

Convert from vertex form to general form

$$y = 2(x - 4)^2 + 3$$

$$y = 2 \underbrace{(x - 4)(x - 4)} + 3$$

$$y = 2(x^2 - 4x - 4x + 16) + 3$$

$$y = 2(x^2 - 8x + 16) + 3$$

$$y = 2x^2 - 16x + 32 + 3$$

$$y = 2x^2 - 16x + 35$$