

Rudin Chapter 3: Absolute Convergence

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Definition: (Absolute Convergence)

A series $\sum a_n$ **converges absolutely** if $\sum |a_n|$ converges.

Theorem:

If $\sum a_n$ converges absolutely then it also converges

Proof:

Hint: Use the comparison test!

Since $|a_n| \geq a_n$, if $\sum |a_n|$ converges then $\sum a_n$ converges