

Quadratic Inequality

Quadratic Form $y > ax^2 + bx + c$
 $a = \quad b = \quad c =$

Vertex Form $y \leq a(x - h)^2 + k$
 $a = \quad h = \quad k =$

Rules for graphing quadratic inequalities

Solid line or dotted line

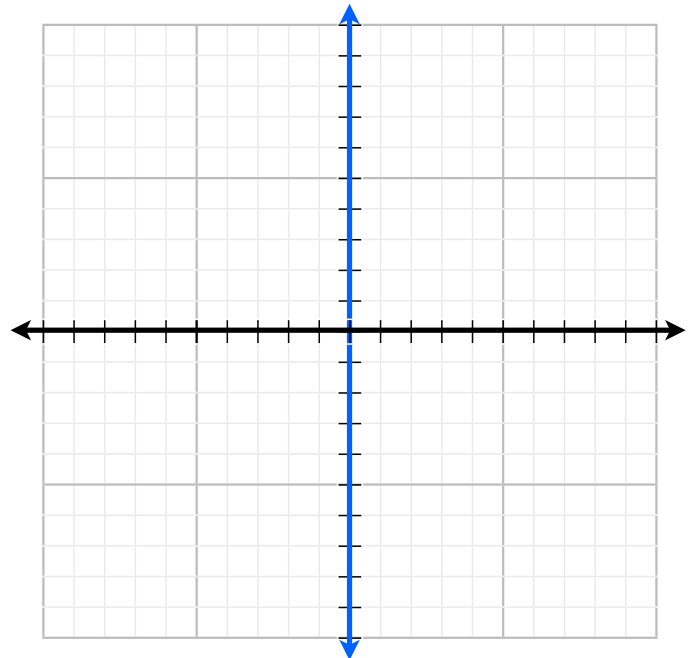
 $y < \text{or } y > \Rightarrow$ dotted line $y \leq \text{or } y \geq \Rightarrow$ solid line

Shade above or below parabola

 $y > \text{or } y \geq \Rightarrow$ shade above parabola $y < \text{or } y \leq \Rightarrow$ shade below parabola

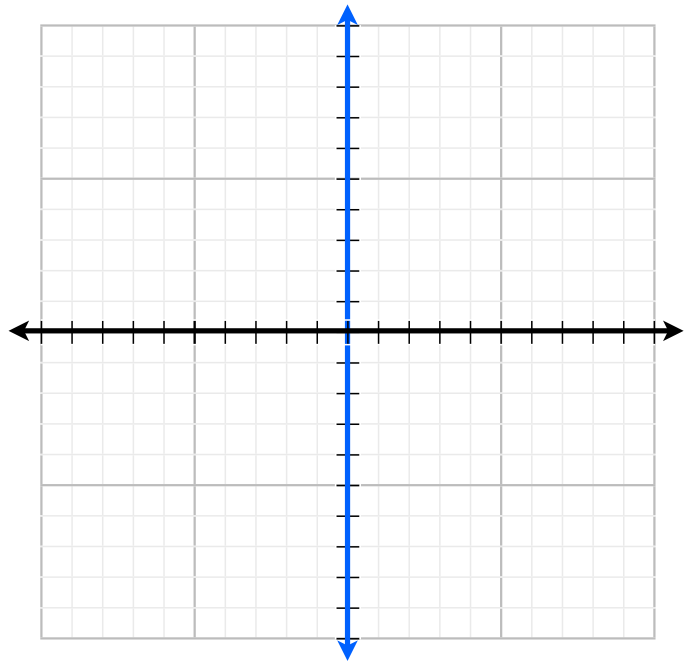
Graph the following quadratic inequalities

$$y > x^2 + 6x + 4$$



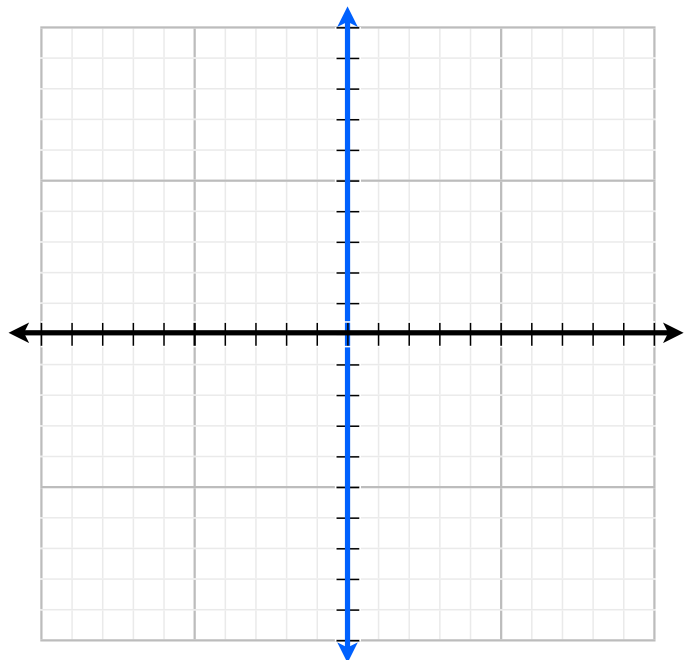
Graph the following quadratic inequalities

$$y \leq -x^2 - 4x - 8$$



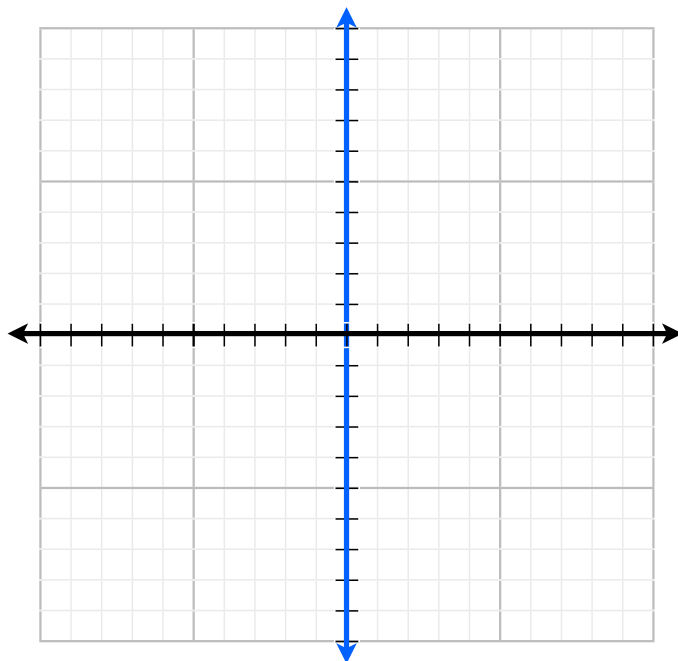
Graph the following quadratic inequalities

$$y < (x - 4)^2 + 3$$



Graph the following quadratic inequalities

$$y \geq -2(x + 2)^2 - 5$$



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