## TABLE ERRATA

379.-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.
On p. 888, in Section 25.4 .33 change $x_{j}$ to $x_{i}$ in the formula for the weights $w_{i}$.
D. S.

On p. 1026, in Eq. 29.3.74, for $\sum_{n=0}^{\infty} u(t-n \pi) \sin t$, read $\sum_{n=0}^{\infty}(-1)^{n} u(t-n \pi)$ $\sin t$. The associated graph of $F(t)$ is correctly shown.

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380.-Richard Barakat, Agnes Houston, and Elgie Levin, "Power series expansions of Mathieu functions with tables of numerical results," J. Mathematical Phys., v. 42, 1963, pp. 200-247.
Dr. Gertrude Blanch has called attention to the fact, that the coefficient of $h^{8}$ in the expression for $D 0_{9}{ }^{1}$ in eq(2.18) is ten times too large. Consequently, we have rechecked our calculations, and thereby discovered the following corrections to be necessary:
p. 203, eq(2.18); the coefficient of $h^{8}$ in $D_{09}{ }^{1}$ should read $\frac{h^{8}}{188743680}$.
p. 208, eq(3.11); the term involving $h^{8}$ should read $\frac{91 h^{8}}{47185920}$.
p. 209, eq(3.22); the term involving $h^{8}$ should read $\frac{59 h^{8}}{47185920}$.
p. 212, eq(3.42a); the term involving $h^{8}$ should read $\frac{229 h^{8}}{11796480}$, and the term $h^{4} / 1536$ was inadvertently omitted from the series within the second set of parentheses.
p. 212, eq(3.42b); the term involving $h^{8}$ should also read $229 h^{8} / 11796480$.

In the table near the bottom of p. 206, the entries in the column headed $D 0_{9}{ }^{1}$ should be:

| NBS Tables | .$-(5) 16$ |
| :--- | ---: |
| power series | .$-(5) 14$ |
| difference | .$(5) 02$ |

The footnote to this table should be omitted.
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381.-M. Clark, Jr. \& K. F. Hansen, Numerical Methods of Reactor Analysis, Academic Press, New York, 1964.

On p. 62, in equation 2.3.23, the coefficient of

$$
\left(h \frac{d}{d x}\right)^{2 n+4}
$$

appearing in the third term of the right member should read $n(5 n-1) / 1440$ instead of $n / 360$.

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382.-G. N. Lance, Numerical Methods for High Speed Computers, Iliffe \& Sons, London, 1960.
On p. 150, in Table 6.7.2, the heading of the second column should read $1 / u_{i}{ }^{(n)}$ instead of $1 / p_{i}{ }^{(n)}$, and the imaginary part of ${A_{i}}^{(8)}$ for $i=7$ and 8 should read $\mp 13549.0$ instead of $\pm 13549.0$.

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383.-N. W. McLachlan, P. Humbert \& L. Poli, Supplement au Formulaire pour le Calcul Symbolique, Mémorial des Sciences Mathématiques, fasc. 113, 1950.

In addition to errata previously announced [1], the following corrections should be made:
p. 9, last formula; for $\psi^{(n)}(1+x)$, read $\psi^{(n)}(x)$.
p. 26, third formula from bottom; for $\zeta(2, \nu)$, read $\zeta(2, \nu+1)$.
p. 26, penultimate formula; the right side should read

$$
\begin{aligned}
& p^{-\nu} \Gamma(\nu+1)\left\{[\psi(\nu+1)-\log p]^{3}+3[\psi(\nu+1)-\right.\log p] \zeta(2, \nu+1) \\
&-2 \zeta(3, \nu+1)\}, R(\nu)>-1 . \\
& \text { Van E. Wood }
\end{aligned}
$$

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1. MTAC, v. 6, 1952, p. 101, MTE 206; v. 7, 1953, p. 105, MTE 222.
384.-Mary G. Natrella, Experimental Statistics, NBS Handbook 91, U. S. Government Printing Office, Washington, D. C., 1963.

Comparison of Table A-7 (Factors for One-Sided Tolerance Limits for Normal Distributions) with the more recent tables [1] of the writer has revealed a number of terminal-digit errors in that part of the Handbook. In some entries these errors vitiate the second decimal place. The largest observed error corresponds to $\gamma=0.99$, $P=0.999$, and $n=6$, where 9.540 should be replaced by 9.550 .

