

denly they appear. In the original, the normal spelling of non-Russian names is given, sometimes incorrectly, in parentheses following the Russian spelling. The errors are retained in the translation, and at least one new one added: Joung for Young, Scherman for Sherman, an incorrect initial for Wilkinson, two distinct misspellings of the name of this reviewer. A "supplementary" list in the original, presumably added after the main one had been compiled, remains separate in the translation.

In the table of contents, there are nine cases of poor or even misleading phraseology: "gradients of functionals" becomes "functional gradients"; "condition of matrices" becomes "conditioned matrices"; "resolution" into factors becomes "expansion" into factors; a method of "supplementation" (*popolnenija*, what the reviewer calls a method of modification) becomes the "reinforcement" method; "some methods of conjugate directions" is translated clumsily as "some conjugate directions methods." These are perhaps the worst.

Since the translator is not (presumably) a mathematician or a numerical analyst, it is not surprising that, for example, "deflation" becomes "exhaustion," and in a footnote it is remarked that occasional nonstandard terminology should not cause trouble for readers who are "literate enough." This is true, but it can cause trouble for beginners, who could otherwise find in this an excellent introduction to the subject. And mere nonstandard technical terminology is not the only fault. "Suitably generalized" becomes "thoroughly [*sic*] reviewed" (p. 32); "terms" becomes "elements" (p. 61); plurals become singular and prepositions are omitted; reference to an example in "paragraph 7" is said to be on p. 80 (actually it is on p. 55); symbols are omitted; subscripts are raised; definite articles improperly supplied (in Theorem 7.5). These slips were noted in scarcely more than a casual scanning of a small portion of the whole; in this last list they represent purely mechanical faults in translating and in proofreading, and there were no corresponding slips in the original to have led to them.

To those who are "literate enough," in the subject but not in Russian, the translation can be highly recommended, because the faults in translation should cause only occasional annoyance. The lost symbols can be supplied after a little thought; the definite articles in Theorem 7.5 can be recognized as not belonging. The material is abundant, and, with proper corrections, the presentation very good. Those who are less literate should be warned to read with care.

A. S. H.

72[G, X, Z].—ROBERT D. LARSSON, *Equalities and Approximations with "FORTRAN" Programming*, John Wiley & Sons, New York, 1963, x + 158 p., 24 cm. Price \$5.50.

This is a book written in response to the needs of the high school teacher who wishes to enrich the curriculum for high-ability students. It also might find use in the programs of many junior colleges. Basically this book contains topics from linear algebra together with some topics in elementary approximation theory. The latter serves as a vehicle for introducing the basic ideas of integral calculus.

The prerequisites for this book are elementary algebra and trigonometry. Chapter I introduces the idea of a group and its properties. In Chapter II matrices are

introduced and their properties discussed. Matrix inversion and the solution of linear equations are combined through the use of the Gauss-Jordan elimination method. In Chapter IV rings, integral domains, and fields are introduced and illustrated. Chapter V considers inequalities and the ideas of this chapter are applied to find upper and lower bounds to simple problems of area estimation in Chapter VI. Finally some iteration techniques and polynomial interpolations are considered in Chapter VII.

An unusual feature of the book is the introduction of FORTRAN programming in Chapter III. In the following chapters many problems are solved by means of computer programs. The sections on programming appear adequate, but could well be supplemented by additional material. Any teacher who is unfamiliar with FORTRAN programming cannot depend on this text for all of the answers.

The reviewer feels that this book is carefully done and the mathematics is rigorously presented. Occasional theorems of a more difficult nature are stated without proof. This book may well find considerable use in assisting teachers confronted with rapidly changing curricula in our nation's high schools and junior colleges.

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73[I].—A. O. Gelfond, *Calcul des Différences Finies*, Dunod, Paris, 1963, x + 378 p., 25 cm. Price 58 F.

This is a translation into French of A. O. Gelfond's *Ischislenie Konechnikh Ratznostei*, Moscow, 1952, and I, for one, am glad to have the work of this great analyst in a more accessible tongue. The French edition embodies corrections and some emendations. For example, Chapter I now includes a section entitled "Interpolation and the Moment Problem in the Complex Plane".

As one looks at the chapter titles, one is apt to get the impression that this book contains only "standard material". This is not so; there are new and interesting results throughout, many of them due to the author. Bernard Berenson once said that a book is worth its place on the shelf if it contains *one* thing that no other book has. Gelfond's book passes Berenson's test by a wide, wide margin, and those of us who like interpolatory function theory will enjoy browsing and studying his work in this new edition.

Table of contents is as follows: Chapter 1, Interpolation; Chapter 2, Newton Series; Chapter 3, Construction of an Entire Function given certain Interpolatory Information; Chapter 4, The Summing of Functions; Bernoulli Numbers and Polynomials; and Chapter 5, Finite Difference Equations.

P. J. D.

74[K].—D. J. FINNEY, R. LATSCHA, B. M. BENNETT & P. HSU, *Tables for Testing Significance in a 2×2 Contingency Table*, Cambridge University Press, American Branch, New York, 1963, vi + 102 p., 27 cm. Price \$3.25.

These tables are used for testing the significance of deviations from proportionality in a 2×2 contingency table