

chines cannot be considered a substitute for the ingenious mathematical and laboratory techniques of analysis which have been devised. . . ." However, this reviewer is convinced that such ingenuity when properly coupled with the power of modern computers will provide greater insight than analytical methods alone.

A. H. T.

29[X].—(a) D. S. MITRINOVIĆ, "Sur les nombres de Stirling de première espèce et les polynômes de Stirling," *Publ. de la Fac. d'Électrotechnique de l'Univ. à Belgrade* (Série: Math. et Phys.), No. 23, 1959, 20 p. (Serbian with French summary. Tables by Miss RUŽICA S. MITRINOVIĆ.)

(b) D. S. MITRINOVIĆ & R. S. MITRINOVIĆ, "Sur les polynômes de Stirling," *Bull. Soc. Math. Phys. Serbie*, v. 10 (for 1958), p. 43–49, Belgrade. (Summary in Russian.)

(c) D. S. MITRINOVIĆ & R. S. MITRINOVIĆ, "Tableaux qui fournissent des polynômes de Stirling," *Publ. Fac. Élect. Univ. Belgrade* (Série: Math. et Phys.), No. 34, 1960, 24 p. (Summary in Serbian.)

These three papers are concerned with the Stirling numbers of the first kind, S_n^r , which may be defined for positive integral n by

$$x(x-1)(x-2)\cdots(x-n+1) = \sum_{r=0}^n S_n^r x^r.$$

Altogether the numbers S_n^{n-m} are tabulated for $m = 1(1)32$, $n = m + 1(1)N$, where $N = 200$ for $m = 1(1)5$, $N = 100$ for $m = 6$, and $N = 50$ for $m = 7(1)32$. The values for $m = 1(1)7$ are given in (a), for $m = 8(1)13$ partly in (a) and partly in (c), for $m = 14(1)20$ partly in (b) and partly in (c), and for $m = 21(1)32$ in (c). The authors found no discrepancy as a result of some checking against unpublished tables by F. L. Miksa (see *MTAC*, v. 10, 1956, p. 37).

Algebraic expressions for S_n^{n-m} in the form of binomial coefficients $\binom{n}{m+1}$ multiplied by polynomials (with factors $n(n-1)$ separated out if m is odd and not less than 3) are given for $m = 1(1)13$ in (a) and for $m = 1(1)9$ in (c).

S_n^{n-m} may also be expressed as a sum of multiples of binomial coefficients in the form

$$S_n^{n-m} = \sum_{k=0}^{m-1} C_m^k \binom{n}{2m-k}.$$

Altogether the values of the coefficients C_m^k are given for $k = 0(1)31$, $m = k + 1(1)32$, the values for $k = 0(1)19$, $m = k + 1(1)20$ being found in (b) and the remaining values in (c).

A. F.

30[Z].—WAYNE C. IRWIN, *Digital Computer Principles*, Van Nostrand Co., Inc., Princeton, 1960, vi + 321 p., 24 cm., \$8.00.

This book contains material presented at a training course in the Electronics Division of the National Cash Register Company. It is an extremely elementary "book for the beginner. No previous acquaintance with computers, electronics or mathematics is necessary."