

thorough grounding in advanced calculus.

Chapter headings (condensed): Approximation of Bounded Linear Operators, Completely Continuous Operators, Self-adjoint Operators, Speeding Up the Convergence, Solution of Time-dependent Problems, Generalization of the Method of Moments, Solution of Integral and Differential Equations.

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Gaussian Quadrature Formulas, by A.H. Stroud and D. Secrest. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1966. 374 pages.

This book gives tables of nodes and weights for fourteen types of Gaussian quadrature formulas. The main tables are N-point formulas for Gauss-Legendre quadrature for  $N = 2(1) 64(4) 96(8) 168, 256, 384, 512$ , Gauss-Hermite quadrature for  $N = 2(1) 64(4) 96(8) 136$ , and Gauss-Laguerre quadrature for  $N = 2(1) 32(4) 68$ . Also tables are given for eleven other types of Gaussian formulas. In all tables nodes and weights are given to thirty significant figures. Tables of error coefficients are given for each of the fourteen tables.

In addition to the above-mentioned tables the book contains five introductory chapters with a total of approximately one hundred pages which give a summary of the theory of Gaussian quadrature, a discussion of the computational procedure including some sample Fortran programs, examples of the use of the tables, a survey of other tables, and a bibliography.

It may be of interest to note that the majority of the formulas were computed on the Control Data 1604 at the University of Wisconsin. The arithmetic was done by means of a general-purpose floating-point program which allowed triple precision, used in the computation of most of the tables, of about thirty-nine significant decimals, and quadruple precision, used in some instances, of about fifty-four significant decimals.

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Contributions to Functional Analysis, dedicated to G. Köthe. Springer Verlag, Berlin, Heidelberg and New York, 1966. viii + 532 pages. Price DM 35.-

This volume contains 44 research papers in functional analysis which were published also in Mathematische Annalen, Vol. 162, pages 83-367 and Vol. 163, pages 1-247, q.v. The papers cover a wide area of functional analysis, and most of them are of general interest. The publishers have attempted to make them available at "as low as possible" a price. For reviews of the individual articles we refer the reader to forthcoming issues of Mathematical Reviews.

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