

$I_n(x)$ ,  $K_n(x)$  for  $n=0$  (1) 20,  $x=0$  (.1) 20 or 25. The arrangement of the tables resembles that of volume 1. Welcome innovations are catch headings in large type showing the function tabulated ( $J$ ,  $Y$ ,  $I$ , or  $K$ ) on every page, the argument range on right-hand pages, and the range of orders on left-hand pages; and a tabular page index to the first four tables. The introductory material contains a preface, the tabular page index, description of the tables and an account of their preparation, instructions for interpolation, acknowledgments, a bibliography, a useful comparison between the notations used in the present volume and other notations of Bessel functions, and a 10 page list of definitions of and formulas relating to Bessel functions. The notations used in this book are the standard notations as in Watson's *Bessel functions*.

The arrangement, outward appearance, and printing of these tables is superb, and no higher compliment can be paid to the production than by saying that the late Dr. Comrie, had he lived to see these tables, would have been pleased.

The tables are a joint effort of several distinguished computers and mathematicians and it would seem invidious to single out any of them for praise; yet it is appropriate to express special thanks of the mathematical community to the chief editor of this volume, Professor Bickley, who in face of physical handicaps, and at a period of considerable distress, devoted much effort and loving care to this enterprise. The result is such as even he could wish.

A. ERDÉLYI

#### NEW JOURNAL

Journal of Rational Mechanics and Analysis. Volume 1. Bloomington, Indiana, The Graduate Institute for Applied Mathematics, Indiana University, 1952. 4+652 pp. \$18.00; \$6.00 to individuals engaged in research or teaching.

The aims of this journal are stated by its editors as follows. "The Journal of Rational Mechanics and Analysis nourishes mathematics with physical applications, aiming especially to close the rift between 'pure' and 'applied' mathematics and to foster the discipline of mechanics as a deductive, mathematical science in the classical tradition. Its scope comprises those parts of pure mathematics or other theoretical sciences which contribute to mechanics; among the included fields are all branches of analysis, differential geometry, analytical dynamics, elasticity, fluid dynamics, plasticity, thermodynamics, relativity, and statistical mechanics. Engineering applica-

tions, numerical work, perturbation procedures, etc., are acceptable only as incidental illustration in a paper devoted to sound mathematical theory. . . . A high expository level is desired, and papers written in an excessively condensed or crabbed style will not be printed." The expressed scope of the journal is thus far wider than its title seems to imply. On the other hand, in practice it is, at least so far, narrower than its editors claim. The twenty papers in this volume are about either physical problems or mathematical problems suggested by physical problems; but they differ markedly from the contents of most journals devoted to applied mathematics in that they contain precisely stated and serious mathematical theorems which are proved. The greater number deal in one way or another with problems in differential equations, whether or not disguised (as more than half are) as mechanics of continua. Analysis unmotivated by physical situations has not yet made its appearance in this volume.

The editors have insisted on a high stylistic and typographical level, in contrast to most present-day editors, who seem to feel that content (even if obscured by stylistic deficiencies) is more important than style. Doubtless this insistence on elegance and clarity has reduced the number of papers which could be published in this volume, but since mathematics is hardly dying of inanition at the present time (as witness the swollen girth of *Mathematical Reviews*), it is gratifying to see attention paid to form as well as to content.

It is hardly necessary to remark that this will be an essential journal for any mathematical library with any pretensions to completeness.

R. P. BOAS, JR.

#### BRIEF MENTION

*Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability, Held at the Statistical Laboratory, Department of Mathematics, University of California, July 31–August 12, 1950.* Ed. by J. Neyman. Berkeley and Los Angeles, University of California Press, 1951. 10+666 pp. \$11.00.

The Proceedings of the First Symposium were published in 1947 and reviewed in this Bulletin, vol. 56, p. 267. This volume contains 46 papers by 52 authors, representing 8 categories: mathematical statistics, probability, astronomy, biometry, econometrics, physics, traffic engineering, and wave analysis.