

ON NUMERICAL EVALUATION OF INTEGRALS OF ANALYTIC FUNCTIONS

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Abstract

A general 5 point quadrature rule of degree at least 5 involving two parameters has been formulated for the numerical evaluation of integral of an analytic function. The values of the parameters have been assigned suitably for generation of the transformed rule due to Hardy, the transformed Gauss-Legendre rules and some existing rules. The associated truncation error found out by using Taylor series expansion has been analyzed.

Key Words : *Analytic function, Cauchy integral formula, Numerical quadrature.*

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