Precalculus

8-05 Systems of Inequalities

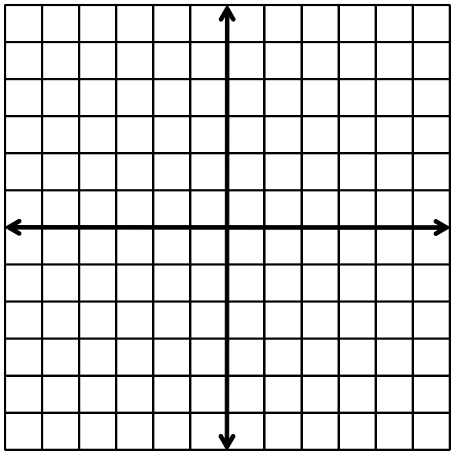
Solve Systems of Inequalities

1. Graph _____the inequalities on the _____coordinate plane.
2. Find the _____of the _____areas.

Graph an Inequality

1. Pretend the inequality sign is = and _____the line.
2. Decide if the line is _____or _____
   a. Solid if _____
   b. Dotted if _____
3. _____
   a. Pick a _____point _____on the line.
   b. _____the test point into the inequality
      i. If this results in a _____statement, then shade the side of the graph _____the test point.
      ii. If the result is _____a true statement, then shade the _____side of the graph.
   c. OR if solved for _____
      i. $y >$ shade _____the line.
      ii. $y <$ shade _____the line.

Solve $\begin{cases} x + y \geq 1 \\ -x + y \geq 1 \\ y \leq 2 \end{cases}$



Solve $\begin{cases} y \geq x^2 \\ y > x + 2 \end{cases}$