theory of numbers do not seem to have been well standardized. Each author discusses a certain minimum set of topics and then proceeds to whatever subject interests him. In this book the choice of further topics is well taken and quite varied.

After an introduction to the series of natural numbers the author takes up the subjects common to most such books. Included here is a descriptive section on the distribution of prime numbers in which a number of interesting numerical examples are given. The later part of the book takes up the representation of integers by binary quadratic forms in considerable detail and it includes a chapter on the numerical solution of various problems that arise in number theory.

The principle followed in the preparation of this book seems to have been conciseness. This is apparent, not only in the typography, but even in the author's manner of writing. The earlier chapters have been written with care but this brief manner of writing makes the later chapters more difficult to read.

Because of its conciseness this book seems more suitable as supplementary reading rather than as a first introduction to the theory of numbers.

H. S. ZUCKERMAN

Anwendung der Eulerschen Reihentransformation zur Summierung der Dirichletschen Reihen, der Fakultätenreihen und der Newtonschen Reihe. By N. Obreschkoff. Berlin, Verlag der Akademie der Wissenschaften, 1938. 36 pp.

This pamphlet is a reprint of an article published in the Sitzungsberichte der Preussischen Akademie der Wissenschaften, Physikalish-mathematische Klasse, 1938. The author applies the Euler-Knopp method of summability to Dirichlet series, to factorial series and to Newton's series, obtaining results which show that this summability method is very useful in such cases and that it is ordinarily more powerful than the methods of summation of Cesàro and of Riesz.

The ordinary Dirichlet series $\sum a_n/(n+1)^s$ is first investigated. The author shows that if this series is E_k-summable for $s=s_0$, then it is E_k-summable for every s for which $R(s)>R(s_0)$, and he gives a formula for the generalized sum there. Use is made, in the proof, of the fundamental Silverman-Toeplitz conditions for summability. A formula is derived for the abscissa of E_k-summability in terms of the E_k-transform of the series $\sum a_n$. Corresponding results are obtained for absolute E_k-summability.

Similarly, it is shown that if the factorial series $a_0/s+\sum n!a_n/s(s$

$+1)(s+2)\cdots(s+n)$ is E_k-summable for $s=s_0$, then it is E_k-summable for every s for which $R(s)>R(s_0)$, and a formula is given for the sum. Also, a formula is derived for the abscissa of E_k-summability. Extensions are made to absolute E_k-summability. Similar results are obtained for the Newton series $a_0+\sum(-1)^n a_n(s-1)(s-2)\cdots(s-n)/n!$.

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