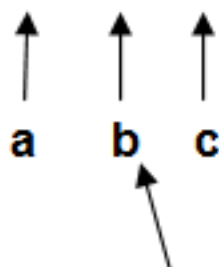


Using a table of values, graph the following function. Identify the zeros and vertex.

$$f(x) = -1/2x^2 - x + 4$$

Step 1: Find the x coordinate for the vertex.

$$f(x) = -1/2x^2 - x + 4$$



******The coefficient of x for the b term is -1. (1 times x is just x, so we don't write the 1, but you must know it's there for this formula! Since the equation says $-x$, we must think of it as -1)

$$a = -1/2$$

$$b = -1$$

$$c = 4$$

$$\frac{-b}{2a} = \frac{-(-1)}{2 \cdot (-\frac{1}{2})} = \frac{1}{-1} = -1$$

The opposite of -1 is positive 1.

The x coordinate of the vertex is -1.