

Chap3 Polynomial and Rational functions

3.1 polynomial. functions.

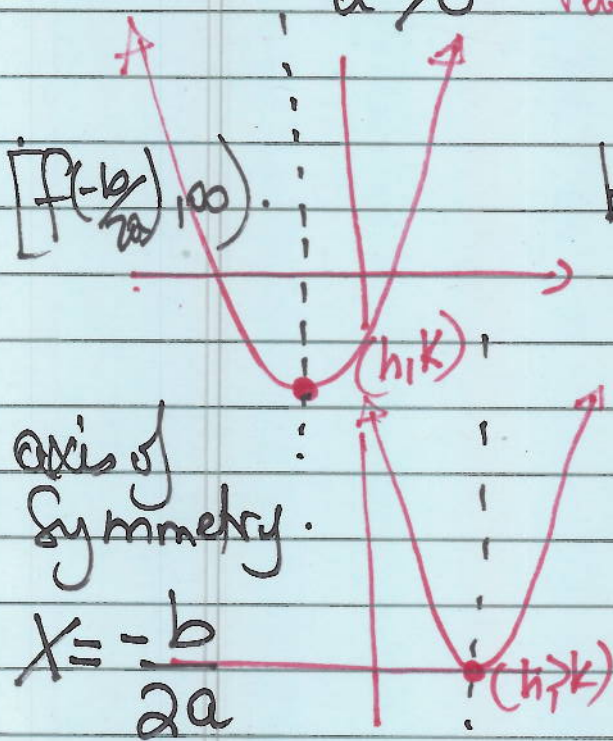
$$y = ax^2 + bx + c. \quad a \neq 0$$

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

Range $[k, \infty)$

$a > 0$

Vertex min

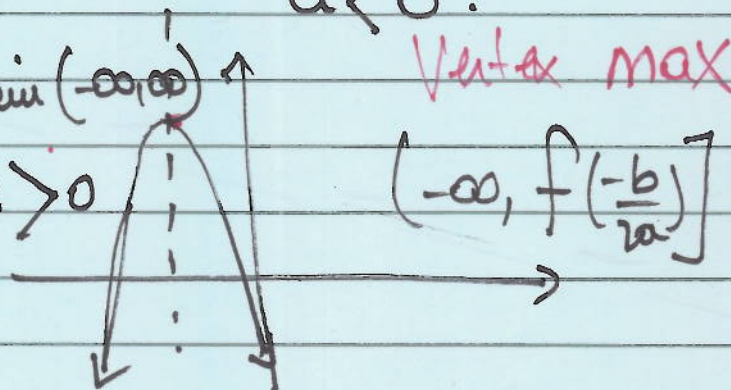


Domain $(-\infty, \infty)$

$$b^2 - 4ac > 0$$

$a < 0$

Vertex max



$$b^2 - 4ac = 0$$

$$x = -\frac{b}{2a}$$

$$x = h$$

axis of Symmetry

$$b^2 - 4ac < 0$$

