

4.

## Solution

Since the line of symmetry will always be a vertical line in all of our parabolas, the general formula for the line will be  $t = z$

where  $z$  is the first coordinate of the vertex, and it is equal:  $-\frac{1}{2(1)} = -\frac{1}{2}$

So, the axis of symmetry is:  $t = -\frac{1}{2}$