

Convert the quadratic equation in standard form into vertex form.

$$y = x^2 + 6x - 3$$

$$y = (x^2 + 6x + 9) - 3 - 9$$

$$y = (x+3)(x+3) - 3 - 9$$

$$y = (x+3)^2 - 3 - 9$$

vertex
form

$$y = (x+3)^2 - 12$$

Vertex $(-3, 12)$