

92[K].—B. M. BENNETT & C. HORST, *Supplement to Tables for Testing Significance in a 2×2 Contingency Table (Five and One Percent Significance Points for $41 \leq A \leq 50, B \leq A$)*, Cambridge University Press, New York, 1966, 28 pp., 26 cm. Price \$1.00 (paperbound).

These tables are an extension of Table 2 in D. J. Finney, R. Latscha, B. M. Bennett & P. Hsu, *Tables for Testing Significance in a 2×2 Contingency Table*, Cambridge University Press, 1963, previously reviewed here (*Math. Comp.*, v. 18, 1964, pp. 514–515). The notation is that of the earlier publication. The present table gives the 5% and 1% one-tail significant values, $b_{.05}$ and $b_{.01}$, for $41 \leq A \leq 50, B \leq A$; the exact probabilities are not given.

MARY G. NATRELLA

National Bureau of Standards
Washington, D. C.

93[K].—F. ZABRANSKY, MASAOKI SIBUYA & A. K. MD. EHSANES SALEH, *Tables for Estimation of the Exponential Distribution by the Linear Combinations of the Optimal Subset of Order Statistics*, The University of Western Ontario, London, Canada, undated. 184 computer sheets. Copy deposited in UMT file.

If $Y(1) > \dots > Y(N)$ is a decreasingly ordered sample from the exponential distribution

$$f(x; \sigma) = \sigma^{-1} \exp(-x/\sigma), \quad x \geq 0, \quad \sigma \geq 0,$$

then σ can be estimated by linear forms

$$\sigma = B(1)Y(n_1) + \dots + B(k)Y(n_k),$$

where

$$1 \leq \nu + 1 \leq n_1 < \dots < n_k \leq N,$$

which implies that ν upper observations are censored.

The first three tables give the ranks n_i , the coefficients $B(i)$, and the inverse of the minimized variance K^* of the minimum-variance unbiased estimator. These tables can be used also for lower and doubly censored samples and for the estimation of both σ and θ for the distribution $f(x - \theta; \sigma)$.

Table 1 (35 pp.) gives K^* and $B(i)$, each to 5D, for $N = 1(1)15, k = 1(1)10, N - \nu = k(1)N$.

Table 2 (90 pp.) gives 5D values of K^* and $B(i)$ for $N = 16(1)45, k = 1(1)10, (N - \nu)/N = 0.5(0.1)1.0$.

Table 3 (40 pp.) gives 4D values of K^* and $B(i)$ for $\nu = 0(1)9, k = 1(1)8, N = (k + \nu)(1)(k + \nu + 23)$.

Table 4 and 5 relate to the asymptotic case ($N \rightarrow \infty$). For given k and $p = \nu/N$, they give $p_i = n_i/N, B(i)$, and $V(p, k)$, which is determined by the relation: the minimum variance = $N^{-1}V(p, k) + O(N^{-2})$.

Specifically, Table 4 (16 pp.) gives p_i to 4D, $B(i)$ to 4D and $V(p, k)$ to 5D for $k = 1(1)8, p = 0.02(0.02)0.98$; while Table 5 (3 pp.) gives 8D values of $p_i, B(i)$, and $V(p, k)$ for $p = 0$ (uncensored) and $k = 1(1)15$.