

of $C_i^{(n)}(p)$ and $D_i^{(n)}(p)$ are given for the same values of i and for $p = q(0.01)[n/2]$, and $n = 2(1)5$. Tables to aid in computation of an error bound are given.

The authors state that these tables were calculated on an IBM 704 and listed to 12 decimal places. These were subjected to "functional" checks using a desk calculator, and then were rounded to 10 decimal places. On the basis of these checks the authors believe the coefficients are all correct within about one unit in the tenth decimal place.

It seems to the reviewer an unfortunate circumstance that the details of the checks made with the IBM 704 and the desk calculator were not more precisely given. It would have been simple, for example, to have checked the integrals of monomials in the range of precision, and this would have made an excellent independent check of accuracy, well worth the additional time required for automatic calculation.

The authors express great enthusiasm over the accuracy of the method and illustrate it with four examples which indicate rather well the situations in which osculating formulas may be used. These situations are ones in which the derivative of the integrand is available without excessive additional work. In particular, the suggested applications to orbit calculations in which the position and velocity vectors are known seemed very appropriate. However, this very example also suggests that there would be some real interest in extending the domain of p so that extrapolations could be made. In that case $n = 1$ would have been a possible choice.

Mrs. Frieda Cohn of the Numerical Analysis Laboratory at the University of Wisconsin has calculated the integrals of a few monomials using these tables, and found that these checked within possibilities of round-off error.

P. C. H.

83[X, Z].—F. A. FICKEN, *The Simplex Method of Linear Programming*, Holt, Rinehart & Winston, Inc., New York, 1961, vi + 58 p., 24 cm. Price \$1.50.

The book literature on the subject of linear programming is in a state of rapid increase and Ficken's contribution on the simplex method, the essence of the success of linear programming, is a welcome addition. It provides a rigorous treatment of old ideas in a 36-page discussion of duality, feasibility, boundedness, consistency, the simplex tableaux, degeneracy, etc. Brief material on inequalities, linear spaces, matrices, etc., appear in one appendix and theorems on existence and duality in a second appendix. The author's bibliography makes no specific mention of G. Dantzig, to whom the topic of the book owes its existence and who has contributed immeasurably to the development of linear programming. A second point is the absence of material on integer programming. It seems important that a book on the subject, appearing in 1961, should shed light on this significant development. The author has avoided mention of this new gem in which the simplex process plays an important role. Otherwise, the book is recommended for the material it treats and for its clarity and rigor.

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