most general result known and to discuss all other results as special cases. This procedure is an ideal one for a survey of the present character. As a result the reader is able to get a clear picture of the whole subject and to see in proper perspective the interrelations of the various special parts. In view of the nature of the book the authors have not included proofs of all theorems. But enough of these have been given to give the reader a real understanding of the methods. The choice of what to include and what to omit is generally in excellent taste. The reviewer would prefer to have seen included more of the proofs of the results of N. I. Achyeser and M. Krein, for their treatise on the subject is written in Russian. There are very few misprints. Those discovered by the reviewer are of a trivial nature and can be corrected in an obvious way by the reader. The book is certainly a very valuable addition to mathematical literature. The American Mathematical Society is to be congratulated on this auspicious initiation of its series of surveys.

D. V. WIDDER

Introduction to mathematical logic. Part I. By Alonzo Church. (Annals of Mathematics Studies, no. 13.) Princeton University Press, 1944. 6+118 pp. $1.75.

This booklet contains the material of the first half of a graduate course given by the author at Princeton and is, in fact, the revision of a set of lecture notes of that course. It is hoped that Part II, covering the second half of the course, which exists now in rough draft in the form of lecture notes, will some day appear in print.

The title of the book is somewhat misleading. As the author says, this is a monograph rather than a text. Its aim is not to give a broad survey of recent developments in symbolic logic but to present formally and rigorously, and with all the latest improvements, the theory of one of the oldest branches of the subject, namely, the calculus of propositional functions. In this aim the author has succeeded admirably. The difficult points are emphasized instead of being avoided. The care and precision for which the author is noted are in evidence throughout. The end result is, for the qualified beginner, a compact presentation of an important theory which can serve also as a model of present-day standards of rigor. The book is of value to the specialist also in bringing together in one place and in one notation rigorous proofs of important basic theorems which are otherwise only to be found scattered throughout the literature.

There are four chapters, of which the first deals with the calculus