

Book Reviews

The explanations are good, although the style is somewhat diffuse. There are useful diagrams in the text, but what has the severely linear diagram on the dust cover to do with quadratic programming?

S. VAJDA

Algèbre linéaire et Programmation linéaire.

J. ACHER.

Dunod, 1965. xiii + 272 pp. 36F.

This book on linear algebra deals with the topics usual in a first course on the subject, with numerous exercises and their solutions. Linear Programming is mentioned in the title and is treated as a useful application of very elementary algebra without a glance at its deeper mathematical interest. It is clearly geared to a thoroughly planned syllabus of a French course of advanced education.

The treatment is competent and in parts attractive, but I do not think that this book will penetrate the British market. It is mainly remarkable for the fact that it starts off with two appendices.

S. VAJDA

Linear Programming: An Introductory Analysis.

N. PAUL LOOMBA.

McGraw-Hill, 1964. xvi + 284 pp. 62s.

There are now so many books dealing with elementary linear programming that it is hard to justify yet another. This volume is justified in so far as there are potential readers with a rudimentary knowledge of algebra who require a sound appreciation of the mechanics of linear programming. To them this text can be confidently recommended, although further reading would be essential for a proper understanding of the different approaches to formulating a problem.

An integrated approach is adopted. This means solving the same problem successively by graphical methods, systematic trial and error, vector and simplex methods. Various steps in each solution are related to previous solutions. Every step is accompanied by a numerical example which is fully worked. Nothing is left to the imagination. It is hard to envisage a student who reads this carefully failing to understand it.

The transportation model, assignment model, degeneracy and duality are dealt with. Cycling is mentioned. A chapter on matrices and vectors is a good introduction, leading to inverting a matrix by utilizing its determinant and its adjoint matrix. Although the significance of shadow prices is explained the