5.7 Systems of Linear Inequalities

Essential Question:

Systems of Linear Inequalities:

Tell whether each ordered pair is a solution of the system of linear inequalities.

y < 2x Inequality 1

 $y \ge x + 1$ Inequality 2

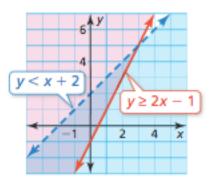
a. (3, 5)

b. (-2, 0)



Graphing a System of Linear Inequalities

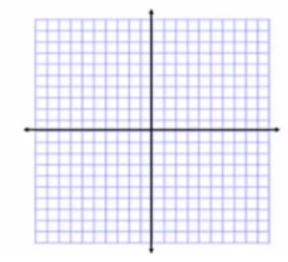
- Step 1 Graph each inequality in the same coordinate plane.
- Step 2 Find the intersection of the half-planes that are solutions of the inequalities. This intersection is the graph of the system.



Graph the system of linear inequalities.

$$y \le 3$$
 Inequality 1

$$y > x + 2$$
 Inequality 2



Graph the system of linear inequalities.

2x + y < -1 Inequality 1

2x + y > 3 Inequality 2

