

elliptic integrals, theta functions, and elliptic functions are taken up in the next three chapters. The relations between the various functions are clearly given and transformations and degenerations are carefully listed.

The two last chapters depart from the treatment of special functions to more general considerations. Chapter VIII treats of integral transforms and their inverses. Included are concise accounts and tables of Fourier, Laplace, Hankel, Mellin, and Gauss transforms. All of these transform relations may be regarded as integral equations of the first kind, with essentially singular kernels and infinite domains of integration. Further analogous integral equations are given, among which are several with finite integration interval, for example, Hilbert's cotangent-kernel equation and Abel's integral equation. Chapter IX is a summary of, for the most part, conventional material on coordinate transformations. A novel feature here is the material on the system of many-dimensional polar coordinates.

Several appendices, one on linear second order differential equations, one on Fourier series, partial-fraction and product representations of some elementary functions, and one on certain summations, complete this comprehensive, scholarly, and useful compilation.

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Sequential analysis. By Abraham Wald. New York, Wiley, 1947. 12+212 pp. \$4.00.

This book could be reviewed from the point of view of the general mathematician, the probability theorist, the mathematical statistician, the theoretical statistician, or from the point of view of any of many kinds of users. We shall try to provide a somewhat composite view.

The central feature of this book is the sequential probability ratio test, abstractly a random walk between adsorbing barriers. We have only to think of a "particle" moving in "steps," the amount of each step being determined by chance in the same way, the stepping process ending whenever the particle, which started from the origin, passes certain "barriers" and leaves an assigned interval. Some 40 pages of the mathematical appendix is devoted to exact and approximate results for such walks. The theory of sequential analysis is growing, and more complex processes are entering; yet this simple random walk is still the core.

To read the body of the book, the reader needs, explicitly, a knowledge of calculus, and, implicitly, a feeling of comfort with sentences