

have been preferable to take the continuous functions of compact support and the repeated integral, obtaining the equality of the two repeated integrals as an application of the Stone-Weierstrass theorem. The last chapter gives the L_1 and L_2 theories of the Fourier transform.

This book is very attractive: the treatment is leisurely and while it is consistently rigorous many of the harder theorems have their proofs supplemented by informal explanations and graphical illustrations; also a number of interesting applications are given. Each chapter has a large number of interesting exercises some of which extend the theory while others give relevant counter-examples. Although the reluctance of undergraduates to buy books is to be deplored it must be reckoned with. The low price of this book, its suitability for several courses and the high standard of its presentation combine to make it ideal as a course book. FRED A. ALEXANDER

MEADOWS, R. G. AND DELBOURGO, R., *Advanced Pure Mathematics* (Penguin, 1971), 128 pp., £2.

This is a school text for pupils who are revising for an Advanced level examination in a traditional syllabus of Pure Mathematics. Each chapter follows the same pattern: summary of theory and rules for carrying out routine processes with no proofs, worked examples, questions to be worked by the pupils, followed by outline solutions and answers. The questions are taken from recent (1966-1969) papers of various boards, many of them at the scholarship level.

There are some mathematical inaccuracies, for example:

page 47. If $\sum a_n$ converges, then $a_n \rightarrow 0$. (N.B. The converse is not necessarily true.)

page 85.

$$\frac{d}{dx} [f_1\{f_2(x)\}] = \frac{df_1}{df_2} \frac{df_2}{dx}.$$

The notations used and the syllabus covered are not in line with the work now done in the 6th grade for the Scottish Certificate of 6th Year Studies; but a harassed teacher of A-level pupils might find the book useful.

G. BONSALL

PURI, M. L. (Editor), *Non-Parametric Techniques in Statistical Inference* (Cambridge University Press, 1970), xiv + 623 pp., £10.20.

This volume contains the Proceedings of the First International Symposium on Non-Parametric Techniques in Statistical Inference, held at Indiana University in June 1969, and includes a cross-section of up-to-date work in this field from many of its leading practitioners. The thirty-five papers are divided into sections devoted to Testing and Estimation, Order Statistics and Allied Problems, General Theory, Ranking and Selection Procedures, Decision Theory and Empirical Bayes Procedures, and Teaching of Non-Parametric Statistics.

The level of presentation of the papers makes this very much a book for the specialist, and a solid mathematical background not only in general statistical theory but in non-parametric inference is assumed by most of the authors. The vast majority of the papers are concerned exclusively with theory, and the use of the word "Techniques" in the title is perhaps misleading: this is in no sense a textbook or a practical aid to those wishing to apply rank procedures, and the contents make few concessions to a readership unfamiliar with the immediate subjects at hand.

The papers in the category of Testing and Estimation comprise about half the book, and deal largely with asymptotic distribution theory in a wide variety of inferential contexts including stochastic processes, density functions and multivariate paired comparisons. The next two sections cover a number of developing branches of the subject, with the accent still very much on limit theorems; among the topics dealt with are sample quantile distributions, goodness-of-fit tests, studentised statistics and classification problems. The final paper is a brief plea (scarcely necessary for anyone with a sufficient interest in the subject to be reading the book) for an increased role for non-parametric methods in elementary statistics courses.

This volume undoubtedly represents a major concentration of modern non-parametric thinking between one pair of covers. While the average mathematical (or even statistical) reader may find little in it to spark his immediate interest, it is clear that those whose research areas involve any non-parametric theory would be extremely ill-advised not to have a copy at hand.

R. A. ELTON