$n = 2, 3$, and 4, and for selected fixed points z_j. Exact decimal values of these coefficients are then tabulated for $p = 0\ (0.1)\ 1$ and $q = 0\ (0.1)\ 1$, corresponding to $n = 2, 3$, and 4.

To expedite the estimate of the remainder term, the function $F(n, P) \equiv |[\Pi_j(P - j)]^3|/(3n)!$ is separately tabulated to two significant figures, for every n and P occurring in the main tables.

Use of these tables is illustrated by an application of three-point hyperosculatory interpolation coefficients to the subtabulation of the modified Hankel function of the first kind and of order one-third, using selected entries from tables [1] of this function for a complex argument.

A reference list of fifteen publications is included.

J. W. W.

1. THE COMPUTATION LABORATORY OF HARVARD UNIVERSITY, *Annals*, Vol. II: *Tables of the Modified Hankel Functions of Order One-Third and of their Derivatives*, Harvard University Press, Cambridge, 1945.

18[J, L, M].—HAROLD JEFFREYS, *Asymptotic Approximations*, Oxford University Press, 1962, 144 p., 22 cm. Price $4.80.

This book treats, in a concise manner, modern work on asymptotic approximations to functions defined either by a definite integral or by a differential equation. The theory is illustrated by means of Bessel functions, the confluent hypergeometric function, and Mathieu functions. A brief discussion of Airey's convergence factor is given, and the book closes with a chapter devoted to the difficult problem of three-dimensional waves. We feel sure that the book will prove useful to students of problems that are attracting considerable attention, but the brevity of the treatment does not make its reading easy. However, ample references are given and difficulties encountered may be overcome by turning, if necessary, to Erdélyi's book [1] and to Langer's papers. The printing is of the high quality we have come to expect from the Oxford University Press.

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1. A. ERDÉLYI, *Asymptotic Expansions*, Dover Publications, Inc., New York, 1956.

19[K].—ANNA GLINSKI & JOHN VAN DYKE, *Tables for Significance Tests in a 2 × 2 Contingency Table (A Recomputation of the Finney and Latscha Tables)*, Statistical Engineering Laboratory, National Bureau of Standards, Washington 25, D.C., September 1962, 5 + 86 p. Deposited in UMT File.

These manuscript tables cover the same range as the original table of Finney [1] together with the extension by Latscha [2], namely, $A = 3(1)20$, $B \leqq A$. The format of these earlier tables is retained, except that the "tail probabilities" now appear to four decimal places instead of three. The authors state that these more precise values were obtained from the Lieberman-Owen tables [3] of the hypergeometric distribution. Errors in the tables of Finney and Latscha as revealed by this recomputation have been reported earlier (*Math. Comp.*, v. 16, 1962, p. 261–262).

In their introductory text the authors also refer to manuscript tables of Bennett and Hsu [4], and state that the present tables form the basis for 3D tables appearing in Section 5, by Mary G. Natrella, of Ordnance Corps Pamphlet ORDP 20-114, entitled *Experimental Statistics.*

J. W. W.

1. D. J. Finney, "The Fisher-Yates test of significance in 2 x 2 contingency tables," *Biometrika*, v. 35, Parts 1 and 2, May 1948, p. 145–156.
2. R. Latscha, "Tests of significance in a 2 x 2 contingency table: extension of Finney's table," *Biometrika*, v. 40, Parts 1 and 2, June 1953, p. 74–86.
3. G. J. Lieberman & D. B. Owen, *Tables of the Hypergeometric Probability Distribution*, Technical Report No. 50, Applied Mathematics and Statistics Laboratories, Stanford University, April 1961.
4. B. M. Bennett & P. Hsu, *Significance Tests in a 2 x 2 Contingency Table: Extension of Finney-Latscha Tables*, Review 9, *Math. Comp.*, v. 15, 1961, p. 88–89. See also *ibid.*, v. 16, 1962, p. 503.

20[K].—Zakkula Govindarajulu, *First Two Moments of the Reciprocal of a Positive Hypergeometric Variable*, Report No. 1061, Case Institute of Technology, Cleveland, Ohio, 1962, 16 + 28 p., 28 cm.

Starting from the definitions, the first two inverse moments of a positive hypergeometric variable have been computed accurate to five decimal places for: $N = 1(1)20$, $M = 1(1)N$, $n = 1(1)M$; $N = 25(5)50$, $M/N = 5\%\ (5\%)\ 100\%$, $n = 1(1)M$; $N = 55(5)100(10)140$, $M/N = 5\%\ (5\%)\ 100\%$, $n/N(\leqq M/N) = 5\%\ (5\%)\ 100\%$. Many theoretical results of interest, recurrence formulae among the inverse moments, and various approximations for the first two inverse moments have been obtained. The rounding error involved in using the formulae recurrently, in order to compute the moments, is at most 1 to 2 units in the last decimal place. The approximate values have been compared with the true values for some sets of values of N, M, and n. For large values of N and n, the Beta approximations are accurate up to 2 or 3 decimal places, provided they exist.

Author's Summary

21[K].—Frank L. Wolf, *Elements of Probability and Statistics*, McGraw-Hill Book Co., Inc., New York, 1962, xv + 322 p., 23.5 cm. Price $7.50.

Since the appearance of the "grey book" prepared by the Commission of Mathematics in 1957, at least a dozen or so textbooks have been published on probability and statistics at the elementary level, that is, requiring only "high school algebra". A number of these books are excellent. Nonetheless, the *Elements of Probability and Statistics* by Frank L. Wolf should prove to be a valuable addition to this collection.

This book is written in a style that is highly readable. The concepts are introduced one by one in a logical sequence and as a connected whole. The notations used are in accordance with the modern practice and would prepare the students for more advanced undertakings. In looking over the book, one is continually surprised and delighted with unexpected findings, such as the following, which are quoted.

"We say that we have a function defined on a set A if there is one and only one object paired with each element of A. The set on which a function is defined is said to be the domain of the function. The objects which are paired with elements of A are called values of the function, and the collection of all of them is called the range of the function." (Page 24.)