An Overview of Linear Transformation

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ABSTRACT

Linear transformations play an important role within the sector of algebra. In this paper we will be covering different parts of the linear transformations starting from its definition to kernels and examples. These transformations can be defined on finite or infinite spaces so there have been different types of linear transformations. It's known by different names such as linear maps or mapping or vector space homomorphism. The functions satisfying the property under vector addition and scalar multiplications are termed as linear transformation. A writing review that directly connects to the content of this section is provided, along with headings for additional research and didactic proposals.

Keywords: Linear transformation, kernel, image, range, vector space, Linear transformation characteristics, Theorem of Nullity for Rank and Matrix representation.

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