

Handout Section 4.4

If $f(x) = \frac{1}{x^2 - 1}$ then find:

(a) the domain, the intercepts and the asymptotes;

- (b) the intervals where the function is increasing and decreasing;**
- (c) the points of local maximum and local minimum;**

- (d) the intervals where the function is concave upward and concave downward;
- (e) the inflection points;

(f) sketch the graph.