PRACTICAL FORMULA OF OPTIMAL QUADRATURE FOR A CLASS OF FUNCTIONS

(Summary)

Quadrature formula of the type (1) and (15) where $f \subseteq W^q(M; x_q, x_n)$ are constructed with the assumption that the degree of exactitude equals 1 and arbitrary p, for which, the evaluation of the rest (7) respectively (16) take the minimum value.

The formula (14) is obtained with the evaluation (11) of the rest for p > 1 and the formula (12) with the evaluation of the rest (13) for p = 1 respectively the formula (18) with the evaluation (19) of the rest for p > 1 and the formula (20) with evaluation of the rest (21), for p = 1.