3. K. A. KARPOV, *Tablicy funkcii* $w(z) = e^{-z^2} \int_0^z e^{x^2}\,dx$ *v kompleksnoĭ oblasti*, Insdat. Akad. Nauk SSSR, Moscow, 1954. See *MTAC*, v. 12, 1958, p. 304–305.

4. K. A. KARPOV, *Tablitsy funktsiĭ* $F(z) = \int_0^z e^{x^2}\,dx$ *v kompleksnoĭ oblasti*, Izdat. Akad. Nauk SSSR, Moscow, 1958. See *Math. Comp.*, v. 14, 1960, p. 84.

5. R. HENSMAN & D. P. JENKINS, "Tables of $(2/\pi)e^{z^2} \int_z^\infty e^{-t^2}$ for complex z," UMT file, *Math. Comp.*, v. 14, 1960, p. 83.

11 [L].—FRITZ OBERHETTINGER & T. P. HIGGENS, *Tables of Lebedev, Mehler, and Generalized Mehler Transforms*, Math. Note No. 246, Boeing Scientific Research Laboratories, Seattle, 1961, 48 p., 21.5 cm.

The transform pairs tabulated are:

A. (Lebedev)

$$g(y) = \int_0^\infty f(x)K_{ix}(y)\,dx,$$

$$f(x) = 2\pi^{-2}x \sinh \pi x \int_0^\infty y^{-1}K_{ix}(y)g(y)\,dy$$

where $K_\nu(x)$ is the modified Bessel function of the second kind.

B, C. (Mehler, Generalized Mehler)

$$g(y) = \int_0^\infty f(x)P^k_{ix-1/2}(y)\,dx$$

$$f(x) = \pi^{-1}x \sinh \pi x\Gamma(\tfrac{1}{2} - k + ix)\Gamma(\tfrac{1}{2} - k - ix) \int_1^\infty g(y)P^k_{ix-1/2}(y)dy,$$

where $P^k_{ix-1/2}(y)$ is the Legendre function. The Mehler transform is the case $k = 0$. Furthermore, $k = \frac{1}{2}$ and $k = -\frac{1}{2}$ give rise to Fourier cosine and sine transforms, respectively.

Most of the results given here are new. A list of Lebedev transforms is available in *Tables of Integral Transforms* by A. Erdélyi, W. Magnus, F. Oberhettinger, and F. G. Tricomi, McGraw-Hill, 1954, v. 2, Ch. 12, but the present compilation is much more extensive. Only a few entries of the Mehler transform are given in the above reference.

The transforms are useful to solve certain boundary-value problems of the wave or heat conduction equation involving wedge or conically shaped boundaries, and a number of references to physical problems are given in the bibliography. To facilitate use of the tables, definitions of higher transcendental functions which enter into the transforms are provided in a separate section.

Y. L. L.

12 [W].—F. P. FOWLER, JR., *Basic Mathematics for Administration*, John Wiley & Sons, Inc., New York, 1962, xvii + 339, 23.5 cm. Price $7.95.

This book presents a general survey of basic mathematics used in the development of modern decision-making techniques. The authors give a background sketch