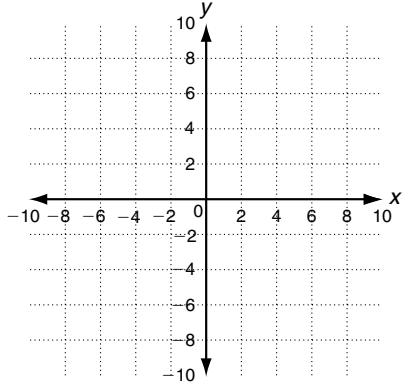


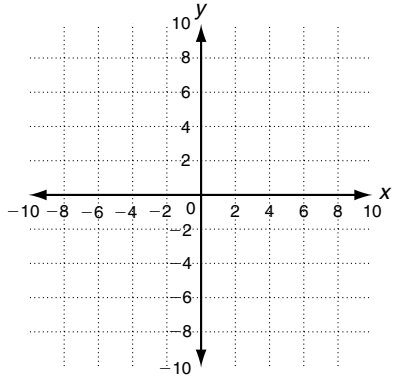
**LESSON** **Practice B**  
**3-3 Solving Systems of Linear Inequalities**

Graph each system of inequalities.

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

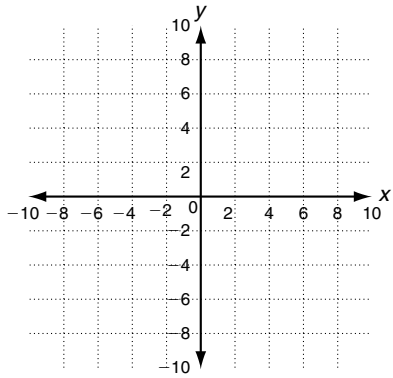


2. 
$$\begin{cases} y < x + 5 \\ y \geq 4x - 2 \end{cases}$$

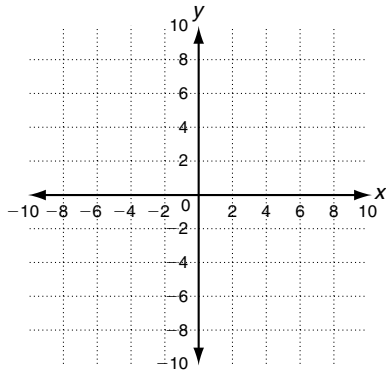


Graph the system of inequalities, and classify the figure created by the solution region.

3. 
$$\begin{cases} x \leq 2 \\ x \geq -3 \\ y \leq 2x + 2 \\ y \geq 2x - 1 \end{cases}$$
 \_\_\_\_\_



4. 
$$\begin{cases} y \leq -x + 4 \\ y \leq 3 \\ y \geq 0 \\ y \geq -2x - 1 \end{cases}$$
 \_\_\_\_\_



**Solve.**

5. The Thespian Club is selling tickets to its annual variety show. Prices are \$8 for an adult ticket and \$4 for a student ticket. The club needs to raise \$1000 to pay for costumes and stage sets. The auditorium has a seating capacity of 240. Write and graph a system of inequalities that can be used to determine how many tickets have to be sold for the club to meet its goal.

