INTRODUCTION OF A DOMINATING FUNCTION

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Abstract

In the present paper a new function named as dominating function (D-function) has been introduced, which dominates all most all the functions like algebraic, exponential, trigonometric, hyperbolic, logarithmic, Taylor's series, Maclaurin's series, Binomial series, Gregory's series, Bessel's functions, Fourier-Bessel expansion, Ber-Bei functions, Legendre's polynomial, Moment generating function, Z-transform, Chebyshev's polynomial, Hermite polynomial, Laguerre polynomial, Hypergeometric function, Confluent hypergeometric function, etc. The functions which can be written in the form of D-function has been named as Dominatable Functions (Dable functions). It has been found that all most all the indefinite integrable functions and the integrals of indefinite non-integrable functions studied by Yadav et al [2, 3, 4, 5, 6] are all D-able functions.

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