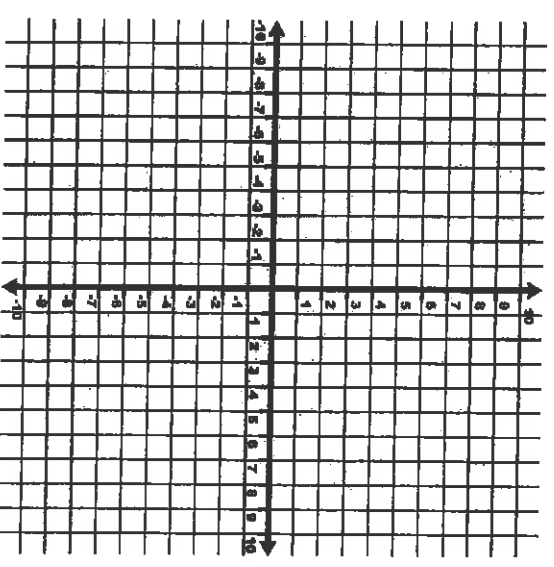


Systems of Inequalities

- Rearrange each inequality so y is by itself.
- Graph inequality on the same coordinate plane.
- The sections where the graphs overlap represent the solutions.

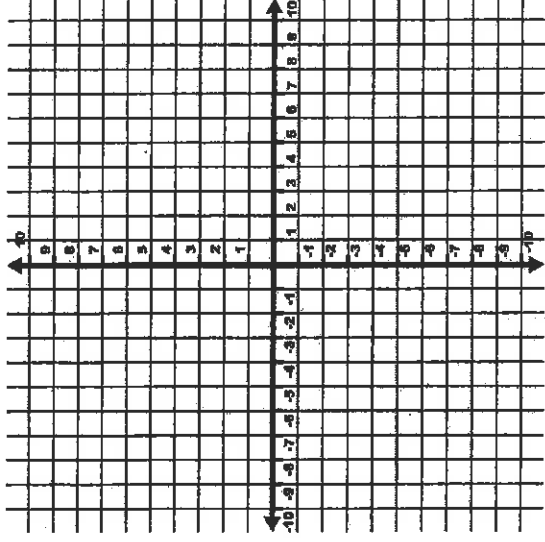
$$y - 3x > 2$$

$$3y \leq -2x - 6$$



Is $(5, 1)$ a solution?

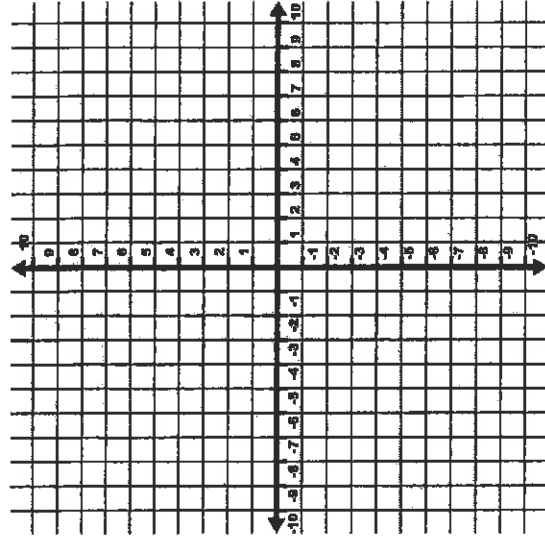
$$y - 5 < 1/2x$$



$$4x - 8y < 16$$

Is $(-2, -3)$ a solution?

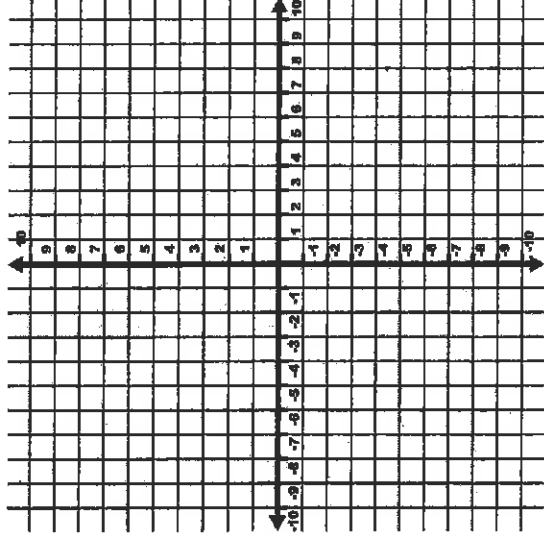
$$2x - y \leq 4$$



$$5x + 3y \geq 9$$

Is $(1, -7)$ a solution?

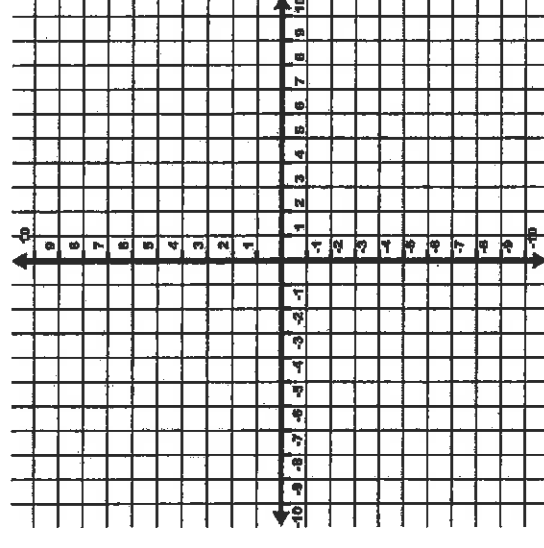
$$y < 2|x - 2| + 1$$



$$y \geq -2|x| + 5$$

Is $(-5, 5)$ a solution?

$$-3x + y \leq -2$$



$$5x + 2y < 10$$

Is $(0, 0)$ a solution?