

Contiguous Matrix Functions Relation for the k-Hypergeometric Matrix Function

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ABSTRACT

Using the Gaussian approach, Mubeen et al. were able to derive fifteen consecutive function relations for k-hypergeometric functions with a single parameter. For the k-hypergeometric matrix function with one and two parameters, S.Chinra *et al.* find seventy-two newly discovered and informative contiguous function relations in the same direction. With regard to k-hypergeometric matrix functions with two parameters, the objective of this research paper is to get seventy-two brand-new and intriguing contiguous function relations for the k-hypergeometric matrix function.

Keywords: Matrix functional calculus; k-Gamma matrix function; k-Beta matrix function

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