From the HOLDEN-DAY Library of Science and Technology

Ways of Thought of Great Mathematicians

by Herbert Meschkowski

A lively collection of examples of the creative thinking of great mathematicians down through the ages, including: The Pythagoreans, Archimedes, Nicholas of Cousa, Blaise Pascal, Leibniz, Gauss, George Boole, Weierstrass, and Georg Cantor. A history of mathematics of interest not only to the mathematician and the student of mathematics, but to the layman as well.

\$4.95 (cloth) \$2.95 (paper)

Changes in Mathematical Thought

by Herbert Meschkowski

An elementary historical introduction to the foundations of mathematics written for students and for the wider circle of those who are interested in philosophical and pedagogical implications of modern mathematics. The book will provide a suitable text for a general cultural course in mathematics, or for courses in the history or foundations of mathematics.

\$4.95 (cloth) \$2.95 (paper)

Logic: A Dialogue

by Arthur K. Bierman

An introductory text written in dialogue style and based on the inductive method of teaching logic Designed primarily for a one-semester course for freshmen, sophomores, and juniors. May also be used as an introduction to the philosophy of language and meaning for juniors and seniors by stressing relevant portions of the text and the calculus of concepts. \$7.95

For the catalog, write to: HOLDEN-DAY, INC. San Francisco, California 94111



Elementary Logic

By BENSON MATES

Professor of Philosophy, University of California, Berkeley

The idea that even for the first course instruction in logic should be rigorous has in large measure determined the content, structure, and style of this introduction to symbolic logic. Using numerous examples and explanatory comments Professor Mates endeavors to supply a reasonably exact definition for each of the principal concepts involved, semantical as well as syntactical, including especially those of sentence, interpretation, truth (with respect to an interpretation), consequence, validity, consistency, tautology, and derivation.

The book includes some smooth-running, relatively simple groups of inference rules, as well as axiomatic, more traditional, presentations for the theorems of logic. To illustrate the applicability of formalized languages and deductive procedures, the author formalizes several theories including that of the Aristotelian syllogism. He explores thoroughly the relation between artificial and natural languages. The book concludes with a historical survey of logic, from Aristotle to the present.

1965 248 pp.

Oxford University Press | 417 Fifth Ave. | New York, N.Y. 10016

ELEMENTARY MODERN LOGIC

PAUL L. BROWN and WALTER E. STUERMANN both University of Tulsa

Published this Spring! This introductory textbook is designed to help the student recognize and draw correct inferences in words and orient him to the important realm of symbolic logic. Providing a new and modern approach to logic and to science, it shows how the tenets of deductive logic apply to the scientific process.

Throughout, the book furnishes sufficient material for a broad coverage of the subject, while permitting the instructor to select topics suitable to the needs and interests of different groups of students.

CONTENTS

Language and Logic: Language and Its Uses • Meaning • Definition • Fallacies • Logic • The Syllogism. Logic in Argument: Symbolic Form • Not, And, Or • If-Then • Interchange Expressions and Simple Arguments • Inference in Extended Arguments • Methods of Proof • Statement Functions and Arguments • Some Directions for Further Study.

Deductive Logic and Science: Some Factors in the Scientific Process • Principles of Deduction in the Scientific Process.

Appendix: Reference List of Interchange Expressions, Simple Argument Forms, and Rules of Inference.

1965. 272 pages, illustrated.

\$ 5.00

The Ronald Press Company

• • 15 East 26th Street/ New York, N.Y.