

Graphing Quadratic Inequalities

Solving Quadratic Inequalities

Steps to Solve Quadratic Inequalities

Step 1: Find the zeros.

Step 2: Graph the points on a number line.

Step 3: Test points within each interval.

Step 4: Sketch the solution on a number line.

1. Solve each quadratic inequality.

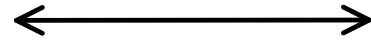
a) $x^2 - 7x + 10 < 0$



b) $x^2 - 4x \leq 0$

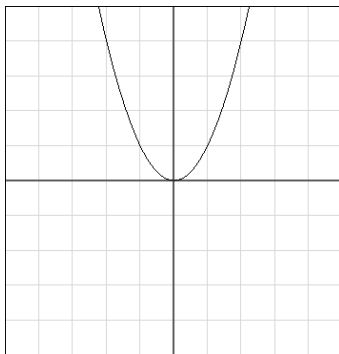


c) $x^2 - 11x > -30$

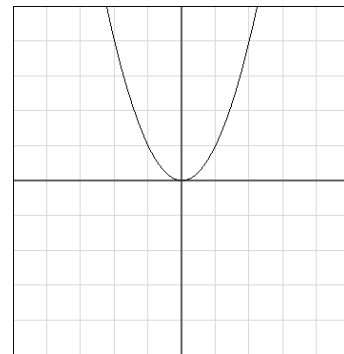


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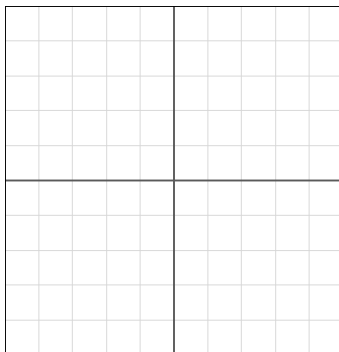
$y \geq x^2$



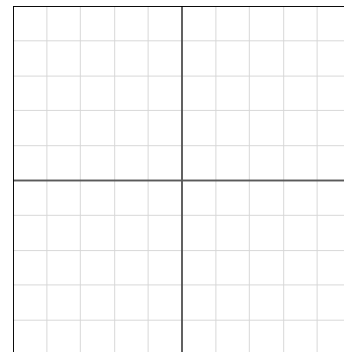
$y \leq x^2$



$y > x^2$



$y < x^2$



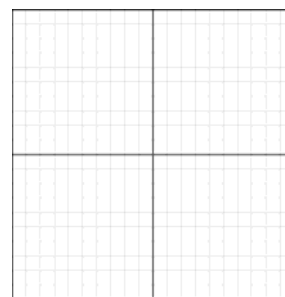
Steps to Graph Quadratic Inequalities

Step 1: Find the vertex and the zeros.

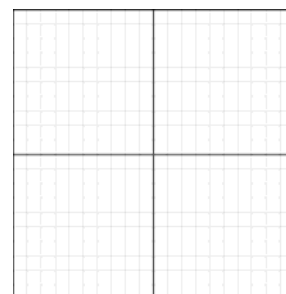
Step 2: Sketch the graph.

2. Graph each quadratic inequality.

a) $y \leq x^2 - 2x - 8$



b) $y > x^2 - 4$



c) $y < 1 - x^2$

