

from the titles of the twenty-four chapters in the book.

- Chapter 1. Why Mathematics?
- Chapter 2. A Historical Orientation;
- Chapter 3. Logic and Mathematics;
- Chapter 4. Number: the Fundamental Concept;
- Chapter 5. Algebra, the Higher Arithmetic;
- Chapter 6. The Nature and Uses of Euclidean Geometry;
- Chapter 7. Charting the Earth and the Heavens;
- Chapter 8. The Mathematical Order of Nature;
- Chapter 9. The Awakening of Europe;
- Chapter 10. Mathematics and Paintings in the Renaissance;
- Chapter 11. Projective Geometry;
- Chapter 12. Coordinate Geometry;
- Chapter 13. The Simplest Formulas in Action;
- Chapter 14. Parametric Equations and Curvilinear Motion;
- Chapter 15. The Application of Formulas to Gravitation;
- Chapter 16. The Differential Calculus;
- Chapter 17. The Integral Calculus;
- Chapter 18. Trigonometric Functions and Oscillatory Motion;
- Chapter 19. The Trigonometric Analysis of Musical Sounds;
- Chapter 20. Non-Euclidean Geometries and their Significance;
- Chapter 21. Arithmetics and their Algebras;
- Chapter 22. The Statistical Approach to the Social and Biological Sciences;
- Chapter 23. The Theory of Probability;
- Chapter 24. The Nature and Values of Mathematics.

Kline, recognizing that this book contains more material than can be covered in some courses, indicates omissions that could be made without destroying logical continuity. These omissions, marked by asterisks, include the entire Chapters 9, 10, 16, 17, 19, 22 and 23 and specific sections in Chapters 4, 5, 6, 7, 12, 14 and 15.

The book is written in a style that is easy to read, technical points are carefully explained, and the illustrative diagrams are excellent.

In the opinion of this reviewer, Mathematics for the Liberal Arts merits a prominent place in every good library that serves not only the teaching profession, but the general public. With respect to its use as a textbook, teachers who disagree with the author's contention that mathematics proper makes little appeal and seems pointless to most liberal arts students, may prefer to focus more attention on set theory and other modern developments. Also, there may be teachers who are inclined to the view that much of the material is more appropriate for a natural science course than for a mathematics course. Nevertheless, the trend towards interdisciplinary and general education courses suggests that textbooks of this type may acquire more widespread use in the future.

A. W. Turner, York University

Almost-periodic functions, by C. Corduneanu. John Wiley and Sons, Inc., New York, 1969. x + 237 pages. U.S. \$13.50.

This book on almost-periodic (a.p) functions and some of their applications covers certain topics which already appeared in book form (for example, in Levitan: Almost-periodic Functions, Moscow 1953), and also some more recent results which were available only in periodical mathematical journals. For example, Chapter I is quite similar to Levitan's.

Quite nice is Chapter IV; Bohr's theorem on bounded integrals of a.p functions and its extension to linear systems given by Bochner are included here.

Chapter VI on Banach space-valued a.p functions presents the approximation theorem following the reviewer [Ann. Ecole Normale Supérieure, 1962].

A quite complete list of references ends this short, but probably useful, monograph.

S. Zaidman, Université de Montréal

Introduction of the methods of real analysis, by Maurice Sion. Holt, Rinehart and Winston Inc., New York, 1968. x + 134 pages. Canad. \$9.85.

In a mere 130 pages the author presents the basic ideas of the topological concepts of real analysis and measure theory. In fact, the book is divided into two parts. Part I concerns the topological concepts and Part II is entirely devoted to measure theory.

The first part starts with a chapter on set theory which distinguishes itself because of brevity. Chapter two deals with spaces of functions such as the classical sequence spaces, spaces of continuous function. In this short chapter the author only aims at the pertinent definitions. The remaining two chapters of the first part are devoted to the elements of point set topology. It includes subjects such as completeness, compactness, connectedness and the Baire category theory which are all essential in analysis.

Part II, which is devoted to measure theory, starts with a discussion of measures on abstract spaces. It includes the Jordan decomposition theorem and the theory of Carathéodory's outer measures. The Lebesgue-Stieltjes measure on the line are discussed and Lebesgue measure in \mathbb{R}^n . A chapter is devoted to the theory of integration. It discusses the basic limit theorems and the Fubini theorem. The book concludes with a chapter on the Riesz representation theorem.

In view of the many subjects which are covered in this book, the reviewer feels that it is a welcome addition to the existing literature in real analysis.

W.A. Luxemburg, California Institute of Technology

A Seminar on graph theory, edited by F. Harary with L. Beineke. Holt, Rinehart and Winston Inc., New York, 1967. v + 116 pages.

The book contains in 111 pages the fourteen lectures of a seminar on graph theory held at University College, London, in 1962/63. The lecturers were: F. Harary (Lecture 1 - 6); L. Beineke (7); P. Erdős (8 - 9); P. Erdős and P. Kelly (10); J. W. Moon (11); C. St. J.A. Nash-Williams (12); R. Rado (13); C. A. B. Smith (14).

The lectures 7 - 14 are prefaced by quite remarkable "Steckbriefe" of the lecturers given by the editor F. Harary. The volume being dedicated to Pólya, Lectures 4, 5, 6 and 11 are concerned with his famous enumeration theory. In 4 one finds a proof, and in 5, a general pattern of applying Pólya's enumeration theorem; in 6, the counting series of graphs and digraphs are determined. Lecture 11 presents nine proofs of Cayley's theorem that the