Volume II covers topics in finite differences and approximate representation of functions, polynomial interpolation, numerical integration and differentiation, ordinary differential equations and partial differential equations. As in Vol. I the work is illustrated by well chosen examples. The methods presented are standard ones, but the author gives many hints and much practical advice on using the various numerical procedures. The weakest chapter in the book is one on partial differential equations. Only the heat equation and Laplace's equation are actually considered. Even here the author manages to say a lot in a very small space.

These volumes are part of the University Mathematical Text series. The price of each volume is quite modest. In fact, the two volumes can be obtained for considerably less than many single volume treatments of numerical analysis.

RICHARD C. ROBERTS

137[X, Z].—LADIS D. KOVACH, *Computer-Oriented Mathematics*, Holden-Day, Inc., San Francisco, Calif., 1964, vii + 98 pp., 23 cm. Price $3.95.

The purpose of this small volume is to acquaint the interested reader with the ideas behind some of the algorithms which are commonplace in computer programs. It is designed for use in lower-level college programming courses and for advanced high school students. The only concept from elementary calculus which appears is the derivative, and this occurs but once.

Topics included are: characteristics of computers, number bases, initial guesses, interpolation, approximation methods, iteration, relaxation, and Monte Carlo methods.

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138[X, Z].—WILLIAM PRAGER, *Introduction to Basic FORTRAN Programming and Numerical Methods*, Blaisdell Publishing Company, New York, 1965, ix + 203 pp., 28 cm. Price $6.00.

This book, written by one of the most distinguished applied mathematicians of the present time, admirably illustrates that trend in the writing of textbooks on numerical analysis (visible in a number of recent works) in which the author seeks to impart to the student practical experience in the use of a digital computer, to acquaint him with the theory of computation, and to do so within the framework of a balanced and integrated course of study.

With regard to the specific scope and intention of the book it would seem impossible to do better than quote from the publisher's advertisement.

"This text corresponds to a sophomore course, which the author has been teaching for several years. The timing of this course and the choice of its contents was motivated by the desire to introduce students in engineering and the sciences to automatic computation as early as is possible without inviting uncritical use of the new tool.

"An introductory chapter, in which the program for a simple computation (selected partial sums of a series) is presented first in English and then in FOR-