

Book Selection

with its bias towards a problem-solving attitude and theoretical and applied economics with its general concern for theoretical niceties. I hope the book will reach a wide audience.

GORDON FISHER

Linear Programming.

MICHEL SIMMONNARD translated by WILLIAM S. JEWELL.

Prentice-Hall, New Jersey, 1966. xiii+430 pp. 72s.

In the preface to the original 1962 French edition, the author tries to explain the increasing interest in mathematical programming in terms of its use as a technique of management and the parallel development of computers. The book itself is designed to cover the mathematical and computational ground of the subject. The simplex technique and some of its variations—including revised form, dual simplex and product form of inverse—are explained. Integer programming methods, mainly those of Gomory, are fully described as are various special structure problems. Appendixes cover the mathematical topics of linear algebra, convex polyhedra and the theory of graphs. Within the special structure section we find methods for bounded variables, decomposition, transportation, graphs, maximal flow, constrained and capacitated problems.

The author describes his approach as being “primarily practical” and it is true that the book contains many numerical examples of the algorithms which are described. There are, however, no practical applications of an industrial or economic nature. Nevertheless, the exposition of the algorithms is very clear and should be easy to follow for most readers. There is one drawback in that the phrase “basic program” has been used by the author or translator for “basic feasible solution”.

The chapter which is probably the most useful is on “post-optimization and parametric programming”. This shows how modifications can be made to the requirement or cost and the coefficients. The inclusion of new variables and constraints is also described.

Because of the detail of both computational methods and theory the book is probably most suitable for mathematical students whilst forming an extremely valuable reference book to operative research workers. It would also seem useful as a textbook for an advanced course in this field.

K. B. HALEY

The Analysis of Variance.

A. HUITSON.

Charles Griffin, London, 1966. viii+83 pp. 18s.

This little book is Number Eighteen of Griffin’s Statistical Monographs and Courses. Dr. Huitson deals in turn with the analysis of a bewildering number of