

MA 109 D2 T1

Week One Extra Recap

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November 13, 2022

Logistics!

Convergence of Sequences

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A sequence which does not converge is said to diverge, or be non-convergent.

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then f_n converges, and the limit is $f_0 = a_0 = b_0$.

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The sequence $a_n := (-1)^n$ does not converge. Proof?

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Theorem (Monotone Convergence)

An upper bounded (lower bounded) real sequence a_n which is monotonically increasing (decreasing) converges. Further,

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 - 4 a_n and b_n are both convergent