

$$\textcircled{16} \quad y^2 + 12x = 2y - 13$$

$$y^2 - 2y = -12x - 13$$

$$y^2 - 2y + \left(\frac{-2}{2}\right)^2 = -12x - 13 + \left(\frac{-2}{2}\right)^2$$

$$(y-1)^2 = -12x - 12$$

$$(y-1)^2 = -12(x+1) \rightarrow (y-k)^2 = 4p(x-h)$$

$$4p = -12$$

$$\frac{4p}{4} = \frac{-12}{4}$$

$$p = -3$$

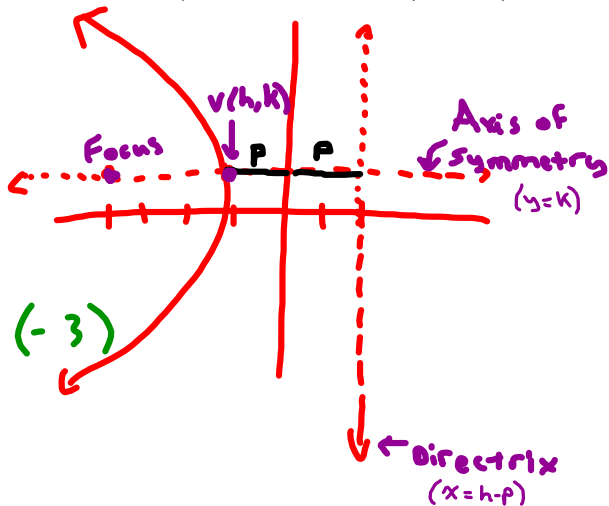
Vertex $(h,k) : (-1, 1)$

Focus: $(h+p, k)$
 $(-1 + -3, 1)$
 $(-4, 1)$

Directrix: $x = h-p$
 $x = -1 - (-3)$
 $x = 2$

Axis of sym.: $y = k$
 $y = 1$

p = distance from focus to vertex
 p = distance from vertex to T (on directrix)



A few notes

