

Mathematics 11C

$$4.3 - y = a(x-h)^2$$

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$$y = ax^2 + k \leftarrow \text{vertical shift}$$



vertical stretch/compression

$$y = a(x - \boxed{h})^2$$

$h \Rightarrow$ horizontal shift
 $\hookrightarrow$ add/subtract to the x 's

$$y = (x - 2)^2 \quad h = 2$$

$$y = (x + 3)^2 \Rightarrow y = (x - (-3))^2 \quad \therefore h = -3$$