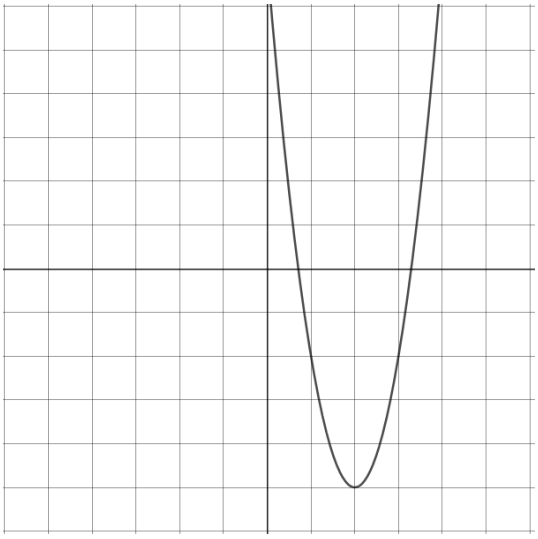
Name: _____ Block: _____

# Pre-Calculus 11: Equations of Quadratics Quiz

*Full credit will only be awarded for all work shown in a neat and organized manner.*

1. Find the equation for the parabola shown in the graph below



2. Find the equation of the parabola that: *(If you need graph paper, grab some at the back)*
   a. has a vertex at (-3,2) and passes through (1,-7)

   b. passes through (2,0), (6,6), (-4,6)

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3. Given the parabola: $f(x) = 2x^2 + 4x - 15$
    a. Find the axis of symmetry of $f(x)$ by **completing the square** (no shortcut allowed!)
    b. Find the x-intercepts of $f(x)$ (*give exact answers)*

4. Given the parabola: $f(x) = -\frac{1}{2}x^2 + 2x - 6$
    a. Find the vertex of $f(x)$ by **completing the square** (no shortcut allowed!)
    b. Find the x-intercepts **and** y-intercept of $f(x)$ (*give exact answers)*