Section 3.1 Sequences and Limits

A sequence is a function defined on $\mathbb{N} = \{1, 2, 3, \cdots\}$ whose range is contained in $\mathbb{R}$.

We say that the sequence x_n converges to x, and write $\lim_{n\to\infty}$ or $x_n \to \infty$, if for all $\epsilon > 0$, there exists $K(\epsilon)$ such that if $n > K(\epsilon)$, $|x_n - x| < \epsilon$.