Extra Credit

March 23, 2022

Chapter 3

Def 3.3.1

Let f be a fn. w/ doman $D \subseteq \mathbb{R}$. Then f has a limit as x approaches infinity iff $\exists L \in \mathbb{R}$ s.t. for every $\mathcal{E} > 0, \exists M \in \mathbb{R}^+$ s.t. $|f(x) - L| < \mathcal{E}$, if $x \geq M$ and $x \in D$. If such an L exists, then L is called the limit of the fn f as x tends to infinity and we write $\lim_{x\to\infty} f(x) = L$

Def 3.1.2