}$$

$$y \le \frac{3}{2}x - 2$$
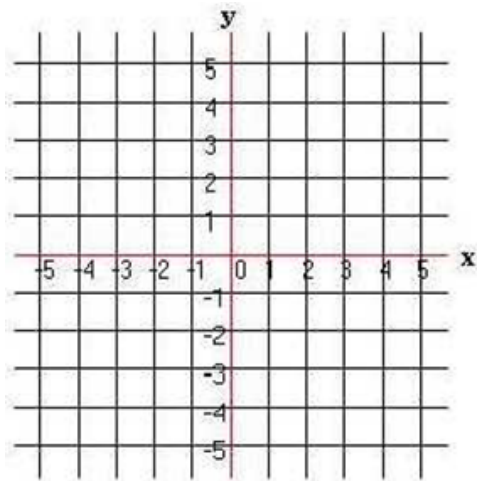
The solution
Set is where
the shaded areas
overlap

$$\begin{cases} y > 2x + 1 \\ y < -\dfrac{2}{3}x - 1 \end{cases}$$

$$\begin{cases} 2x - 3y \le 9 \\ 5x + y > 3 \end{cases}$$

$$y \ge \tfrac{2}{3}x - 3$$

$$y > -5x + 3$$

HW - Worksheet