Modelling with Fractional Order Continuous and Discrete (Delta) Integration

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ABSTRACT

In this paper, we use the discrete case methodology to the continuous situation in order to identify closed-form of fractional order continuous and discrete integration. We have derived several theorems and formula using Riemann Liouville fractional integral with gamma function. Also, we develop the discrete analogofthecontinuousversionforvthfractionalorderintegration. The novelty of this article is the introduction of fractional order exponential functions and obtaining its related theorems.

Keywords: Continuous and discrete integration, Fractional exponential function, Fractional Integral and differentials

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