Einführung in die Zahlentheorie von Arnold Scholz, überarbeitet
und herausgegeben von Dr. B. Schoeneberg. Third ed. Sammlung
Göschen No. 1131. Walter de Gruyter and Co. , Berlin 1961.
Price DM. 3. 60.

An introduction to Number Theory that in its four chapters covers
roughly the same ground as Dirichlet-Dedekind's classic in its first
four chapters. Taking into account the smallness of the volume
(126 pages, 4 x 6 in^2) it contains a considerable amount of information,
of course at the price of a terse style, carefully avoiding repetition.
It will be appreciated by intelligent students and by every instructor
planning a course on these lines.

Contents: I. Divisibility, including arithmetical functions.
II. Congruences, Residue Classes, including primitive roots, power
residues, representation by sums of squares: Lagrange's theorem
for four squares and the classical condition for two squares, proved
by means of a strikingly simple theorem of Thue, which is based on
the pigeon hole principle. III. Quadratic residues, with two proofs
of the reciprocity law and a few remarks on biquadratic residues.
IV. Quadratic forms, including finiteness of the class number proved
for definite and for indefinite forms, ending with a brief discussion
of Pell's equation.

H. Schwerdtfeger, McGill University

Mathematical Logic and the Foundations of Mathematics, by
G. T. Kneebone. Van Nostrand. 400 pages. 1963.

This book is subtitled "An Introductory Survey ", and it is exactly
that. It is introductory in that no previous knowledge is assumed, and
it is a survey in that its range is very wide and finer details are
omitted except for references. The author himself compares it with
Baedeker.

It succeeds admirably in its purpose. Something is said about
a remarkably large number of well selected topics; what is said is
well enough said and sufficiently detailed to awake interest, and excel-
lent references are provided for detailed study. It should be irresistibly
inviting to a student who works in the presence of a good library
(without this latter condition, however, other books would be preferable).
For those who appreciate such things, it may be added that it is written
in excellent English, rather than in the mathematically corrupted form