

Vertex Formula



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THE MATH EXPERT

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

$$\text{Vertex, (h, k)} = \left(\frac{-b}{2a}, \frac{-D}{4a} \right)$$

$$\text{where, } D = b^2 - 4ac$$

(OR)

$$x - \text{coordinate of vertex} = \frac{-b}{2a}$$

substitute it in $y = ax^2 + bx + c$ to find y - coordinate