

articles so that users of the collected works would be certain of employing the precise references as in the originals.

Lee Lorch, University of Alberta

Introduction to elementary vector analysis, by J. C. Tallack. Cambridge University Press (The MacMillan Company of Canada Limited), 1966. i + 140 pages. \$3.00.

The title of the book under review is to be taken literally for the material covered is the following: vector addition and subtraction, multiplication by scalars, differentiation, integration and scalar multiplication (dot products). An anomaly is the absence of the cross product. Although the book is intended to be brief, there seems little justification for this omission.

The author in his preface states that his aim is "to provide an easy introduction" and that "although the material is of an elementary nature, it has been developed rigorously." His aim has nearly been fulfilled in that the treatment of vectors proceeds intuitively through a discussion of displacements and geometry; at times, however, the reading is made more difficult because the author has failed in his attempt to make the development rigorous. In particular, the derivative of a vector is defined without giving any consideration - much less a definition - of the notion of the limit of a vector function of a scalar. The integral of a vector function is defined as the anti-derivative; yet, the author moves ahead expecting the reader to swallow the line integral with absolutely no mathematical definition!

In the reviewer's opinion, the content is too bare for use in standard vector analysis courses offered in Canada and the United States, and the material is inappropriate for the new vector courses being developed for prospective secondary teachers.

S. Schuster, University of Minnesota

Iterative solution of elliptic systems and applications to the neutron diffusion equations of reactor physics, by Eugene L. Wachpress. Prentice-Hall Inc., Englewood Cliffs, N. J., 1966. xiv + 299 pages. \$12.95.

This book deals with many aspects of the theory and practice of the numerical solution of the elliptic equations of reactor physics. It is based upon the author's experience in the naval reactor programme while employed at the Knolls Atomic Power Laboratory, Schenectady, N. Y., and introduces a new non-linear iterative procedure based upon the periodic application of a variational acceleration technique. The earlier chapters of the book, dealing briefly with matrix analysis and the formulation of discrete boundary value problems, contain material which has been