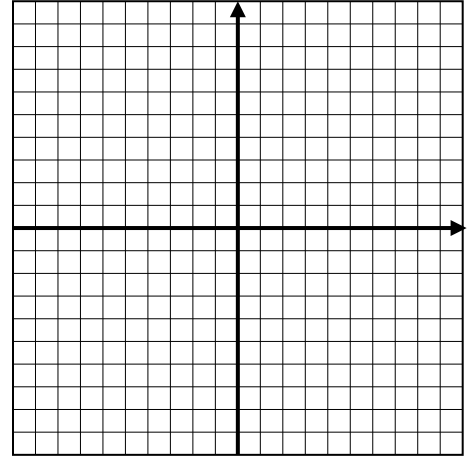


## 6.2 - Exploring Graphs of Systems of Linear Inequalities

**Review:** Solve the linear system using graphing

$$\begin{aligned}x + y &= 5 \\ 2x - y &= -2\end{aligned}$$



**Example 1:** Using desmos.com, graph the system (similar to that one above). How is it similar? How is it different?

$$\begin{aligned}x + y &> 5 \\ 2x - y &> -2\end{aligned}$$

**Example 2:** Graph this system of linear inequalities. Justify your representation of the solution set.

$$\begin{aligned}\{(x, y) \mid x + y \leq 5, x \in I, y \in I\} \\ \{(x, y) \mid x + 3y > 0, x \in I, y \in I\}\end{aligned}$$

