

Bell Work

Graph the parabola.

$$y = x^2 + 4x + 3$$

Graphing Quadratic Inequalities with 2 Variables

Graph the inequality.

$$y < -x^2 - 2x - 1$$

A manila rope used for rappelling down a cliff can safely support a weight W (in pounds) provided $W \leq 1480d^2$, where d is the diameter (in inches) of the rope. Graph the inequality and interpret the solution

Graph Systems

$$\begin{aligned} y &< -x^2 + 3 \\ y &\geq x^2 + 2x - 3 \end{aligned}$$

Solve Quadratic Inequalities with 1 Variable

Solve algebraically.

$$x^2 - 3x - 4 < 0$$

Solve algebraically.

$$4x^2 + 3 > -13x$$