

which present the same material in a similar manner but do not include so many problems. This text should still be very useful for engineering and technical students. Its old-fashioned approach to differential equations, however, will find little favor with the present modern approach taken in more purely mathematical texts.

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**133[M].**—G. SANSONE & R. CONTI, *Non-linear Differential Equations*, The Macmillan Company, New York, 1965, xiii + 535 pp., 24 cm. Price \$15.00.

This is a superb book devoted to the classical and modern theory of linear and nonlinear ordinary differential equations. It covers existence and uniqueness theorems, stability theory, perturbation techniques, asymptotic behavior, periodic solutions, and Briot-Bouquet theory, with encyclopedic thoroughness and in careful detail. Perhaps most valuable is the way in which ideas and concepts are illustrated by means of specific examples. An almost complete set of references to important papers in the field is given.

Students in mathematics, engineering, and physics will find this book of great value, and it will be equally useful to research workers. The authors have written a beautiful and lucid exposition of this area of analysis which can be used as a basis for a variety of different courses. It is unreservedly recommended.

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**134[X].**—DIETER GAIER, *Konstruktive Methoden der konformen Abbildung*, Springer-Verlag, Berlin, 1964, xiii + 294 pp., 23 cm. Price DM 68.

This book is a very thorough survey of those aspects of the theory of conformal mapping which relate to the numerical computation of conformal maps. Theory (and occasionally proof) are followed in close order by numerical techniques and, whenever available, the results of numerical experiment. This book is an absolute "must" for every computer lab; but because of the wealth of material it contains, it will also be of considerable use to people whose interest is purely theoretical. There is a bibliography of 480 items.

The five chapters are entitled, respectively: The Conformal Mapping of Simply Connected Domains by means of Integral Equations with a Neumann Kernel; The Method of Theodoresen for the Conformal Mapping of  $|z| < 1$  on a Region; Approximation of Conformal Maps by means of Polynomials with Extremal Properties; Additional Methods for the Conformal Mapping of Simply Connected Regions; Conformal Mapping of Multiply Connected Regions on Canonical Regions.

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