which are exact whenever f is a polynomial of degree $\leqq 2n - 1$. Formulas are given for α, $\beta = -0.9(0.1)3.0$, $\beta \leqq \alpha$, and $n = 1\ (1)8$. The A_i and x_i are given to 8 significant figures. The x_i $(i = 1, \cdots, n)$ are the zeros of the corresponding Jacobi polynomial $P_n^{(\alpha,\beta)}(x)$ for the segment [0, 1]. The tables comprise 410 pages; there is a short introduction of 20 pages.

These are important tables, both for practical calculations and for the information they give concerning Jacobi polynomials; they will be useful, for example, for investigations of the distribution of the zeros of Jacobi polynomials. For use in numerical integration on a high-speed computer, however, it may be more convenient in many cases to compute a formula of this type before it is used. Each of these low-order formulas could be computed on, say, the IBM 7090 in a very few seconds.

For this reason, we believe it is more important to give tables of highly accurate formulas, which are more difficult and time consuming to compute. This reviewer is preparing such a set of tables; among the formulas already computed are the following Gaussian-type formulas:

$$\int_{-1}^{1} f(x)\,dx \simeq \sum_{i=1}^{n} A_i f(x_i), \qquad n = 2(1)64(4)96(8)168,256,384,512$$

$$\int_{-\infty}^{\infty} e^{-x^2} f(x)\,dx \simeq \sum_{i=1}^{n} A_i f(x_i) \qquad n = 2(1)64(4)96(8)136$$

$$\int_{0}^{\infty} e^{-x} f(x)\,dx \simeq \sum_{i=1}^{n} A_i f(x_i) \qquad n = 2(1)32(4)68$$

We have the A_i and x_i in these formulas correct to 30 significant figures.

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22 **[P].**—FREDERICK C. GROVER, *Inductance Calculations Working Formulas and Tables*, Dover Publications Inc., New York, 1962, xiii + 286 p., 21 cm. Price $1.85.

This book first appeared in 1946. At that time it would have been an excellent tool for the practical engineer or designer of coils. Although the entire work is based upon one conceptually simple general definition, the author has heroically catalogued, in some 280 pages, an impressive number of special cases. He proceeds systematically through all types of coil shape, winding types, relative orientation, and other parameter situations. Formulae for such special cases are provided and adequate approximations and/or tables of special functions supplied. Today, the type of calculation in which this book would be of practical use would be carried out by a relatively small number of general-purpose inductance computing codes on a digital computer.

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EDITOR'S NOTE: See also *MTAC*, v. 3, 1948–1949, p. 521, RMT **674**.