the compression condition as:

(density behind shock)/(density before shock) > 1 rather than $\geqslant 1$.

The worst physical error would seem to be that of publishing the discussion accompanying the tables without first looking at some of the experiments to which presumably they are meant to be applied.

If one ignores the discussion of §3 of the paper, and substitutes for it the caution that for a given semivertex-angle one should choose the smaller of the two shock-angles, the tables and graphs of the paper should be useful for obtaining the initial curvature of the shock in the case of a curved, pointed, two-dimensional object such as an air-foil. The tabulation is in the form of 13 tables, each for a single Mach number ($M = 1.05$, 1.08, 1.12, 1.18, 1.25, 1.35, 1.47, 1.63, 1.83, 2.12, 2.56, 3.24, 4.45) with argument within the table being the shock-angle. There is included the additional useful table giving the relation between vertex-angle, shock-angle, and Mach number for the greatest vertex-angle with attached shock at given Mach number. The accompanying graphs exhibit curvature ratio and vertex-angle as functions of shock-angle.

RICHARD N. THOMAS

University of Utah
Salt Lake City, Utah

[1] T. Y. THOMAS, "On curved shock waves," *Jn. Math. Phys.*, v. 26, 1947, p. 62–68.

MATHEMATICAL TABLES—ERRATA

In this issue references have been made to Errata in RMT **729** (Chowla & Todd), **733** (Tietze), **734** (Todd), **741** (Johnson); UMT **93** (Fukamiya).

168.—F. S. CAREY, "Notes on the division of the circle," *Quart. Jn. Math.*, v. 26, 1893, p. 332–371.

Table IV, giving the coefficient of the 6-nomial sextic, has the following errata. This list is the result of a recalculation of the table.

p	*Coefficient of*	*For*	*Read*
61	x^0	−27	27
109	x^2	39	135
181	x^0	13565	1685
193	x^0	−5182	−5184
	x	1936	1744
229	x^0	−2103	187
241	x	594	580
373	x^3	381	380
397	x	4960	−5040
433	x^0	−130032	−1728
457	x	3561	3461
103	x^0	1773	1373
127	x	−977	−972
151	x^0	6547	6543
163	x^0	21323	5023
223	x	−3276	5644
	x^0	−71228	4592
331	x^0	84429	84427

EMMA LEHMER

942 Hilldale Ave.
Berkeley 8, Calif.

169.—NBSMTP, *Tables of Spherical Bessel Functions*, v. 1, New York, Columbia University Press, 1947 [*MTAC*, v. 2, p. 308–309].

In the table of $(\pi/2x)^{\frac{1}{2}}J_{\frac{1}{2}}(x)$ at $x = 7.45$

for .12340 32451 *read* .12342 32451.

GERTRUDE BLANCH

NBS Institute for Numerical Analysis
Univ. of California, Los Angeles

170.—NBSMTP, *Tables of the Exponential Function* e^x, New York, 1st ed. 1939, 2nd ed. 1947 [*MTAC*, v. 1, p. 438, v. 2, p. 314, v. 3, p. 173].

P. 188, at $x = 1.8784$, *for* $x = 1.9884$ *read* $x = 1.8784$; and *for* $e^x = 6.54302\ 76384\ 25706$ *read* $6.54302\ 76384\ 25796$; *for* $x = 1.9885, 1.9886$ *read* $x = 1.8785, 1.8786$.

PAUL ARMER

Rand Corporation
Santa Monica, Calif.

171.—L. SCHWARZ, "Untersuchung einiger mit den Zylinderfunktionen nullter Ordnung verwandter Functionen", *Luftfahrtforschung*, v. 20, 1943, p. 341–372. [Translated by J. LOTSOF, Cornell Aeronautical Laboratory, 1946.]

The following errors were found by differencing the tables and consequently the corrected values can be in error by at most two units in the last decimal place.

