

of this type, and consequently represents a significant contribution to the related tabular literature.

J. W. W.

1. O. S. BERLYAND, R. I. GAVRILOVA & A. P. PRUDNIKOV, *Tables of Integral Error Functions and Hermite Polynomials*, Pergamon Press, Oxford, 1962. (See *Math. Comp.*, v. 17, 1963, pp. 470-471, RMT 80.)

2. M. ABRAMOWITZ & I. A. STEGUN, Editors, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards, Applied Mathematics Series, No. 55, U. S. Government Printing Office, Washington, D. C., 1964, pp. 317-318, Table 7.4.

85[7].—M. LAL & W. RUSSELL, *Table of Factorials 0! to 9999!*, Department of Mathematics, Memorial University of Newfoundland, St. John's, Newfoundland, September 1967. Ms. of 3 + 200 pp., 28 cm. Deposited in the UMT file. Price \$10.00.

This attractively printed, bound table consists of 50S unrounded values of $n!$ for $n = 0(1)9999$, arranged in floating-point form. Exact values of the first 48 entries can be read from the table.

The introduction contains a statement that the underlying calculations were performed on an IBM 1620 and the tabular output was printed on an IBM 407, Model E8. Appended to the introduction is a one-page Fortran listing of the program used in the initial calculation, which extended to 23S. This program was subsequently modified to permit the handling of 100S products. The authors express the belief that their results were probably correct to at least 90S before reduction to 50S in the final printout.

Reference is made in the introduction to earlier, closely related tables by Reitwiesner [1], Salzer [2], and Reid & Montpetit [3]. To this list there should be added the tables of Giannesini & Rouits [4]. These tables are all of much lower precision than the one under review.

It seems appropriate to this reviewer to mention here the existence of extensive manuscript tables [5] of exact factorials by these same authors.

J. W. W.

1. G. W. REITWIESNER, *A Table of Factorial Numbers and their Reciprocals from 1! through 1000! to 20 Significant Digits*, Ballistic Research Laboratories, Technical Note No. 381, Aberdeen Proving Ground, Maryland, 1951. (*MTAC*, v. 6, 1952, p. 32, RMT 955.)

2. H. E. SALZER, *Tables of $n!$ and $\Gamma(n + 1/2)$ for the First Thousand Values of n* , National Bureau of Standards, AMS 16, Washington, D. C., 1951. (*MTAC*, v. 6, 1952, p. 33, RMT 957.)

3. J. B. REID & G. MONTPETIT, *Table of Factorials 0! to 9999!*, Publication 1039, National Academy of Sciences—National Research Council, Washington, D. C., 1962. (*Math. Comp.*, v. 17, 1963, p. 459, RMT 67.)

4. F. GIANNESINI & J. P. ROUITS, *Tables des coefficients du binôme et des factorielles*, Dunod, Paris, 1963. (*Math. Comp.*, v. 18, 1964, p. 326, RMT 40.)

5. M. LAL, *Exact Values of Factorials 200! to 550!*; and M. LAL & W. RUSSELL, *Exact Values of Factorials 500! to 1000!*, Department of Mathematics, Memorial University of Newfoundland, St. John's, Newfoundland; the first dated August 1967, the second undated. (*Math. Comp.*, v. 22, 1968, pp. 686-687, UMT 67, 68.)

86[7, 9].—M. LAL & W. F. LUNNON, *Expansion of $\sqrt{2}$ to 100,000 Decimals*, University of Manchester, Manchester, England, December 10, 1967. Computer output deposited in the UMT file.

Continuing the computation in [1] and [2], the authors have now extended the $\sqrt{2}$ to 100,000D by the use of the Atlas Computer in Manchester. The Newton-