Aplikace matematiky

Summaries of Papers Appearing in this Issue

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(These summaries may be reproduced)

JOZEF MIKLOŠKO, Bratislava: *Numerical integration with weight functions* $\cos kx$, $\sin kx$ *on* $[0, 2\pi/t]$, $t = 1, 2, \ldots$ Apl. mat. 14 (1969), 179–194. (Original paper.)

The paper describes a numerical method for computation of integrals with weight functions $\cos kx$, $\sin kx$ (k-integer), and its convergence and the estimation of the remainder is investigated. Some weight coefficients of these formulae are tabulated and their application is demonstrated by numerical experiments.

JAROSLAV ZÁHORA, Brno: *Nomogramy adjungované k dotykovým a průsečíkovým nomogramům majícím aspoň jeden systém křivých isoplét.* (Nomogrammes adjoints aux nomogrammes à lignes concourantes et aux nomogrammes à contact tangentiel ayant au moins un système d'isoplèthes courbes.) Apl. mat. 14 (1969), 195–209. (Mémoire scientifique original.)

L'article traite une transformation non-corrélative, qui adjoint au nomogramme à lignes concourantes (au nomogramme à contact tangentiel) ayant r systèmes d'isoplèthes courbes r nomogrammes à contact tangentiel (r nomogrammes à lignes concourantes).

JIŘÍ FIALA, Praha: *Zeroes of orthogonal polynomials by QD-algorithm.* Apl. mat. 14 (1969), 210–219. (Original paper.)

In the paper a method for computing zeroes of orthogonal polynomials is presented. An algorithm is given for computing directly the top row of the QD-scheme for some recurrently defined polynomials. The algorithm is then applied to classical orthogonal polynomials.

VÁCLAV DOLEŽAL, Praha: *On general nonlinear and quasilinear unanticipative feedback systems.* Apl. mat. 14 (1969), 220–240. (Original paper).

The paper deals with fundamental properties of nonlinear and quasilinear unanticipative feedback systems; theorems concern'ng the existence of the over-all transfer operator and input-output boundedness and stability are proved.