

ON THE APPLICATION OF ABOODH TRANSFORM TO SYSTEM OF PARTIAL DIFFERENTIAL EQUATIONS

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ABSTRACT

In this research, we have derived the general formulas for the solution of systems of partial differential equations with the help of the Aboodh integral transform. Various test examples have been deployed for the validation of the derived formulas, including homogeneous and nonhomogeneous systems with constant coefficients. Amazingly, the reported solutions are in perfect conformity with the literature.

KEYWORDS: Integral transforms, Aboodh transform, partial differential equations, system of differential equations.