Function	λ	x	*for*	*read*
$J_c(\lambda,x)$	0.2	1.58	0.9_5297	0.995297
$J_c(\lambda,x)$	1.0	1.74	0.884505	0.884547
$N_c(\lambda,x)$	0.1	0.88	1.784990	1.784986
$N_c(\lambda,x)$	0.1	0.96	1.861997	1.861965
$N_s(\lambda,x)$	0.1	1.38	1.357677	1.357670
$N_c(\lambda,x)$	0.2	0.44	0.967949	0.966929
$N_c(\lambda,x)$	0.2	0.46	0.995782	0.995784
$N_c(\lambda,x)$	0.2	0.58	1.155928	1.153056
$N_s(\lambda,x)$	0.2	0.30	0.097532	0.097509
$N_s(\lambda,x)$	0.2	0.44	0.184975	0.184746
$N_s(\lambda,x)$	0.2	0.58	0.289383	0.288526
$N_s(\lambda,x)$	0.2	0.60	0.304306	0.304406
$N_c(\lambda,x)$	0.7	1.48	0.831510	0.831310
$N_s(\lambda,x)$	0.7	0.06	0.003768	0.004336
$N_s(\lambda,x)$	1.0	1.54	0.005461	0.005036
$C_c(\lambda,x)$	0.0	0.10	0.069995	0.070995
$C_s(\lambda,x)$	0.0	0.58	0.064846	0.064865
$J_s(\lambda,x)$	0.2	4.1	1.27530258	1.57530258
$N_c(\lambda,x)$	0.9	4.9	1.388321	1.388821

A. H. ROSENTHAL

NBS Institute for Numerical Analysis
Univ. of California, Los Angeles

172.—G. N. WATSON, "A Table of Ramanujan's function $\tau(n)$," London Math. Soc., *Proc.*, s. 2, v. 51, 1949, p. 1–13 [*MTAC*, v. 3, p. 468].

P.12, $n = 847$ *for* 38152 *read* 58152.

This typographical error was noted when Watson's table was put on punch cards and submitted to a series of checks. These cards are available in the UMT FILE.

D. H. L.

UNPUBLISHED MATHEMATICAL TABLES

EDITORIAL NOTE: Beginning with this volume we are starting a collection of unpublished mathematical tables to be known as the UMT FILE. Authors of tables which have no immediate prospect of publication are invited to submit copies for deposit in UMT FILE. Description of such tables will appear in UMT and photostat or microfilm copies will be supplied at cost to any reader of *MTAC*. Address tables or correspondence to D. H. LEHMER, 942 HILLDALE AVE., BERKELEY 8, CALIFORNIA.

90[F].—R. A. LIENARD, *List of primes of the form* $k \cdot 10^6 + 1$ *and* $k \cdot 10^7 + 1$ *for* $k < 1000$. Manuscript in the possession of the author and deposited in UMT FILE.

There are listed 117 primes of the form $k \cdot 10^6 + 1$ and 109 primes of the form $k \cdot 10^7 + 1$.

R. A. LIENARD

95 Rue Béchevelin
Lyon, France

91[K].—BALLISTIC RESEARCH LABORATORIES. Aberdeen Proving Ground, Md., *Probability Integral of Extreme Deviation From Sample Mean.*

$$H_n(x) = (n/2\pi(n-1))^{\frac{1}{2}} \int_0^x \exp\left(-t^2/2n(n-1)\right) H_{n-1}(t)dt, \quad (H_1(x) = 1.)$$

For normally distributed and ranked variables $u_1 \leqslant u_2 \leqslant \cdots \leqslant u_n$, $H_n(nk)$ gives the probability that the extreme deviation from the sample mean, i.e., $u_n - \bar{u}$ or $\bar{u} - u_1$ will not exceed k times the population standard deviation for random samples of size n, for $n = 1(1)25$. Each function is tabulated until it becomes sensibly unity. The interval of tabulation for x is as follows:

.1 for $n = 2(1)7$, .4 for $n = 12, 13$,
.2 for $n = 8(1)11$, .8 for $n = 14(1)25$.

The accuracy is 7D.

The work was done on the ENIAC under the direction of J. V. HOLBERTON.

92[K].—BALLISTIC RESEARCH LABORATORIES, Aberdeen Proving Ground, Md., *Binomial Probabilities.*

$$I_p(c, n-c+1) = \frac{1}{B(c, n-c+1)} \int_0^p x^{c-1}(1-x)^{n-c}dx.$$