One final comment relates to an aspect of the organization of the text. The author has tried to keep the first five chapters parallel to those in his earlier book, *Advanced real calculus* (Harper and Brothers, 1957), and there are numerous references to that volume in the present one. This reviewer found disquieting the necessity for frequent consultation of other works that will be needed by a student to fill the gaps in *Advanced complex calculus*.

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Individual choice behavior, a theoretical analysis. By R. Duncan Luce. New York, Wiley, 1959. 12+153 pp. $5.95.

This book belongs to that small but increasing set of teatises in which competent mathematicians apply their skill to problems in the behavioral sciences. Luce's basic concept is the probability that a subject chooses an alternative belonging to a specified subset of the set of alternatives presented. His primary interest is in the consequences of an axiom concerning these probabilities. Results are applied to psycho-physics, learning theory, and utility theory.

Excellent features of the book are the careful statement of assumptions, derivations, and results, the plentiful and good examples, the attention to interpretation, the candid accounts of the history and significance of problems, the mention of unsolved problems, and the attention to testing the theory. As an example of the last named, Luce is not satisfied to note that his utility model is capable of experimental verification "in principle." He points out that the indicated experimental study would be impractical and then derives a result that can be tested.

The book has significant implications for the mathematics curriculum. The reader is faced with only the most modest demands on his algebraic and computational skill. On the other hand, he is required to have considerable sophistication and appreciation of axiomatics and the ability to keep in mind various assumptions and their interrelations. Indeed the skills required are most similar to those that are developed in undergraduate courses in foundations of mathematics or in elementary courses of the so-called "modern" type. Classical analysis plays almost no role.

There are a few very minor blemishes to the generally excellent exposition. Quantification in the mathematical sections is rather clumsy. For example, Luce writes, in the statement of his major axioms and in many other places, the hypothesis "if $P(x, y) \neq 0, 1$, for all $x, y \in T$." This formulation is unfortunate on two counts: