

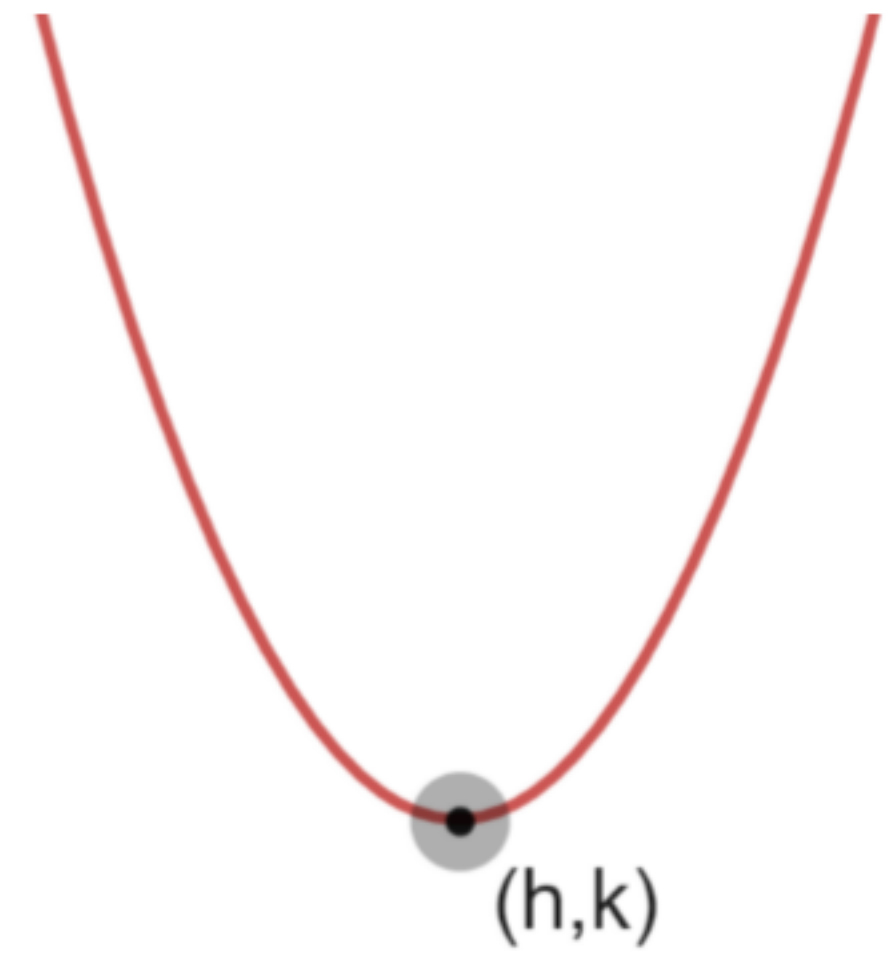
Find the Vertex of a Quadratic Function from Standard Form

$$y = ax^2 + bx + c$$

There are two options for finding the vertex from standard form.

1) Write in vertex form by completing the square.

$$y = ax^2 + bx + c \rightarrow y = a(x - h)^2 + k$$



2) Use the vertex formula to find the x-value of the vertex, then substitute the x-value into the equation to find the y-value of the vertex.



$$x = -\frac{b}{2a} \quad y = f\left(-\frac{b}{2a}\right)$$

