free from obvious misprints. It should prove valuable to all workers in the field.

A. Sharma, University of Alberta

A second course in complex analysis, by William A. Veech. W.A. Benjamin, Inc. 1967. ix + 246 pages. U.S. $8.75.

This is, as the title indicates, a text designed for students who have had at least a semester of elementary complex function theory; in addition, the author presupposes in the reader a fair knowledge of point set topology. The book begins with a treatment of the logarithmic function and analytic continuation is studied in some detail. Chapter two deals with geometric principles, including linear fractional transformations, Schwarz's Lemma and symmetry. Chapter three concerns conformal mapping, presenting among other things, the Riemann Mapping Theorem without using normal families and the theorem of Fejér on radial limits of analytic functions on the unit disc. In Chapter four a brief treatment of the modular function leads to the Lindelöf approach to the Picard Theorems; Koebe's Distortion Theorem and the existence of Bloch's constant also result. The last two chapters are largely independent of the foregoing ones, the one dealing with representation of entire functions as products and the final one with the Wiener-Ikehara proof of the Prime Number Theorem.

The emphasis during the first four chapters is topological, leaning heavily on the notions of covering map and covering space. As a result there is little hard-core analysis except in the last two chapters. The treatment is always thoughtful and thorough; occasionally one feels that there is too much painstaking detail. In general, however, this is the book's only limitation aside from the restricted choice of subject matter, which is, of course, unavoidable in a text of this nature.

W.J. Harvey, Columbia University

Theory of functions of a complex variable, Vol. III, by A.I. Markushevich. Translated from the Russian by R.A. Silverman. Prentice-Hall, London, 1967. xi + 360 pages. 5.4 s.

This is the final volume of a series of books by Professor Markushevich based on courses given at Moscow University. The first two volumes provide a careful grounding in the elementary theory of analytic and meromorphic functions in the plane; the present one extends into the orthodox advanced fields of complex analysis.

The approach is thorough and modern. The Riemann Mapping Theorem for plane domains is proved using Koebe's method. A study of prime ends introduces the section on boundary behavior of conformal mappings of Jordan domains, which leads into the theory of approximation by the methods of Runge and others. Elliptic functions are treated in some detail with both the Weierstrass and the Jacobi approach included. An abstract definition of Riemann surface is then given, and the concept of interior mapping is used to introduce the concrete Riemann surfaces of meromorphic functions from Stöilow's topological viewpoint. An examination of analytic continuation facilitates the construction of the Riemann surface of an algebraic function, done here in rare detail. Finally, the Schwartz reflection principle is used to construct the modular function, thus leading to the two Picard Theorems.

The style of writing is easy to read, and the printing and presentation of the

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