

Parabolas: Vertex Form vs. Standard Form vs. Factored Form

Vertex Form: $a(x-h)^2 + k$

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

Standard Form: $ax^2 + bx + c$

$$y = -2x^2 + 12x - 10$$

Factored Form: $a(x-p)(x-q)$

$$y = -2(x-1)(x-5)$$