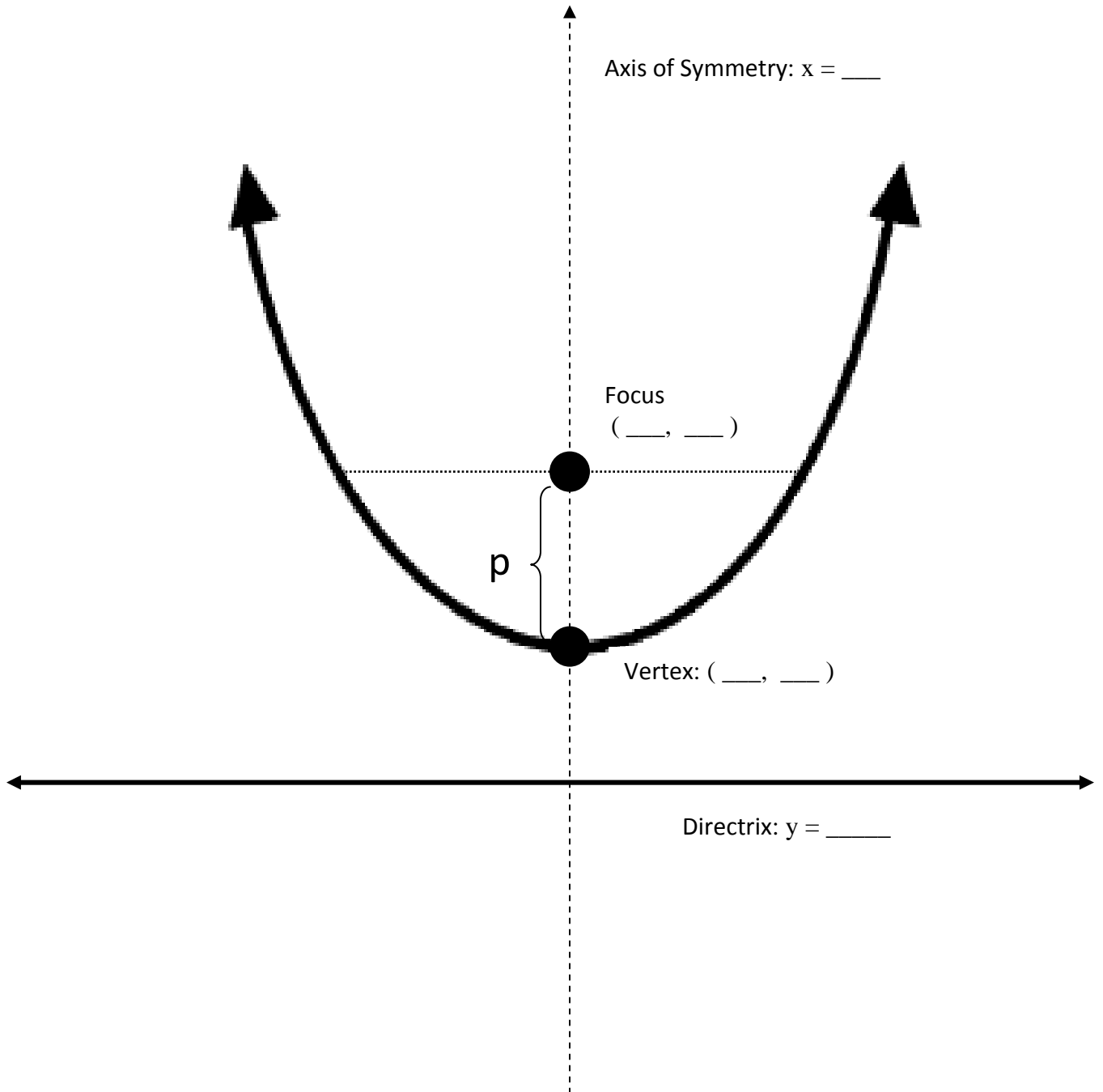


# Vertical Parabola



## Vertex Form

## Standard Form

Vertical

$$y = a(x-h)^2+k$$

$$(x-h)^2 = 4p(y-k)$$

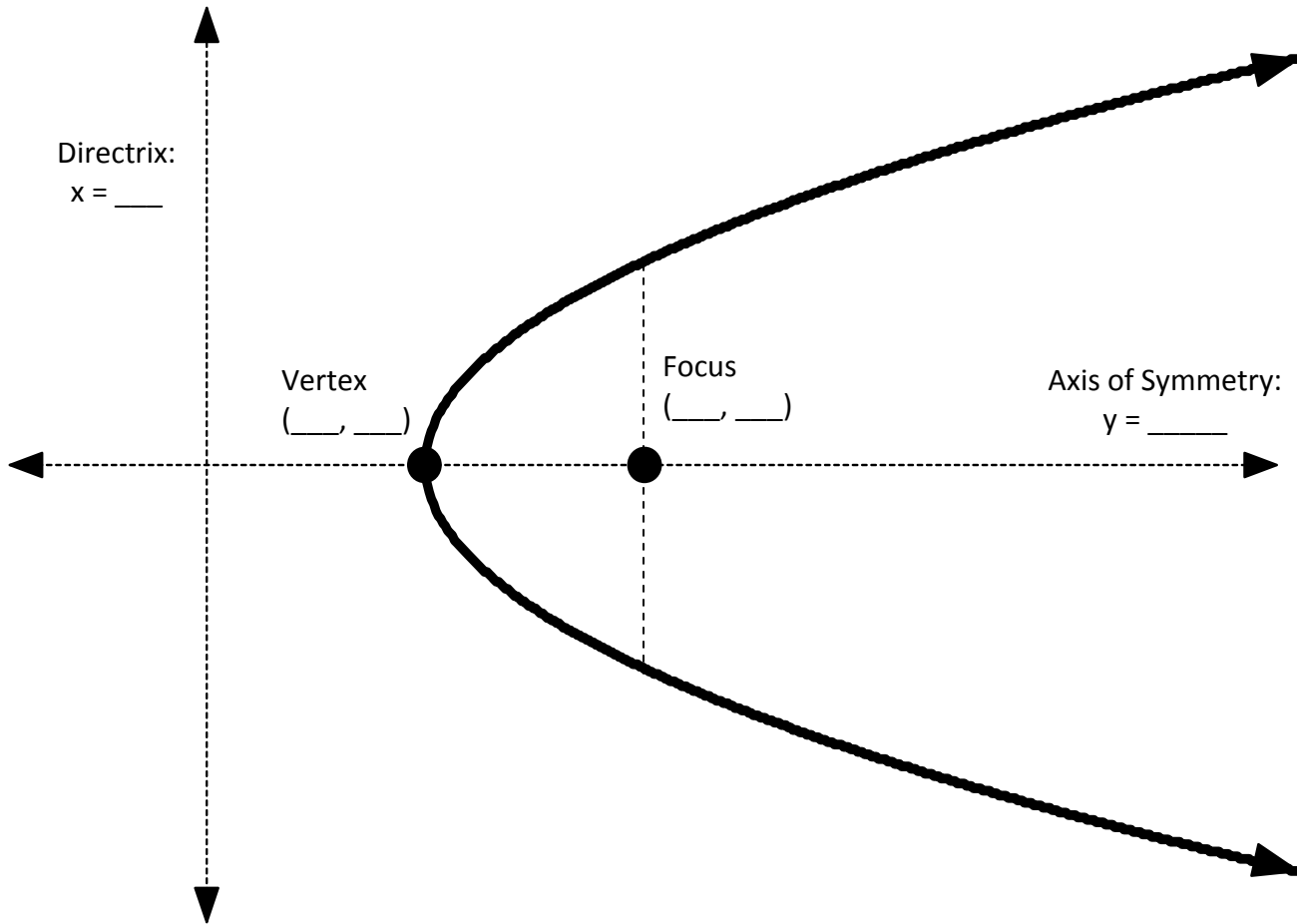
Horizontal

$$x = a(y-k)^2+h$$

$$(y-k)^2=4p(x-h)$$

$$****a = \frac{1}{4p}****$$

# Horizontal Parabola



## Vertex Form

## Standard Form

Vertical

$$y = a(x-h)^2 + k$$

$$(x-h)^2 = 4p(y-k)$$

**Horizontal**

$$x = a(y-k)^2 + h$$

$$(y-k)^2 = 4p(x-h)$$

$$****a = \frac{1}{4p}****$$