45[K].—I. D. J. Bross & E. L. Kasten, "Rapid analysis of 2 x 2 tables", Amer. Stat. Assn., *Jn.*, v. 52, 1957, p. 18–28.

Conventional statistical analysis of 2 x 2 tables such as

Sample	A	$\bar{A}$	
1	a	b	$N_1 = NP$
2	c	d	$N_2 = NQ$
	T		N

involves use of triple-entry tables for critical values of a. These tables are entered with N, N_1, and T, or some equivalent combination of three numbers. The body of the table then usually gives critical values for the observation a. The authors remark that the statistical test is relatively insensitive to variation in N and propose to reduce the complexity of the tabular entry to double entry by ignoring N and using only the parameters T and P. Charts I to IV inclusive present lower tail critical values for a at 5%, 2.5%, 1% and .5% levels of probability for $.1 < P < .9$ and $5 \leqq T \leqq 49$. Interchange of P and Q produces lower tail critical values for c (and by subtraction) upper tail critical values for a.

The authors claim that the approximation is good, provided P and Q are both at least .1 and T is not larger than $.2N$.

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46[K].—F. E. Clark, "Truncation to meet requirements on means," Amer. Stat. Assn., *Jn.*, v. 52, 1957, p. 527–536.

The problem under consideration is that of truncating a given distribution so that the resulting population will meet specified sampling requirements. This problem arises when one wishes to screen the output of some production process in order to reduce the risk (probability) of having lots rejected on the basis of a requirement that only those lots will be accepted for which the mean $\bar{X}$ of a random sample of n items shall, for example, exceed or be less than some value, say UAL (upper average level) or LAL (lower average level).

Methods are given for determining a single point of truncation A such that the mean $\bar{X}_A$ of a random sample from a normal population (μ, σ) screened or truncated at A will meet a specification requirement $\bar{X}_A \geqq$ LAL or $\bar{X}_A \leqq$ UAL with risk of rejection r.

Methods are also given for determining double points of truncation A and B such that a normal population (μ, σ) truncated at $X = A$ and at $X = B$ will meet the requirement LAL $\leqq \bar{X}_{AB} \leqq$ UAL with risk r.

As aids in carrying out the computations involved in the above methods, a table is included which lists values of the mean μ_{ab} and the standard deviation σ_{ab} of the standard normal population (0, 1) truncated at a and at b $(a \leqq b)$. Entries are given to $4D$ for $a = -3.00(.25).50$ and for $b = 3.00(-.25)0$. A chart is included which contains curves of constant μ_{ab} and σ_{ab} for fixed degrees of truncation p,