

Phys.) No. 107, 1963, 77p., (b) III. *Belgrade, Mat. Inst., Posebna izdanja, Knjiga 1 (Editions speciales, 1), 1963, 200 p.*

A number of tables by these authors have been reviewed in *Math. Comp.* from time to time. In recent years the tables have most commonly appeared, as does (a) above, in *Publ. Fac. Elect. Univ. Belgrade*, whereas in (b) we now have the first "book" in a new series of occasional special publications of the Mathematical Institute at Belgrade; the new series is destined to contain monographs, extended original articles and original numerical tables.

In (a) and on p. 13-156 of (b) we find two continuations of tables (*Publ. Fac. Elect.*, No. 77, 1962) already reviewed in *Math. Comp.*, v. 17, 1963, p. 311. The integers ${}^pP_n^+$ defined by

$$\prod_{r=0}^{n-1} (x - p - r) = \sum_{r=0}^n {}^pP_n^+ x^r,$$

previously listed for $p = 2(1)5$, are now listed in (a) for $p = 6(1)11$ and in (b) for $p = 12(1)48$. In both (a) and (b) the values of the other arguments for given p are $n = 1(1)50 - p$, $r = 0(1)n - 1$; when $r = n$, the value of ${}^pP_n^r$ is obviously unity.

In the second part (p. 159-200) of (b) are tables of the integers ${}^rS_n^k$ defined by

$$t(t-1) \cdots (t-\nu+1)(t-\nu-1) \cdots (t-n+1) = \sum_{k=1}^{n-1} {}^rS_n^k t^{n-k},$$

where it is to be noted that the left side contains $(n-1)$ factors, $(t-\nu)$ being omitted. The table is for arguments $n = 3(1)26$, $\nu = 1(1)n - 2$, $k = 1(1)n - 1$.

The tabular values were computed on desk calculating machines, and all are given exactly, even when they contain more than 60 digits. Various spot checks were made in the Instituto Nazionale per le Applicazioni del Calcolo at Rome and in the Computer Laboratory of the University of Liverpool. Details of some of the verificatory computations are given.

A. F.

6[I, X].—PETER HENRICI, *Error Propagation for Difference Methods*, John Wiley & Sons, Inc., New York, 1963, vi + 73 p., 24 cm. Price \$4.95.

This little monograph is a sequel to the author's now classic *Discrete Variable Methods in Ordinary Differential Equations*, published by Wiley in 1962. The subject here is the use of multi-step methods for systems of equations, and the treatment, though in the spirit of the previous volume, is independent of it. The author remarks, however, that to pass from one to several variables was "not a mere exercise in easy generalization," so that the reader would be well advised to read the volumes in the order of their appearance. The two together provide a unified treatment of the subject that will not soon be surpassed.

A. S. H.

7[K].—I. G. ABRAHAMSON, *A Table for Use in Calculating Orthant Probabilities of the Quadrivariate Normal Distribution*, 5 p. + 71 computer sheets, ms. deposited in UMT File.