

9.2 Graphing Linear Inequalities

FM.O.2 Use geometric and algebraic techniques to solve optimization problems with and without technology.

Linear Inequality - _____

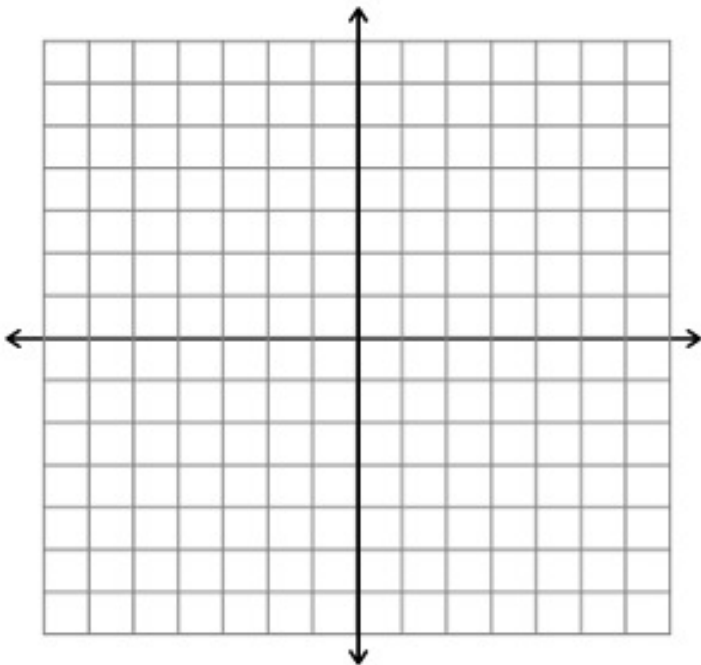
Geometric Optimization - _____

Ex. 1 Graphing Linear Inequalities Given the following equation, graph the linear inequality on the graph.

$$2x + 2y \leq -2$$

Step 1: Put inequality into slope-intercept form

Step 2: Graph the inequality & Step 3: Determine solution set S

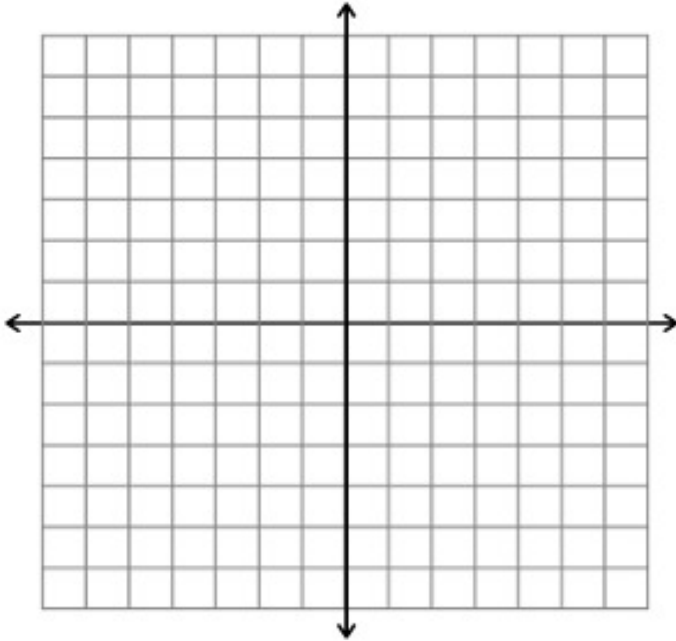


Ex. 2 Graphing Linear Inequalities Given the following equation, graph the linear inequality on the graph.

$$x - 2y > 0$$

Step 1: Put inequality into slope-intercept form

Step 2: Graph the inequality & Step 3: Determine solution set S



Ex. 3 Sketch the solution set for the system

$$x \geq 0$$

$$y \geq 0$$

$$x + y - 6 \leq 0$$

$$2x + y - 8 \leq 0$$

Step 1: Put inequalities into slope-intercept form

Step 2: Graph the inequality & Step 3: Determine solution set

