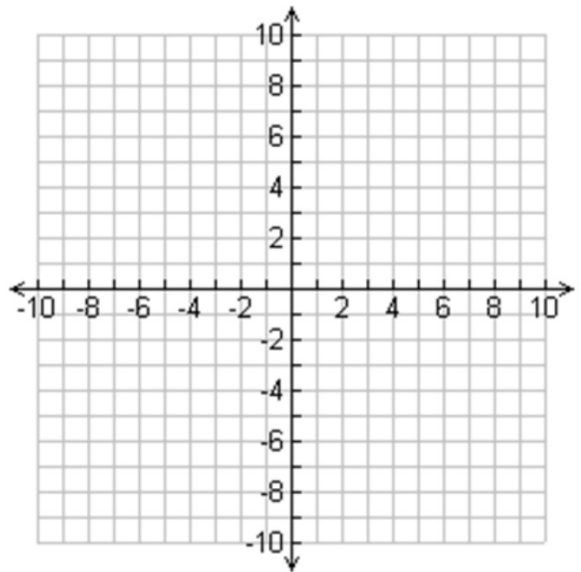


Bellwork

Graph the following identifying all Key Elements:

1. $y = -2x^2 + 8x - 9$



Graph by Factoring

Procedure:

Step 1: Factor the Quadratic expression.

Step 2: Set each factor = 0.

Step 3: Solve each of the equations for x.

These values are the x-intercepts.

Step 4: Add the x-intercepts together.

Step 5: Divide by the result of Step 4 by 2 and simplify.

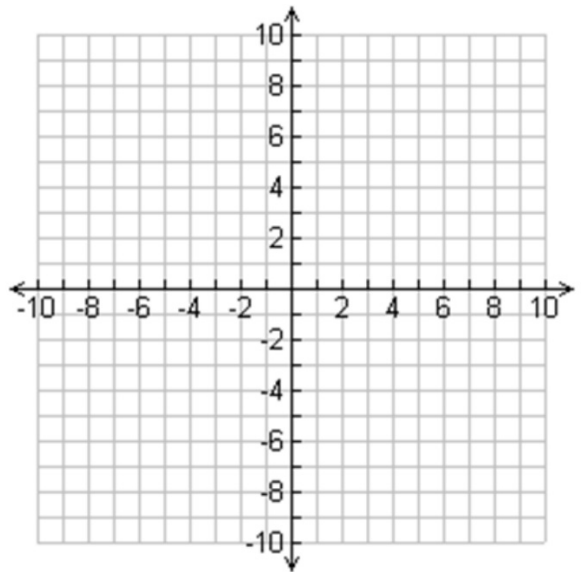
Writing this as $x = \text{result}$ gives you the AOS.

NOTE: You will still need to find at least one point on each side of the vertex!

Example

Graph and Identify all Key Elements:

1. $y = 2x^2 + x - 6$



Example

Graph and Identify all Key Elements:

1. $y = -3x^2 + x + 2$

