

WRITE IN VERTEX FORM

$$y = x^2 + 12x + 32$$

$$y - 32 = x^2 + 12x$$

$$y - 32 + 36 = x^2 + 12x + 36$$

$$y + 4 = x^2 + 12x + 36$$

$$y + 4 = (x + 6)(x + 6)$$

$$y + 4 = (x + 6)^2$$

$$y = (x + 6)^2 - 4$$

Vertex:
 $(-6, -4)$