tions; nonlinear optimization, nonlinear programming and systems of inequalities, nonlinear ordinary differential equations; introduction to automatic control; and linear and nonlinear prediction theory.

Of these chapters, only that on nonlinear optimization may be considered to be well enough organized and to contain enough material to represent a contribution to mathematical literature. The others show lack of understanding of the basic ideas and methods, lack of organization, or both. This is particularly true of the chapters on control theory and nonlinear differential equations.

The book is definitely not recommended for either students or teachers.

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92[K, O, X, Z].—JOHN PEMBERTON, *How to Find Out in Mathematics* (*A Guide to Sources of Mathematical Information Arranged According to the Dewey Decimal Classification*), Macmillan, New York, 1963, x + 158 p., 19 cm. Price $2.45 (paperbound).

This is a useful guide, not to the substance of mathematics, but more to its organizational set-up. It is written from the point of view of the librarian. The list of titles of the twelve chapters and three appendices that follows should indicate its scope:

Careers for Mathematicians; The Organization of Mathematical Information; Mathematical Dictionaries, Encyclopedias and Theses; Mathematical Periodicals and Abstracts; Mathematical Societies; Mathematical Education; Computers and Mathematical Tables; Mathematical History and Biography; Mathematical Books—Part 1: Bibliographies; Mathematical Books—Part 2: Evaluation and Acquisition; Probability and Statistics; Operational Research and Related Techniques; Sources of Russian Mathematical Information; Mathematics and the Government; Actuarial Science.

D. S.

93[I, M].—V. M. BELÏAKOV, R. I. KRAVTSOVA & M. G. RAPPAPORT, *Tablifsy ellipticheskikh integralov*, Tom I (*Tables of Elliptic Integrals*, v. I), Izdatel′stvo Akademie Nauk SSSR, Moscow, 1962, 656 p., 27 cm. Price 5 rubles 14 kopecks.

This is the third set of extensive tables of the elliptic integral of the third kind to appear within the last five years. The previous ones were prepared, respectively, by Selfridge and Maxfield [1] and by Paxton and Rollin [2].

In the present member of a two-volume set we find in Table I the values of

$$\Pi(n, k^2, \varphi) = \int_0^\varphi (1 + n \sin^2 \alpha)^{-1}(1 - k^2 \sin^2 \alpha)^{-1/2} \, d\alpha$$

to 7S for $-n = 0(0.05)0.85, 0.88(0.02)(0.94)(0.01)0.98(0.005)1$, $k^2 = 0(0.01)1$, and $\varphi = 0°(1°)90°$. Corresponding to $n = 0$, $\Pi(n, k^2, \varphi)$ reduces, of course, to $F(k^2, \varphi)$.

Table II gives $E(k^2, \varphi)$ to similar precision for the same range in k^2 and φ.

Approximations to 8D of $A_m(\varphi) = \int_0^\varphi \sin^{2m} \alpha \, d\alpha$ appear in Table III for $m = 1(1)10$