BOOK REVIEWS

should read "proposition 43"; p. 116, line 6, $(\mu/)$ should read $(\mu/2)$; p. 123, line 12, "(jm+km'+i(m'+j-1)m+Km'+j+1)" should read " $(jm+km'+i \ (m'+j-1)m+km'+j+1)$." There are too many substitutions given with the spacing not clear to enumerate them all. We content ourselves with a general warning on this point.

A. W. JONES

An index of mathematical tables. By A. Fletcher, J. C. P. Miller, and L. Rosenhead. New York, McGraw-Hill; London, Scientific Computing Service, 1946. 8+451 pp. \$16.00.

The compilation of this index of tables has been achieved by a tremendous outlay of painstaking work over a period of many years. Many tables of value have appeared in scientific and engineering articles and bringing these to light constitutes by itself a most valuable endeavor. The material is listed according to functions, there being twenty-four sections of which two, for example, are logarithms of trigonometrical functions and Gamma function psi function, Polygamma function, Beta function, Incomplete gamma and Beta functions. There are also sections devoted to primes, binomial coefficients, Bernouilli numbers, mathematical constants, and so on.

The authors have indicated with each table the number of decimals, the range of the argument and the intervals of tabulation, the facilities for interpolation (that is, whether first or second differences are given), and the authorship with date. For example, under §21.31— Incomplete elliptic integrals of the first and second kinds—we find that $F(\theta, \phi)$ and $E(\theta, \phi)$ were tabulated as follows:

12dec. $\theta = 0(1^{\circ})90^{\circ}$ $\phi = 45^{\circ} \Delta^{5}$ or Δ^{6} Legendre 1816, 1826.

Similarly, under Bernouilli numbers the entries for exact values for B_n begin with: n=1(1)5 Bernouilli (1713) and continue with some 30 other tables.

There is a 70 page bibliography and an introduction in which the authors describe in detail the interpretation to be given to their notations and remarks.

E. R. Lorch

Tables of the Bessel functions of the first kind of orders zero, one, two, and three. (The Annals of the Computation Laboratory of Harvard University, vols. 3-4.) Cambridge, Harvard University Press; London, Oxford University Press, 1947. \$20.00.

With the help of the automatic sequence controlled calculator, the

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