

- 21[W].—KENNETH J. ARROW, SAMUEL KARLIN & HERBERT SCARF, *Studies in the Mathematical Theory of Inventory and Production*, Stanford University Press, Stanford, California, 1958, x + 340 p., 25 cm. Price \$8.75.

This work is the initial volume in the Stanford Mathematical Studies in the Social Sciences. The reviewer joins the principal authors in recommending careful attention to the first two chapters: in Chapter I, Arrow presents a remarkably concise and enlightening discussion which, more constructively than anything else the reviewer has read, relates inventory theory to economics; in Chapter II, this useful survey is continued as the principal authors treat common features of many inventory models after placing them within a realistic framework for decision models. The Introduction ends with summaries of results of the remaining three parts: Optimal Policies in Deterministic Inventory Processes, Optimal Policies in Stochastic Inventory Processes, and Operating Characteristics of Inventory Policies. This book is judged to devote reasonable attention to computing problems both for calculation of solutions and for illumination. Reading of individual chapters has convinced the reviewer that the general promises on computing made by the authors on pages 16–19 were honestly kept. The frequent graphs and tables are uniformly helpful and pleasing. A bibliography of four pages covering mainly the years 1955–1957 is also included. It is to be hoped that subsequent volumes of this Stanford Series will push forward into the wide reaches of inventory problems including, for example, areas of demand prediction, measures of utility for satisfying differing demand patterns, and even seemingly prosaic questions such as how to maintain records of extensive inventory systems. In summary, this book is a substantial contribution to the mathematics of inventory and production problems. Since it provides a sound exposition over quite a broad range, it should serve as a valuable source for further research.

W. H. MARLOW

The George Washington University  
Washington, District of Columbia

- 22[W, Z].—DANIEL D. MCCrackEN, HAROLD WEISS, & TSAI-HWA LEE, *Programming Business Computers*, John Wiley & Sons, Inc., New York, 1959, xvii + 510 p., 24 cm. Price \$10.25.

Here is a well-written book about the elements of programming high-speed electronic computers. It is particularly written for those people who are interested in the programming of management data problems. The book touches upon down-to-earth details such as verifying the program accuracy, input and output programming, and rerun techniques. It discusses the advantages and disadvantages of machine-aided coding. In general, *Programming Business Computers* is a comprehensive survey of programming with special emphasis on business data processing.

ARTHUR SHAPIRO

Applied Mathematics Laboratory  
David Taylor Model Basin  
Washington, District of Columbia

- 23[X].—J. N. GOODIER & P. G. HODGE, JR., *Elasticity and Plasticity*, v. 1, Surveys in Applied Math. Series, John Wiley & Sons, Inc., New York, 1958, ix + 152 p., 23 cm. Price \$6.25.