1. Graph the quadratic equation 
   \[ y = 2(x + 2)^2 + 4. \]
   Specify the vertex, axis of symmetry, maximum or minimum values, and intercepts.

2. Graph the quadratic equation 
   \[ y = x^2 + 6x - 1. \]
   Specify the vertex, axis of symmetry, maximum or minimum values, and intercepts.
3. Graph the quadratic equation

\[ y = -3x^2 + 12x. \]

Specify the vertex, axis of symmetry, maximum or minimum values, and intercepts.

Vertex:

Axis of symmetry:

Extreme value:

Intercepts: