The critical comments on the typography in the companion tables of $(\sin x)/x$ apply equally to these tables.

J. W. W.

49[D].—D. G. MARTIN, *Tables of* $(\sin x)/x$ *to Six Decimal Places*, Report 4934, Atomic Energy Research Establishment, Harwell, England, 115 pp., 29 cm. Available from H. M. Stationery Office. Price 16s.

In an introduction to these extensive tables the author states that they were prepared on an IBM 7030 system to facilitate computation of the scattering of long-wavelength neutrons by defects in irradiated solids. He cites, as a further application, calculations of the diffraction of electrons and X-rays by polyatomic molecules in liquids, gases, and amorphous solids. Pertinent references to such applications are included in a short bibliography, which follows a concluding introductory paragraph describing the use of the tables.

These double-entry tables consist of 6D approximations to $(\sin x)/x$ for $x = 0(0.001)50(0.01)100$, together with first differences. As the author notes, the only comparable table is that of Reynolds [1], which gives 8D values for $x = 0(0.001)49.999$, *without* differences.

Unfortunately, the photographic reproduction of the computer sheets here has left much to be desired with respect to legibility; indeed, many entries contain figures that are completely, or almost completely, undecipherable. Apparently little effort was expended in assuring that these useful tables were printed in an acceptable manner.

J. W. W.

1. G. E. REYNOLDS, *Table of* $(\sin x)/x$, Technical Report 57-103, Air Force Cambridge Research Center, Cambridge, Massachusetts, 1957.

50[D, E, H, L, P, X].—KEITH A. SWITZER, *Tables of Roots of Certain Transcendental Equations Arising in Eigenfunction Expansions*, Circular 23, College of Engineering, Washington State University, Pullman, Washington, 1965, 61 pp., 28 cm.

The numerical tables herein were motivated by a need for a more extensive compilation than those already available of eigenvalues associated with boundary-value problems arising in analyses of heat transfer and of mechanical vibrations.

The first table (Table A) consists of 5D values of the first eight roots S_n of the transcendental equation $C = S_n \tan S_n$, corresponding to $C = 0.001(0.001)0.1(0.01)1(0.1)10(1)100(10)400$.

In Table B there appear, to the same precision, the first eight roots of the equation $C + S_n \cot S_n = 0$, for $C = -0.999(0.001)-0.1(0.01)1(0.1)10(1)100(10)400$.

Finally, Table C presents, again to 5D, the first eight roots of the equation $C = S_n J_1(S_n)/J_0(S_n)$, for the same range of the parameter C as in Table A.

The computational scheme followed in evaluating the tabular entries consisted of successive halving of the interval containing the desired root, starting with an increment of 0.1. This algorithm is written in ALGOL in this report, and the author states that the FORTRAN programs actually used to develop the tables may be obtained by communicating with him.