The following corrections should be made in Table A-35 (Critical Values of Smaller Rank Sum for the Wilcoxon-Mann-Whitney Test):

| $n_{1}$ | $n_{2}$ | $\alpha$ for one-sided test | for | read |
| ---: | ---: | :---: | ---: | ---: |
| 4 | 13 | .005 | 14 | 13 |
| 13 | 19 | .005 | 147 | 148 |
| 14 | 19 | .025 | 182 | 183 |
| 2 | 14 | .05 | 5 | 6 |
| 3 | 9 | .05 | 9 | 10 |
| 2 | 14 | .10 | 7 | 8 |

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1. D. B. Owen, Factors for One-Sided Tolerance Limits and for Variables Sampling Plans, Sandia Corporation Monograph SCR-607. (Reviewed in Math. Comp., v. 18, 1964, pp. 155-156, RMT 10.)
385.-R. H. Ritchie \& A. Y. Sakakura, "Asymptotic expansions of solutions of the heat conduction equation in internally bounded cylindrical geometry," J. Appl. Phys., v. 27, 1956, pp. 1453-1459.

A new calculation to 12D of the entries in Table II (Derivatives of the gamma function), appearing on p. 1458, has revealed the following errors in the terminal digits of eight entries in this 8D table.

| $n$ | $\nu$ | $f o r$ | read |
| ---: | ---: | ---: | ---: |
| 1 | 3 | 8 | 7 |
| 2 | 2 | 7 | 6 |
| 2 | 3 | 3002 | 2999 |
| 3 | 1 | 2 | 6 |
| 3 | 2 | 4 | 2 |
| 3 | 3 | 10 | 01 |
| 4 | 1 | 2 | 8 |
| 4 | 3 | 68 | 58 |

The accuracy of the corresponding entries in the table of Jeffery [1] was confirmed to at least 9S.

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1. H. M. Jeffery, "On the derivatives of the r-funtion," Quart J. Math., v. 6, 1864, pp. 82-108.
2. -HJ. Tallqvist, Tafeln der 24 ersten Kugelfunktionen $P_{n}(\cos \theta)$, Societas Scientiarum Fennica, Commentationes Physico-Mathematicae, VI, No. 3, 1932.

The tabular entries $P_{n}(\cos \theta)$ for $\theta=0^{\circ}\left(1^{\circ}\right) 90^{\circ}$ and $n=1(1) 24$ were checked. The following tabular entries should be changed as indicated.

| $\theta$ | $n$ | for | read |
| :---: | :---: | :---: | :---: |
| $15^{\circ}$ | 16 | -.39950 | -.35950 |
| $60^{\circ}$ | 23 | .00452 | .04524 |

The following tabular entries should be increased by 1 in the last (fifth) place:

| $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{\circ}$ | 22 | $17^{\circ}$ | 13 | $39^{\circ}$ | 22 | $67^{\circ}$ | 14 |
| $4^{\circ}$ | 9 | $20^{\circ}$ | 18 | $46^{\circ}$ | 19 | $67^{\circ}$ | 17 |
| $4^{\circ}$ | 16 | $25^{\circ}$ | 20 | $51^{\circ}$ | 10 | $69^{\circ}$ | 17 |
| $4^{\circ}$ | 19 | $26^{\circ}$ | 19 | $51^{\circ}$ | 13 | $79^{\circ}$ | 13 |
| $13^{\circ}$ | 10 | $35^{\circ}$ | 13 | $64^{\circ}$ | 15 | $85^{\circ}$ | 18 |
|  |  |  |  | $65^{\circ}$ | 20 | $85^{\circ}$ | 21 |

The following tabular entries should be decreased by 1 in the last (fifth) place:

| $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $6^{\circ}$ | 20 | $10^{\circ}$ | 18 | $34^{\circ}$ | 13 | $64^{\circ}$ | 17 |
| $7^{\circ}$ | 10 | $15^{\circ}$ | 18 | $41^{\circ}$ | 21 | $65^{\circ}$ | 11 |
| $7^{\circ}$ | 15 | $24^{\circ}$ | 19 | $41^{\circ}$ | 23 | $75^{\circ}$ | 24 |
| $8^{\circ}$ | 14 | $34^{\circ}$ | 11 | $57^{\circ}$ | 20 | $85^{\circ}$ | 10 |

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HJ. Tallqvist, Tafeln der Kugelfunktionen $P_{25}(\cos \theta)$ bis $P_{32}(\cos \theta)$, Societas Scientiarum Fennica, Commentationes Physico-Mathematicae, VI, No. 10, 1932.

