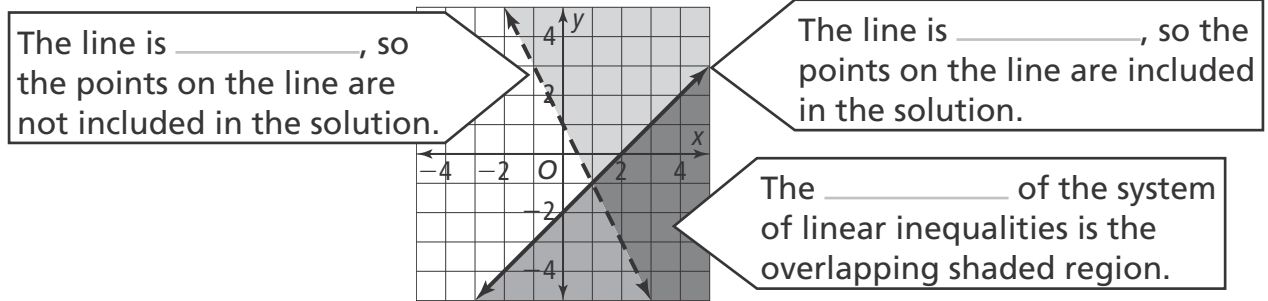# 4-5 Reteach to Build Understanding

Systems of Linear Inequalities

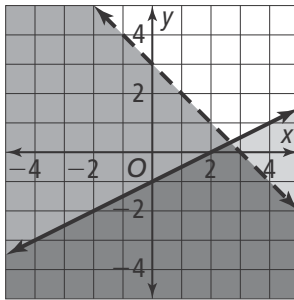1. Use the diagram to complete each statement.

The line is _____, so the points on the line are not included in the solution.

The line is _____, so the points on the line are included in the solution.

The _____ of the system of linear inequalities is the overlapping shaded region.

2. Complete the statement about each inequality in the system of inequalities from Exercise 1.

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

All points will be _____ the dashed line.

All points will be _____ the solid line.

3. Sheryl made two incorrect statements about the system of inequalities shown in the graph. Put an X next to the incorrect statements. Correct her errors. Explain your reasoning.

   a. One of the inequalities in the system is $y < \frac{1}{2}x - 1$.

   b. One of the inequalities in the system is $y < -x + 3$.

   c. The points on the line $y = -x + 3$ are solutions of the system.

   d. $(2, -2)$ is a solution of the system.

   e. $(-4, -3)$ is a solution of the system.