sequence. ..., c_{-2}, c_{-1}, c_o, c_1, c_2, ... (denoted c) and form the matrix $T_c = (a_{m,n})$, where $a_{m,n} = c_{m-n}$. If $a = (a_n)$ and $b = (b_n)$ are appropriately sized vectors, the problem considered here is to find the condition on c which ensures that the equation $T_c a = b$ can always be solved uniquely for a .

T. L. Pearson, Acadia University

Complex Variable Methods in Science and Technology, by John Cunningham. Van Nostrand Co. Ltd., London, Toronto, New York, Princeton, 1965. viii + 178 pages.

This book of 178 pages succeeds quite well in its main purpose "to provide students who are not primarily pure mathematicians with the basic tools of complex analysis for use in the theoretical study of physical problems" (author's preface). Another quotation "The author believes that the surest method of acquiring mathematical skills is to study examples and then try to apply the methods exemplified to fresh problems" is honestly fulfilled. The examples chosen are taken mostly from examination questions at five British (red-brick) universities. "Technology" in the title could be replaced by "Engineering" in the North-American context.

The listing of chapters shows that the author managed to compress the customary complex analysis material in small number of pages since the topics such as Real Variable Theory (chap. 1), Improper Integrals (chap. 6), Beta, Gamma and Delta Functions (chap. 8) and Differential Equations (chap. 9) are also included.

The text is well written; within the self-imposed limitations on rigor most statements are mathematically correct. Intuition and practical sureness are its dominant features. On this continent it can be used in most "applied mathematics" courses where in the hands of an experienced instructor the book can be useful, indeed.

V. Linis, University of Ottawa

A First Course in Partial Differential Equations, by H.F. Weinberger. Blaisdell Publishing Co., New York (Division of Ginn and Co.), 1965. ix + 446 pages.

One way of writing a text on partial differential equations is to assume a sound background in the standard topics of advanced calculus, Fourier series, Laplace transforms, and complex variables. Although the result may be elegant and compact, the student with minimal knowledge of these topics will find the going rather rough. An alternative approach, which is the one followed by the author, is to incorporate in a fairly substantial way this additional material. In the present book, for example, there are close to 100 pages on the standard theory of complex variables. The resulting substantial increase in size is, however, more than compensated by a careful self-contained treatment which makes the book admirably suited both for class use and for self-study.

The first three chapters establish the basic properties of second-order equations, including questions of uniqueness and continuity. The next group deals with the method of separation of variables ending with Sturm-Liouville theory and general Fourier expansions. After the sections on complex variables there are two chapters on Fourier and Laplace transforms (the latter including a detailed solution of a diffraction problem in the theory of sound). The final chapter on approximation techniques covers finite differences, successive approximations, and the Rayleigh-Ritz variational method. There are good sets of problems (with answers). To those acquainted with previous books by the same publishers, the pleasing format and high standards of production will come as no surprise.

H. Kaufman, McGill University

Contributions to Differential Equations, J.P. LaSalle and J.B. Diaz (managing editors), vol. I. Interscience Publishers, New York, 1963. v + 519 pages. $16.50.

This is a serial publication issued under the auspices of RIAS and the University of Maryland. It may be considered as a continuation of the five issues of the Annals of Mathematics Studies entitled Contributions to the Theory of Nonlinear Oscillations (which however dealt solely with ordinary equations). The intention of the editors is to avoid short notes in favour of extensive well-written papers containing full proofs. The present volume contains 25 papers authored by Lefschetz, Diaz and Payne, Horvath Douglis, Bramble and Payne, Letov, Cesari, Kalman, Ho and Narendra, Hale, Aziz and Diaz, Roxin and Spinadel, Driver, Billings, Yoshizawa, Olech, Harvey, Squire, Mlak, Seifert, and Harris.

H. Kaufman, McGill University

Kūshyār ign Labbān: Principles of Hindu Reckoning. A translation with introduction and notes by Martin Levey and Marvin Petruck. The University of Wisconsin Press: Madison and Milwaukee, 1965. xiii + 114 pages. $6.00.

Since our present knowledge of the development of mathematics among the Muslims is still rather incomplete, any publication of new source material will be welcome. Activity in this direction is increasing, and historians of mathematics of several countries have, in recent years, contributed to the research into Arabic mathematics. The present publication makes available, for the first time, the arithmetic of Kūshyār