Graphing Parabolas
Parent Function & Translations

$$y = x^2$$

Vertex Form

$$y = a(x - h)^2 + k, \text{ vertex at } (h, k)$$

Graphing Parabolas – Vertex Form

$$y = a(x - h)^2 + k \quad \text{vertex } (h, k)$$

1. From the parent form, $y = x^2$, move the vertex over h and up k units
2. Pick a convenient point, zero, if possible
3. Find a 3rd point using symmetry.