TABLE ERRATA

407.—MILTON ABRAMOWITZ & IRENE A. STEGUN, Editors, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards, Applied Mathematics Series, No. 55, U. S. Government Printing Office, Washington, D. C., 1964, and all known reprints.

In Table 2.5, on p. 8, the factor for converting pounds force to newtons should be 4.44822 instead of 4.44823. This corresponds to the correction of the conversion factor from pounds (avdp.) to kilograms, namely 0.45359237 instead of 0.4535937, which was first made in the second printing.

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On p. 946, in formula 26.6.4, the factor $(1 - x^2)$ in the third term in the series should be replaced by $(1 - x)^2$.

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On p. 835, in Table 24.4, entitled Stirling Numbers of the Second Kind, the leading digit of the tabular entry corresponding to $m = 14$, $n = 22$ should be 3 instead of 6, so that the emended entry should read 329 51652 81331.

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EDITORIAL NOTE: Comparison of the entry in question with the corresponding entry in the manuscript table of Miksa (*MTAC*, v. 9, 1955, p. 198, RMT **85**) confirms this correction.

408.—I. S. GRADSHTEYN & I. M. RYZHIK, *Table of Integrals, Series, and Products*, Fourth Edition, Academic Press, New York, 1965.

On p. 458, the right side of formula 5 in section 3.836 is incorrect. The correct form has been given by Medhurst and Roberts [1], who point out a correction in the corresponding formula in [2]. The correct formula can also be obtained by differentiating both sides of formula 4 in the same section with respect to the parameter a.

It is interesting to note that this error can be traced to the collected works of Lobachevskiy [3], which is the source cited in this latest edition of Gradshteyn and Ryzhik. Lobachevskiy used the notation $r^{\sim n}$ (presumably original with him and now obsolete) for the factorial function $r(r - 1)(r - 2) \cdots (r - n + 1)$, which is equivalent to $\Gamma(r + 1)/\Gamma(r - n + 1)$. In Eq. 14 on p. 340 in v. V of this basic reference the term $(r - 2\lambda + rx)^{r-1}$ is erroneously printed as $(r - 2\lambda \pm rx)^{\sim r-1}$,

and this typographical error has been carried over in modern notation to the formula under discussion in Gradshteyn and Ryzhik.

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1. R. G. MEDHURST & J. H. ROBERTS, "Evaluation of the integral $I_n(b) = (2/\pi)\int_0^\infty ((\sin x)/x)^n \cos(bx)dx$," *Math. Comp.*, v. 19, 1965, pp. 113–117.
2. A. ERDÉLYI, W. MAGNUS, F. OBERHETTINGER & F. G. TRICOMI, *Tables of Integral Transforms*, Vol. I, McGraw-Hill, New York, 1954, p. 20, formula (11).
3. N. I. LOBACHEVSKIY, *Polnoye Sobraniye Sochineniy*, Gostekhizdat, Moscow and Leningrad, 1946–1951.

409.—WILLIAM H. BEYER, Editor, *Handbook of Tables for Probability and Statistics*, Chemical Rubber Company, Cleveland, Ohio, 1966.

The pagination used in citing the following errors is that of the "professional" (502-page) edition of this handbook; the same tables appear on other pages in the "student" (362–page) edition.

In Table II. 1 (Normal distribution), which occupies pp. 117–124, the tabular entries for $F(x)$ corresponding to $x = 0.87, 2.00, 2.92, 3.32$, and 3.89 should be decreased by a unit in the last decimal place, and the corresponding values of $1 - F(x)$ should accordingly be increased by a unit in the last place. The entries for $x = 2.00$ have been inadvertently printed twice, once at the bottom of p. 120 and again at the top of p. 121. The values of $f(x)$ for $x = 0.37$ and $x = 2.55$ should be decreased by a final unit.

In Table III. 3 (Individual terms, Poisson distribution), on p. 175, the entry for $m = 0.3$, $x = 4$ should read .0003 in place of .0002.

In Table III. 4 (Cumulative terms, Poisson distribution), on p. 182, in the first line of headings, read 4.0 in place of 5.0.

