

WRITE IN VERTEX FORM

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

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

$$y + 4 + 18 = 2x^2 + 12x + 18$$

$$y + 22 = 2x^2 + 12x + 18$$

$$y + 22 = 2(x + 3)(x + 3)$$

$$y + 22 = 2(x + 3)^2$$

$$y = 2(x + 3)^2 - 22$$