The tabular entries $P_{n}(\cos \theta)$ for $\theta=0^{\circ}\left(1^{\circ}\right) 90^{\circ}$ and $n=25(1) 32$ were checked. The following tabular entries should be changed as indicated:

| $\theta$ | $n$ | for | read |
| :---: | :---: | ---: | :---: |
| $46^{\circ}$ | 30 | -.02304 | +.02304 |
| $61^{\circ}$ | 30 | .14898 | .14894 |
| $61^{\circ}$ | 31 | .03584 | .03581 |

The following tabular entries should be increased by 1 in the last (fifth) place:

| $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2^{\circ}$ | 30 | $16^{\circ}$ | 31 | $22^{\circ}$ | 30 | $26^{\circ}$ | 31 |
| $2^{\circ}$ | 31 | $18^{\circ}$ | 31 | $23^{\circ}$ | 26 | $27^{\circ}$ | 27 |
| $3^{\circ}$ | 27 | $19^{\circ}$ | 30 | $26^{\circ}$ | 28 | $34^{\circ}$ | 31 |
| $13^{\circ}$ | 31 | $19^{\circ}$ | 31 | $26^{\circ}$ | 29 | $38^{\circ}$ | 29 |
| $14^{\circ}$ | 31 | $20^{\circ}$ | 25 | $26^{\circ}$ | 30 | $72^{\circ}$ | 25 |

The following tabular entries should be decreased by 1 in the last (fifth) place:

| $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ | $\theta$ | $n$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2^{\circ}$ | 26 | $13^{\circ}$ | 26 | $38^{\circ}$ | 26 | $69^{\circ}$ | 29 |
| $2^{\circ}$ | 27 | $21^{\circ}$ | 31 | $39^{\circ}$ | 25 | $69^{\circ}$ | 31 |
| $5^{\circ}$ | 30 | $24^{\circ}$ | 31 | $39^{\circ}$ | 29 | $71^{\circ}$ | 27 |
| $5^{\circ}$ | 31 | $25^{\circ}$ | 30 | $41^{\circ}$ | 31 | $71^{\circ}$ | 30 |
| $7^{\circ}$ | 31 | $25^{\circ}$ | 31 | $58^{\circ}$ | 29 | $71^{\circ}$ | 32 |
| $8^{\circ}$ | 29 | $33^{\circ}$ | 32 | $59^{\circ}$ | 29 | $77^{\circ}$ | 28 |
| $11^{\circ}$ | 27 |  |  |  |  |  |  |

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HJ. Tallqvist, Sechsstellige Tafeln der 32 ersten Kugelfunktionen $P_{n}(\cos \theta)$, Acta Societatis Scientiarum Fennicae, Nova Series A, Tom. II, No. 11, 1938.
The tabular entries $P_{n}(\cos \theta)$ for $\theta=0^{\circ}\left(1^{\circ}\right) 90^{\circ}$ and $n=1(1) 32$ were checked. The following tabular entries should be changed as indicated.

| $\theta$ | $n$ | for | read |
| ---: | ---: | ---: | ---: |
| $8^{\circ}$ | 23 | -.340689 | -.340690 |
| $87^{\circ}$ | 9 | .123677 | .123676 |
| $90^{\circ}$ | 12 | .225486 | .225586 |

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387.-A. Walther, "Anschauliches zur Riemannschen Zetafunction," Acta Math., v. 48, 1926, pp. 393-400.
On p. 400, in the table of $\zeta^{\prime}(s) / \zeta(s)$, the following terminal-digit corrections should be made.

| $s$ | for | read |
| :---: | :---: | :---: |
| 1.7 | $\cdots 822$ | $\cdots 823$ |
| 4.1 | $\cdots 343$ | $\cdots 342$ |
| 6.3 | $\cdots 689$ | $\cdots 688$ |

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Editorial note: Similar corrections are required in H. B. Dwight, Mathematical Tables, first edition, McGraw-Hill, New York, 1941 (p. 227); second edition, Dover, New York, 1958 (p. 215), where this table has been reproduced.

