CONDITIONS FOR CONVERGENCE AND SUBSEQUENTIAL CONVERGENCE OF REGULARLY GENERATED SEQUENCES

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Abstract

Regularly generated sequences were first introduced in [1]. It is said that (u_n) is regularly generated by a sequence $\alpha = (\alpha_n)$ in some sequence space $\mathcal{A}$ and α is called a generator of (u_n) if

$$u_n = \alpha_n + \sum_{k=1}^{n} \frac{\alpha_k}{k}.$$

In this work we obtain necessary conditions under which the regularly generated sequence (u_n) converges or converges subsequentially.

Keywords: Subsequential convergence, regularly generated sequences, slowly oscillating sequences, summability by weighted means

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