orthonormal sets for the case p=2. (It is rather surprising not to see Hilbert's name mentioned in this connection.) The last chapter is on several types of Stieltjes' integration.

Very few misprints or misstatements have come to the reviewer's attention. Especial mention should be made of the valuable and well chosen lists of references to the literature which conclude each chapter.

It seems to the reviewer that in scope and choice of subject matter this text is nicely calculated to suit the needs of introductory classes in real variable theory. On the basis of having used the text for such a class for one term, he would suggest only one respect in which it proved to be somewhat troublesome: namely, in the free use from the start of the logical symbols introduced in chap. I. It is suggested that students embarking on this subject have a good many new ideas, and an essentially novel ideal of precision, to struggle with, both of which are inherent in the subject itself. It seems open to question whether we really help them by replacing a possibly tedious, but clear, English sentence by such a formula as

$$m \neq p: \supset: \exists q \ni \cdot m + q = p \cdot V \cdot \exists n \ni \cdot m = p + n$$

for them to cope with in addition, almost at the outset of their voyage. JAMES A. CLARKSON

Topological methods in the theory of functions of a complex variable. By Marston Morse. (Annals of Mathematics Studies, no. 15.) Princeton University Press, 1947. 2+145 pp. \$2.50.

The theory of analytic functions is related to topology in two ways. On one hand it can serve as a powerful tool in the study of topological questions. On the other hand many of the basic theorems in the theory of functions are essentially topological in character and can be proved by such methods. It is the latter observation that forms the starting point for Morse's booklet. If the purely topological properties of analytic functions are to be isolated, it is natural to study the class of functions which, in the small, share the topological properties of analytic functions. One of the main problems will then be to find out to what extent this new class retains the topological properties in the large.

The author actually considers two classes of topologically defined functions, *interior transformations* and *pseudo-harmonic functions*. They arise, respectively, from analytic and harmonic functions by sense-preserving local homeomorphisms. Interior transformations

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