vector spaces, extension of positive linear forms, locally convex topological vector spaces, separation of convex sets in a locally convex topological vector space, compact convex sets, the Krein-Milman theorem, seminorms and duality in topological vector spaces. In Chapter 4, the basic theory of normed linear spaces, Banach spaces, Hilbert spaces and linear mappings between such spaces is presented. In Chapter 5, the Baire Category theorem, uniform boundedness principle, open mapping and closed graph theorems are proved. Chapter 6 is entitled " Banach algebras ". It contains elementary spectral theory and Gelfand theory. Only the rational functional calculus is introduced in this chapter. In Chapter 7, the theory of C^*-algebras, up to and including the Gelfand-Naimark theorem, is presented. The final chapter contains a miscellany of applications of results in earlier chapters. There are sections on Wiener's theorem on reciprocals of non-vanishing absolutely convergent trigonometric series, the Stone-Čech compactification, the spectral theorem for a normal operator, spectral sets, irreducible representations, von Neumann algebras, group representations and the character group of a locally compact abelian group.

The prerequisites for reading the book are elementary abstract algebra, general topology, complex analysis and measure theory. Throughout the text there are numerous exercises, many of them very difficult, but which serve to indicate further developments of the theory. There is a section entitled " Hints, Notes and References ", a comprehensive bibliography and an index. To conclude, this book has been carefully and concisely written. It should prove invaluable to the research student in functional analysis.

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WEIR, A. J., *General Integration and Measure* (Cambridge University Press, 1974), xi+298 pp., £5·70.

This is a sequel to Dr Weir's undergraduate textbook on *Lebesgue Integration and Measure* (C.U.P., 1973) in which he provided a concrete approach to the Lebesgue integral in terms of step functions and then deduced the abstract concept of Lebesgue measure. This volume is considerably more abstract than the first, and is pitched at the level of an elementary graduate course. In Chapter 8 the Daniell integral is introduced and Stone's theorem is proved. Chapter 9 is devoted to the study of Lebesgue-Stieltjes integrals and measures. In Chapter 10 the complex case of the Riesz Representation theorem is proved. The extension of a measure defined on a ring of sets is studied in Chapter 11. In Chapter 12 the theory developed so far is compared with the classical approach in which a measure is defined, then the class of measurable functions is introduced and finally the idea of integration with respect to the measure is given. Chapter 13 is devoted to uniqueness and approximation theorems and Chapter 14 to product measures. In Chapter 15, Baire and Borel measures are studied. Chapter 16 is devoted to complex measures and in the final chapter the Radon-Nikodym theorem and its consequences are studied. There are numerous exercises throughout which serve to illustrate the theory and to indicate further developments of the subject. Fifty pages of the book are devoted to the solutions of these exercises. This book is clearly and carefully written. It should prove invaluable to a research student in functional analysis who wishes to become acquainted with the Daniell approach to integration and the important applications of the theory.

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