Progress in Operations Research, Volume I, edited by Russell L. Ackoff. John Wiley and Sons, Inc., New York, 1961. 505 pages. $11.50.

The first in a series of review volumes sponsored by the Operations Research Society of America, this survey provides an excellent account of the present status of the major topics comprising this relatively new discipline. Eight areas are covered: Inventory Theory, Mathematical Programming, Dynamic Programming, Queuing Theory, Sequencing Theory, Replacement Theory, Simulation, and Military Gaming. Each chapter is accompanied by a comprehensive bibliography. This book is indispensable to anyone concerned with the technical aspects of Operations Research.

H. Kaufman, McGill University

Management Models and Industrial Applications of Linear Programming, by A. Charnes and W. W. Cooper. John Wiley and Sons, Inc., New York and London, 1961. 859 pages (2 volumes). $11.75.

From the authors' preface: "it [the book] is directed mainly to persons who are interested in managerial applications of linear programming; it is designed to serve as a textbook as well as a reference; the results incorporated herein are based on research which we conducted on a sustained basis, in the context of actual managerial problems, for nearly a decade."

The two volumes form a fairly comprehensive treatment of the subject. The utility of the book is enhanced by the inclusion of a considerable portion of the authors' own researches; for example, the stepping-stone method for transportation-type models, and non-linear power of adjacent-extreme-point methods. A major (deliberate) omission is the analysis of linear-programming problems involving chance constraints. All the required mathematical techniques are carefully developed and examples are worked out in considerable detail; however, no sets of problems are given. There is a bibliography of 557 items at the end of the second volume.

Hyman Kaufman, McGill University

Mathematical Programming, by S. Vajda. Addison-Wesley Publishing Co., Inc., Reading Mass., 1961. ix + 310 pages. $8.50.

This is an introductory text. Partial table of contents: algebra of linear inequalities, algebra of duality, graph and combinatorial theory, general algorithms, special algorithms (including the trans-