

Round Table

1) What will the axis of symmetry be for the parabola?

(Hint: $x = \frac{-b}{2a}$)

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

Axis of Symmetry:

$$X = \underline{\hspace{2cm}}$$

2) Find the Vertex for the equation:

Hint: $\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right)\right)$

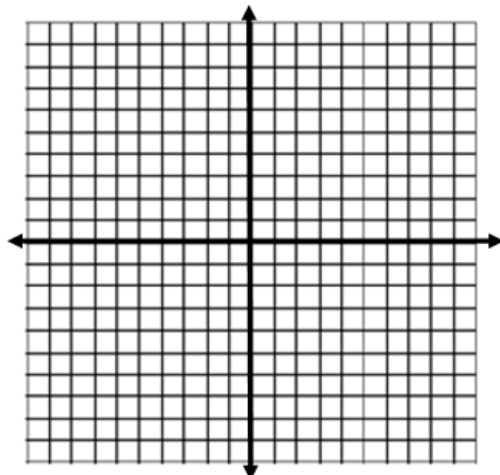
$$y = x^2 - 2x + 1$$

Vertex:

Based on the equation, will the vertex be a maximum or a minimum?

2) **Algebraically** fill in the table below and plot the points to graph the equation. (Include the axis of symmetry as a dashed line)

x	y



4) What is the Domain and Range of the graph?

Domain:

Range:

5) The path of a ball follows the equation $h(t) = -4.9t^2 + 30t + 3$, where t is the time in the air (in seconds) and $h(t)$ is the height of the ball.

Using your graphing calculator find the vertex:

What is the maximum height that the ball reaches?

How long does it take to reach the maximum height?

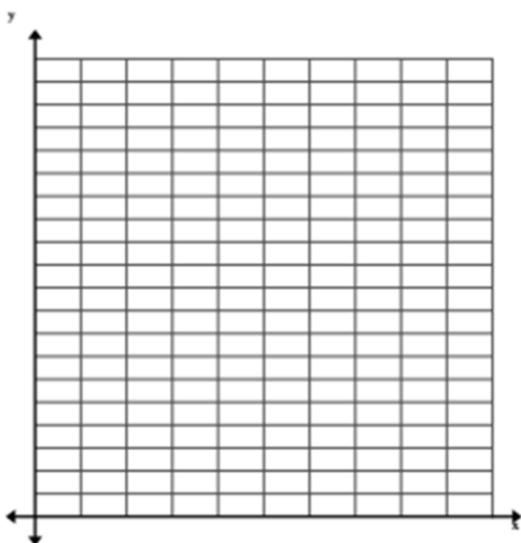
6) What will the axis of symmetry be for the parabola?

Axis of Symmetry:

$X =$ _____

7) Use your graphing calculator to fill in the table below and plot the points to graph the equation. (Include the axis of symmetry as a dashed line)

X	Y



8) What is the Domain and Range of the graph?

Domain:

Range: