Though the book is perhaps somewhat too dogmatic in judging, for instance, upon the relative merit of weak and strong converses, and though it is hardly an "Ergebnisbericht"—lacking an index and having only a one-page bibliography—it does well achieve the purpose stated in its preface, "to provide, for mathematicians of some maturity, an easy introduction to the ideas and principal known theorems of a certain body of coding theory."

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EDITORIAL NOTE: This book has also been published by Springer-Verlag, Berlin in 1962 as v. 31 of the new series of *Ergebnisse der Mathematik und ihrer Grenzgebiete*.

88[S, X].—H. C. BAKHVALOV, ET AL., *Chislennye metody resheniia differentsial 'nykh i integral'nykh uravnehiĭ i kradraturnye formuly*, (*Numerical Methods for the Solution of Differential and Integral Equations and Quadrature Formulas*), supplement to *Zhurnal vychislitel'noi matematiki i matematicheskoi fiziki* (*Journal of Computational Mathematics and Mathematical Physics*), No. 4, v. 4, Academy of Science, U.S.S.R., Moscow, 1964, 351 pp., 26 cm. Price 1 ruble 55 kopecks (paperback).

There are altogether 28 papers in this collection, of lengths varying from four pages to 59 pages, and covering a wide range of topics. The longest paper is the first, by Bahvalov, on Monte Carlo methods. Other topics include probabilistic error estimates in the solution of differential equations, methods of quadrature for the solution of singular integral equations, difference methods in regions of instability of systems of linear differential equations, several papers on differential-difference equations, asymptotic solution of integro-differential equations, non-linear boundary-value problems, and a group of papers on special applications in the study of waves, diffraction, and other topics. An overall evaluation would be difficult, but it should be a useful collection for specialists.

A. S. H.

89[X].—EDWIN F. BECKENBACH, Editor, *Applied Combinatorial Mathematics*, John Wiley & Sons, Inc., New York, 1964, xxi + 608 pp., 24 cm. Price $13.50.

This book is an outgrowth of a Statewide Lecture Series on Applied Combinatorial Mathematics offered by the University of California in the spring of 1962. In it are collected eighteen expository articles which are applied, combinatorial, and mathematical in varying degrees and proportions and which together cover a wide range of subjects. Thoughtfully written and handsomely presented, accompanied with diagrams and extensive up-to-date bibliographies, the articles form a valuable addition to the literature. For many readers they will serve as enjoyable introductions to certain fields of lively current interest; for others they will call attention to problems not yet solved. Since most readers will be especially interested in particular articles, we list here the titles and authors:

1. The Machine Tools of Combinatorics, by Derrick H. Lehmer.
2. Techniques for Simplifying Logical Networks, by Montgomery Phister, Jr.