

this part of the handbook include a table of the summed Poisson distribution function and an extension of the range of the annuity tables to include higher interest rates.

A final new feature of the present edition is the inclusion of a valuable list of 29 references to relevant treatises, textbooks, tables, and general guides for table-users.

The author appears indeed to have taken great pains to make this edition an especially useful and reliable one.

J. W. W.

1. R. S. BURINGTON, *Handbook of Mathematical Tables and Formulas*, Fourth edition, McGraw-Hill, New York, 1965. (See *Math. Comp.*, v. 19, 1965, p. 503, RMT 72.)

44 [2.20].—H. P. ROBINSON, *Roots of  $\tan x = x$* , Lawrence Berkeley Laboratory, University of California, Berkeley, California, December 1972, ms. of 10 type-written pp. deposited in the UMT file.

This table consists of the first 500 nonnegative roots of the equation stated in the title, all to 40D. The underlying computations were performed on a Wang 720C programmable calculator, and a partial check was provided by a preliminary calculation of the first 300 roots to 40D by means of a different program.

The results of the present calculations clearly supersede in precision and extent those of all previous ones [1] of the roots of this important equation in applied mathematics.

As an example of the use of the table, the author has applied it to the evaluation of the DuBois Reymond constant  $C_3$ , using a formula originally developed by Watson [2].

J. W. W.

1. A. FLETCHER, J. C. P. MILLER, L. ROSENHEAD & L. J. COMRIE, *An Index of Mathematical Tables*, 2nd ed., Addison-Wesley, Reading, Mass., 1962, v. 1, p. 144.

2. G. N. WATSON, "DuBois Reymond constants," *Quart. J. Math.*, v. 4, 1933, pp. 140–146.

45 [2.20, 3, 4].—M. P. CHERKASOVA, *Problems on Numerical Methods*, translated from the Russian by G. L. Thomas and R. S. Anderssen, Wolters-Noordhoff Publishing, Groningen, The Netherlands, 1972, vii + 210 pp., 23 cm. This book is available from International Scholarly Book Services, Inc., P. O. Box 4347, Portland, Oregon 97208. Price \$8.50.

This book is intended to serve as an educational aid in elementary numerical analysis courses by providing the student with a comprehensive set of numerical problems (with answers) upon which he can cut his computational teeth. Chapter 1, "The approximate solution of nonlinear algebraic and transcendental equations," contains 301 problems; Chapter 2, "Numerical methods in linear algebra," contains 146 problems; and Chapter 3, "Numerical solution of ordinary differential equations," contains 28 problems, many containing 5 or 6 parts. Each chapter contains brief summaries of the methods intended for use on the problems.