

BOOK REVIEWS

Tables of Probability Functions. Vol. I. New York, Work Projects Administration. 1941. 28+302 pp. \$2.00.

The earliest systematic table of the error function or probability integral was prepared by James Burgess and published in the Transactions of the Royal Society of Edinburgh, volume 39, Part II, 1898, pp. 257–321. This was followed by that compiled by W. F. Sheppard under the auspices of the British Association for the Advancement of Science, published by the Cambridge University Press in 1939, and by various other minor tables.

The present Tables extend the range of all existing ones and provide a smaller tabular interval. The usual control methods employed by the Agency to make them accurate have been used.

Both functions have been calculated to fifteen decimal places at intervals of 0.0001 in the range between 0 and 1 and at intervals of 0.001 in the range from 1 to 5.6. A short supplementary table (Table II) is included giving the values of $H(x)$ and its derivative to eight significant figures for x ranging from 4 to 10 at intervals of 0.01. The procedures for direct and inverse interpolation are explained and the degree of approximation attained are emphasized. The method employed for the actual computation is outlined together with the checks for control of accuracy.

The pages are 9 by 4 inches, both $H'(x)$ and $H(x)$ appearing in contiguous columns. There are 51 lines on a page in blocks of five, the last entry on a page being repeated at the top of the following one.

VIRGIL SNYDER

Guide to Tables in the Theory of Numbers. By Derrick Henry Lehmer. (Bulletin of the National Research Council, Number 105. Division of Physical Sciences, Committee on Mathematical Tables and Aids to Computation, Report 1: Report of the Subcommittee on Section F: Theory of Numbers.) Washington, D. C., National Research Council, 1941. 14+177 pp. \$2.50.

In a foreword Professor R. C. Archibald, Chairman of the Committee, states that "In broad outline it exhibits the general plan for all Reports in the series. In adopting this plan the Committee desires to make clear that the Reports are being prepared primarily for scholars and others active in scientific work throughout the world."

Directions for the use of the Report are given in the Introduction.