

ALMOST CONVERGENCE METHOD WITH FRACTIONAL ORDER OPERATOR

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Abstract: The purpose of this paper is twofold. First, basic concepts such as Gamma function, almost convergence, fractional order difference operator and sequence spaces are given as a survey character. Thus, the current knowledge about those concepts are presented. Second, we construct the almost convergent spaces with fractional order difference operator and compute dual spaces which are help us in the characterization of matrix mappings. After we characterize to the matrix transformations, we give some examples. In this paper, the notation $\Gamma(n)$ will be shown the Gamma function. For $n \in \{0, -1, -2, \dots\}$, Gamma function defined by an improper integral $\Gamma(n) = \int_0^{\infty} e^{-t} t_{n-1} dt$.

Keywords: Gamma Function, almost convergence, fractional order operator, matrix domain

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