in series. VII. Complex numbers. VIII. Functions of more than one variable. IX. Vector algebra. X. Applications of vector algebra to analytical geometry of straight lines and planes. XI. Vector functions. Differential geometry of curves. Line integrals. XII. Matrices, determinants and Linear dependence. XIII. Linear equations, Eigenvectors and Eigenvalues. XIV. Curvilinear coordinates and multiple integrals. XV. Vector analysis. XVI. Ordinary differential equations. The Laplace transform. XVII. Functions of a complex variable. XVIII. The Dirac δ-Function; Fourier series and integrals. XIX. Factorial, Legendre and Bessel functions. XX. Statistics and Probability.

R.K. Saxena, McGill University

Matrix Mechanics, by H.S. Green. (P. Noordhoff Ltd., Gronigan, 1965, The Netherlands). 118 pages. $5.50.

This is a refreshing little text which presents in a clear, compact form the basic ideas of quantum mechanics. It is quite novel in that it uses only the algebraic techniques of matrix mechanics. The text is supplemented by short exercises throughout and at the end of each chapter.

The book opens with a historical sketch followed by an introduction to the mathematics of Hilbert spaces. The postulates of quantum mechanics are introduced and applied to the harmonic oscillator. The eigenvalue problem is then discussed more generally and applied to several interesting examples, notably angular momentum and spin. The final chapter is a brief introduction to relativistic quantum mechanics.

D. Masson, University of Toronto

Thermal Stresses in a Composite Cylinder with an Arbitrary Temperature Distribution along its Length, by V.S. Nikishin. New York, Plenum Press Data Division, 1966. 119 pages. $22.50.

This book is a monograph, translated from the Russian by a Subsidiary of Consultants Bureau Enterprises Inc. of New York. It was originally published in 1964, as one of the Transactions (Trudy) of the Computing Center of the Academy of Sciences in Moscow.

The subject matter of the book is well stated in the title, but it should perhaps be added that a "composite" cylinder is one where the "core" is different from the "shell" (the author has particularly shells of various materials filled with concrete in mind). The mathematical formulation of the problem is based on linear elasticity theory and the usual law of thermal expansion. On this basis, the problem treated becomes one of solving a set of differential equations with appropriate boundary conditions. The method used is one of expansion in orthogonal functions; it is carried through to its numerical conclusion; the latter is