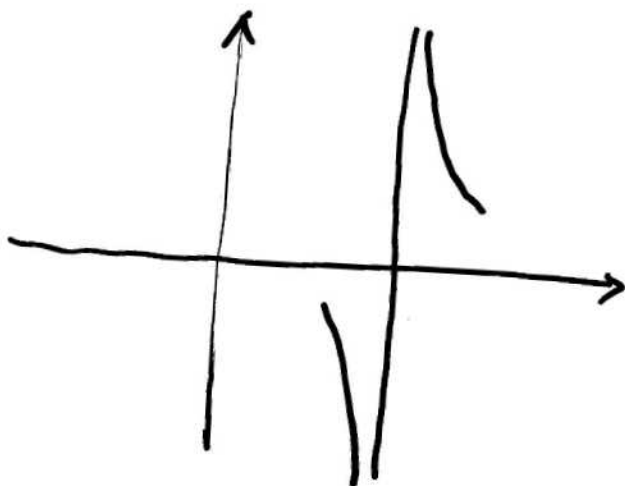


$$1) \lim_{x \rightarrow x_0^-} f(x) = -\infty$$



$$\lim_{x \rightarrow 0^-} \frac{1}{x} = -\infty$$

$$, \lim_{x \rightarrow 0^+} \frac{1}{x} = +\infty$$

TEOR. WEIERSTRAS

$$f \text{ CONT. } [a, b] \Rightarrow \left[\begin{array}{l} \exists \bar{x}, \bar{x} \in [a, b]: \\ f(\bar{x}) \leq f(x) \leq f(\bar{x}) \\ \forall x \in [a, b] \end{array} \right.$$

$$m = \min_{[a, b]} f(x) = f(\bar{x}) ; M = \max_{[a, b]} f(x) = f(\bar{x})$$