

Vertex $\longrightarrow$ Standard

$$y = A(x-h)^2 + k$$

$$y = Ax^2 + Bx + C$$

Ex:

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

vertex: $(2, -3)$

① Expand

$$= 2(x-2)(x-2) - 3$$

② FOIL

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