Lesson 2.2.2: Graphical Solutions of Systems of Linear Inequalities in Two Variables

How to Solve Systems of Linear Inequalities by Graphical Method?

- 1. Draw the graphs of both inequalities on the same Cartesian plane.
- Determine the solution of the system by labeling the intersection region of all the solutions in the system.

Practice Exercises 2.2.2

Show the graph of the solution of each system of linear inequalities.

1.
$$\begin{cases} y \ge 2x - 1 \\ x - y < 1 \end{cases}$$
2.
$$\begin{cases} y < \frac{2}{-x} - 1 \\ y \ge -x + 2 \end{cases}$$

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

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Show the graph of the solution of each system of linear inequalities.

1.
$$\begin{cases} y \le 2x + 1 \\ x + y > -1 \end{cases}$$
 2.
$$\begin{cases} y > \frac{4}{5}x - 2 \\ y \le -2x + 3 \end{cases}$$
 3.
$$\begin{cases} x - 2y < -2 \\ y \le -4x - 1 \end{cases}$$

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