The Completeness of p-Summable Sequences as 2-Normed Spaces

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Abstract

The norm space is the pairs of vector space with defined norm in the vector space. An example of vector space is ℓ^p. Vector space ℓ^p is a space that contains all real number sequences that satisfy the sums of all elements in ℓ^p normed space. Furthermore at ℓ^p can be defined as a norm-2 $\|\cdot,\cdot\|_p$, that is equal to the sum of all 2 dimensional matrix determinant in norms in ℓ^p, such that $\left(\ell^p, \|\cdot,\cdot\|_p\right)$ is a 2-normed space. Result of this study is seeking at the completeness of 2-normed space $\left(\ell^p, \|\cdot,\cdot\|_p\right)$ by utilizing the completeness of norm space $\left(\ell^p, \|\cdot\|_p\right)$.

Keywords (12 font)
p-summable, norm space, Banach space

Biography / Biographies

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