In Table IV. 1 (Percentage points, Student's t-distribution), on p. 226, the following four corrections are necessary: when $F = 0.90$, $n = 8$, for 2.397, read 1.397; when $F = 0.9995$, $n = 3, 5, 7$, for 12.941, 6.859, and 5.405, respectively, read 12.924, 6.869, and 5.408.

In Table V. 1 (Percentage points, chi-square distribution), on p. 234 corresponding to $F = 0.500$, $n = 15$, for .4.3 read 14.3.

In Table IX. 1 (Percentage points, distribution of the correlation coefficient when $\rho = 0$), on p. 299, the definition of the tabulated quantity should read $\Pr\{r \leqq \text{tabular value} \mid \rho = 0\} = 1 - \alpha$.

In connection with Table X.9 (Critical values of Spearman's rank correlation coefficient) on pp. 329–330, there is no explicit statement of the quantity tabulated. In fact, the table gives values of $r_s(\gamma)$, defined by $\Pr\{r_s \geqq r_s(\gamma)\} \leqq \gamma/2$, and is based on tables of E. G. Olds [1, 2], where it is stated that exact values were obtained for $n \leqq 7$, while a Pearson type II approximation was used for $n = 8, 9, 10$, and a normal approximation was used for $n \geqq 11$. These approximations account for the lack of monotonicity in the column headed $\gamma = .01$ on p. 330 of the *Handbook*. Beyer makes no statement concerning the fact that most of this table is based on such approximations. D. B. Owen [3] has now obtained the exact distribution of

r_s for $n \leqq 11$. Conversion of Owen's results to the critical values given by Beyer reveal five errors in the latter:

n	γ	*for*	*read*
9	.05	.683	.700
11	.10	.523	.536
11	.05	.623	.618
11	.02	.736	.709
11	.01	.818	.755

Also, at $n = 7, \gamma = .01$, the entry .929 should be inserted.

The approximations of Olds to the integers S, which are related to r_s by the equation $r_s = 1 - 6S/(n^3 - n)$ give one digit to the right of the decimal point. This digit was ignored in converting to the r_s values, with the result that some entries in Beyer are as much as 3 units larger in the last place than those obtained by using all of Olds' digits.

Since Table X.9 has been reproduced from the table on p. 412 of Volume I of *Statistics and Experimental Design in Engineering and the Physical Sciences*, by N. L. Johnson and F. C. Leone, the preceding remarks apply equally to that source.

In Table XIII.1 (Miscellaneous constants), on p. 389, the final decimal digits given for π and e should each be increased by a unit. The last six digits given for Euler's constant, γ, should read 286061 in place of 386061.

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1. E. G. OLDS, "Distributions of sums of squares of rank differences for small numbers of individuals," *Ann. Math. Statist.*, v. 9, 1938, pp. 133–148.
2. E. G. OLDS, "The 5% significance levels for sums of squares of rank differences and a correction," *ibid.*, v. 20, 1949, pp. 117–118.
3. D. B. OWEN, *Handbook of Statistical Tables*, Addison-Wesley, Reading, Mass., 1962.

410.—NBS APPLIED MATHEMATICS SERIES, No. 48, *Fractional Factorial Experiment Designs for Factors at Two Levels*, U. S. Government Printing Office, Washington, D. C., 1957; reprinted with corrections, 1962.

On p. 58, in the last line, *for* cdfgk *read* cdfgkl.

The following errors occur in the original printing, but they have been corrected in the 1962 reprint:

On p. 1, in the third line from the bottom, *for* 1/22, *read* 1/32.

In Plan 2.5.8, on p. 5, in the next to the last line, *for* bcd, *read* bcde.

In Plan 8.8.16, on p. 31, following "Block confounding," *for* EGH, *read* AC.

In Plan 8.9.32, on p. 33, following "Block confounding," *for* EGHJ, *read* FGJ. In the same plan, the fourth entry in the fifth column under "Blocks" should *read* abej *in place of* adej; and the last entry in the same column should *read* abf *in place of* abj.

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