

Download Sequence In Real Analysis

Definition A sequence of real numbers is any function $a : \mathbb{N} \rightarrow \mathbb{R}$. Often sequences such as these are called real sequences, sequences of real numbers or sequences in \mathbb{R} to make it clear that the elements of the sequence are real numbers. Analogous definitions can be given for sequences of natural numbers, integers, etc. A sequence of real (or complex) numbers is said to converge to a real (or complex) number c if for every $\epsilon > 0$ there is an integer $N > 0$ such that if $j > N$ then $|a_j - c| < \epsilon$. The number c is called the limit of the sequence and we sometimes write $a_j \rightarrow c$. Sequence. A sequence is a function whose domain of definition is the set of natural numbers. Or it can also be defined as an ordered set. Notation: Real Analysis, Spring 2010, Harvey Mudd College, Professor Francis Su. Playlist, FAQ, writing handout, notes available at: <http://analysisyawp.blogspot.com/>