

REVIEWS AND DESCRIPTIONS OF TABLES AND BOOKS

72[A-E, G-O, P, S].—R. S. BURINGTON, *Handbook of Mathematical Tables and Formulas*, Fourth edition, McGraw-Hill Book Company, New York, 1965, xi + 423 pp., 21 cm. Price \$4.50.

This is a revised, enlarged, and reset edition of a well-known, popular mathematical handbook.

As in the earlier editions, the book is divided into two parts; namely, Part One, "Formulas, Definitions, and Theorems from Elementary Mathematics"; and Part Two, "Tables".

The current trend in mathematical education is reflected in this latest edition in the inclusion in Part One of sections devoted to sets, logic, algebraic structures (including Boolean algebra), number systems, matrices, and statistics.

The second part of the book consists of 39 tables, generally to 5D or 5S. The tables in the third edition have been retained and partially rearranged. These tables include natural and common logarithms, natural and logarithmic values of trigonometric functions, exponential and hyperbolic functions, squares, cubes, square roots, cube roots, reciprocals, circumferences and areas of circles, factorials and their reciprocals, binomial coefficients, probability functions, interest and actuarial tables, the complete elliptic integrals K and E , common logarithms of the gamma function, factors and important constants. Two additional tables have been included in this new edition: one of these, which constitutes part of Table 32, contains 4D square roots of certain common fractions; the other gives 3D values of the χ^2 distribution. One error exists in the latter table: the entry for the 1% point ($\epsilon = 0.01$) and three degrees of freedom ($m = 3$) should read 11.345 instead of 11.341. This has been tabulated correctly by Fisher and Yates [1].

Another improvement over the earlier editions is the inclusion of a glossary of symbols and an index of numerical tables, as well as an appropriately enlarged subject index.

A further feature is a "table locator," which enables the user to readily locate any one of the tables by merely flexing the pages. An abbreviated list of mathematical symbols, abbreviations and the Greek alphabet are now presented on the inside of the front cover and the facing page, respectively.

This improved and expanded edition should be even more useful than its predecessors.

J. W. W.

1. R. A. FISHER & F. YATES, *Statistical Tables for Biological, Agricultural and Medical Research*, 5th ed., Oliver and Boyd, London, 1957.

73[F].—F. GRUENBERGER & G. ARMERDING, *Statistics on the First Six Million Prime Numbers*, Paper P-2460 of the Rand Corporation, Santa Monica, California, 1961, 145 pp., $8\frac{1}{2} \times 11$ in. Copy deposited in UMT File.

The five tables in this report are concerned with the distribution of the first six million primes, from $p_1 = 1$ (which is here counted as a prime) to $p_{6000000} = 104395$ -