A HIGH ORDER NUMERICAL INTEGRATION METHOD AND A CORRESPONDENT CUADRATURE FORMULA

(Abstract)

An integration formula of Runge-Kutta-Fehlberg type for problem (1.1) is derived, which has the order of accuracy $m + 6$, $m > 1$ and requires four evaluations of f. The method is given by (2.2) coefficients (2.8). From this integration formula is obtained the cudrature formula (3.2) — (3.3).