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## A Suggestion for the Improvement of Mathematical Tables.

By W. J. Macdonald, M.A.

If in Tables such as Chambers' the differences were given for a second instead of for a minute, they might be arranged (and used) as follows:

| $30^{\circ}$ | Lsin | Diff. |  |  |
| ---: | ---: | ---: | :---: | :---: |
| $0^{\prime}$ | 96989700 | $1^{\prime \prime}$ |  | 36 |
| $1^{\prime}$ | $9 \cdot 6991887$ | $2^{\prime \prime}$ |  |  |
| $2^{\prime}$ | $9 \cdot 6994073$ | $3^{\prime \prime} 108$ |  |  |
| $3^{\prime}$ | $9 \cdot 6996258$ | $4^{\prime \prime} 144$ |  |  |
| $4^{\prime}$ | $9 \cdot 6998441$ | $5^{\prime \prime} 180$ |  |  |
| $5^{\prime}$ | $9 \cdot 7000622$ | $6^{\prime \prime} 216$ |  |  |
| $6^{\prime}$ | $9 \cdot 7002802$ | $7^{\prime \prime} 252$ |  |  |
| $7^{\prime}$ | $9 \cdot 7004981$ | $8^{\prime \prime} 288$ |  |  |
| $8^{\prime}$ | $9 \cdot 7007158$ | $9^{\prime \prime} 324$ |  |  |
| $9^{\prime}$ | $9 \cdot 7009334$ |  |  |  |
| $10^{\prime}$ | $9 \cdot 7011508$ |  |  |  |

To find Lsin $30^{\circ} 4^{\prime} 29^{\prime \prime}$
$L \sin 30^{\circ} 4^{\prime}=9.6998441$
correction for $\mathbf{2 0}^{\prime \prime} \quad 720$
" " $9^{\prime \prime}$ 324

$$
L \sin 30^{\circ} 4^{\prime} 29^{\prime \prime}=9 \cdot 6999485
$$

## To find the angle whose

$$
\mathrm{L} \sin \quad=9.7005632
$$

$$
\mathrm{L} \sin 30^{\circ} 7^{\prime}=9 \cdot 7004981
$$

$$
651
$$

$$
10^{\prime \prime}=\quad 360
$$

$$
291
$$

$8^{\prime \prime}=\quad 288$
$\therefore$ the angle is $30^{\circ} 7^{\prime} 18^{\prime \prime}$.

The following Resolution, moved by Mr Duthie, was unanimously adopted :-
"Considering that in the tables of lineal and square measure the fractional measures-viz., $\frac{5}{2}$ yds. $=1 \mathrm{pl}$, and $30 \frac{1}{4} \mathrm{sq} . \mathrm{yds} .=1 \mathrm{sq} . \mathrm{pl} .-$ are of no practical value, and in their premature appearance in arithmetical study involve a grievous and unnecessary burden in teaching, this Society appeal to the Scottish Education Department to exercise its authority with a view to their abolition in schools, and to this end to allow no questions involving their use to be set in examinations under the control of the Department."

