Analysis Meeting I

November 6, 2025

Study the following topics out of Rudin or Hunter and we will discuss them

1. Sequences, subsequences and the concept of limit

2. Monotone sequences: Bounded monotone sequences converge (with proof)

3. The Bolzano-Weierstrass theorem: Bounded sequences have at least a convergent subsequence (with proof)

4. Cauchy sequences and completeness of the reals: Real values Cauchy sequences are convergent. (with proof)

5. The concept of the $\liminf$ and $\limsup$ and their use. (See also handwritten notes)