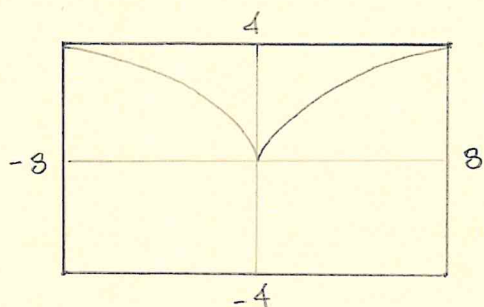
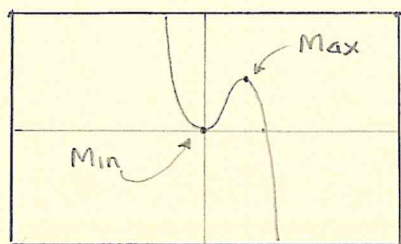


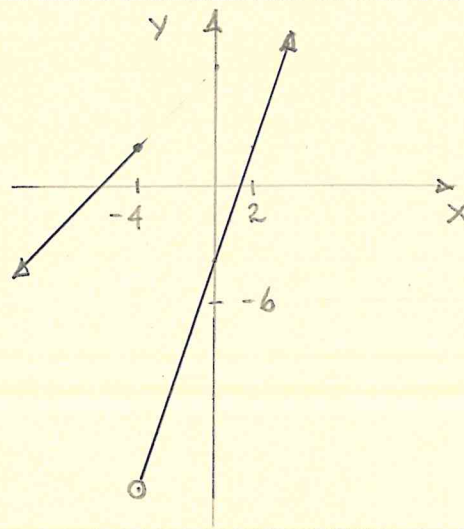
Pg. 38, #29  $f(x) = x^{2/3}$ 

a)

b) Increasing on:  $(0, \infty)$ Decreasing on:  $(-\infty, 0)$ Pg. 38, #44  $f(x) = -x^3 + 3x^2$ RMin Value = 0 when  $x = 0$ RMax Value = 4 when  $x = 2$ 

Pg. 38, #56

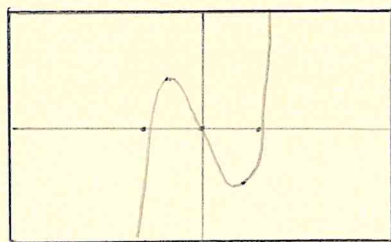
$$f(x) = \begin{cases} x+6, & x \leq -4 \\ 3x-4, & x > -4 \end{cases}$$

Pg. 39, #81  $g(x) = x^3 - 5x$ 

a) Note that

$$\begin{aligned} g(-x) &= (-x)^3 - 5(-x) \\ &= -x^3 + 5x \\ &= -g(x) \end{aligned}$$

b)

Thus,  $g$  is an odd function and graph has origin symmetry