

The Vertex form of the Quadratic Equation

$$y = 2x^2 + 4x - 7$$

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

$$\text{Vertex } (-1, -9)$$

$$y = 2(x - (-1))^2 + (-9)$$

$$h = -1$$

$$k = -9$$

$$y = 2(x + 1)^2 - 9$$

$$a = 2$$