This manuscript table gives the probability that four jointly normally distributed random variables will be simultaneously positive (orthant probability) when the distribution has a mean of zero and a correlation matrix of the form

$$\begin{bmatrix} 1 & A & 0 & 0 \\ A & 1 & B & 0 \\ 0 & B & 1 & C \\ 0 & 0 & C & 1 \end{bmatrix}$$

where A, B, and C are non-negative.

The values of this probability are tabulated to 6D for $A = 0(0.05)0.95$, $B = 0(0.05)0.95$, and $C = 0(0.01)0.99$, consistent with the correlation matrix being positive definite. The author claims accuracy of the tabular values to at least 5D, on the basis of a number of checks. She briefly discusses the question of interpolation, and presents a method for using this table to calculate the orthant probability in the general case.

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8[K].—NORMAN T. J. BAILEY, *The Elements of Stochastic Processes with Applications to the Natural Sciences*, John Wiley & Sons, Inc., New York, 1964, xi + 249 p., 23 cm. Price $7.95.

This book is highly recommended reading, and is a good introductory text in applied stochastic processes for three reasons:

(1) It is clearly written, proceeding by examples; it is very readable and contains a number of exercises.

(2) It attempts to be broad, covering a number of areas, and has chapters on recurrent events, random walks, Markov chains and processes, birth-death processes, queues, epidemics, diffusion, and some non-Markovian processes.

(3) It does not belabor any one topic; it is, therefore, not too voluminous, and hence is challenging to the interested reader.

The author's experience in the field has produced a very fine contribution.

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9[K].—Statistical Engineering Laboratory, National Bureau of Standards, *Table of Percentage Points of the χ^2-Distribution*, Washington, D. C., August 1950, 1 + 7 p. Deposited in UMT File.

This is a composite table made up from three previously published tables and by transformation or by interpolation in them.

The table uses the format of Thompson [2] and gives the percentage points of χ^2 for the following values of ν and P:

ν	P and $1 - P$
1(1)30	.005, .01, .02, .025, .05, .10, .20, .25, .30, .50
31(1)100	.005, .01, .025, .05, .10, .25, .50
102(2)200	.01, .10, .25, .50
2(2)200	.000001, .0001

All entries are given to three decimal places except 2(2)200, .000001 and .999999 which are to two.

Special features of the present table are coverage of even values of ν from 102 to 200 as well as values of P and $1 - P$ equal to .0001 and .000001.

It is noted that the Greenwood and Hartley *Guide to Tables in Mathematical Statistics* in its list of tables of percentage points of χ^2, p. 140–143, makes no mention of the fact that Campbell's Table II may be used to obtain percentage points of the χ^2, taking $2c$ in Campbell as ν and $2a$ in Campbell as χ^2. This was done in obtaining certain entries of the present table. The Greenwood and Hartley *Guide* does, however, list Campbell on p. 151 under "Percentage points of the Poisson distribution; confidence intervals for m."

Many entries in the present table were obtained by interpolation in Thompson's Table, using the four-point Lagrangian formula, Eq. (7) in [2].

In the middle of the distribution the interpolates agree through the third decimal with Campbell's values. In the tails of the distribution agreement is somewhat poorer, a difference of 1 or 2 units in the third decimal being usual.

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1. R. A. FISHER, *Statistical Methods for Research Workers*, 11th Ed., Table III, Oliver and Boyd, Edinburgh, 1950.
2. CATHERINE M. THOMPSON, "Table of the percentage points of the χ^2-distribution," *Biometrika*, v. 32, Part II, October, 1941.
3. GEORGE A. CAMPBELL, "Probability curves showing Poisson's exponential summation," *Bell System Tech. J.*, January, 1923.
4. J. ARTHUR GREENWOOD & H. O. HARTLEY, *Guide to Tables in Mathematical Statistics*, Princeton Univ., 1962.

10[L].—A. R. CURTIS, *Tables of Jacobian Elliptic Functions whose Arguments are Rational Fractions of the Quarter Period*, National Physical Laboratory, *Mathematical Tables*, Vol. 7, Her Majesty's Stationery Office, London, 1964, iii + 81 p., 28 cm. Paperback. Price 15 shillings ($3.00).

Table 1 (p. 8–78) has one page for each of the 71 arguments $q = 0(0.005)0.35$, where $q = \exp(-\pi K'/K)$ is Jacobi's nome, and K, K' are the usual quarter periods. Each page gives, entirely to 20 D, values of k, K, sn (mK/n), cn (mK/n), dn (mK/n), where k is the modulus and the values of m/n form the Farey series $\mathfrak{F}_{15}$, i.e., m and n take all positive integral values for which $m < n \leqq 15$ and m/n is in its lowest terms, while the various m/n are arranged in ascending order of magnitude. This Farey series of arguments also, as it happens, has 71 members.

Table 2 (p. 80–81) gives, again for $q = 0(0.005)0.35$ and entirely to 20 D, the values of k, k', the modular angle $\theta = \sin^{-1}k$ in radians, K, K' and the period-ratio K'/K.

The tables were prepared to facilitate filter design computations, as well-known tables by the Spenceleys, which proceed by ninetieths of K, did not contain all the desired m/n arguments nor always give the desired number of decimal places. The argument q was used in order that the distribution of k-values should be dense