

Chapters are devoted to thermodynamics, ordinary differential equations, special functions, vector analysis, coordinate systems, calculus of variations, partial differential equations of classical physics, eigenvalues and eigenfunctions, mechanics of molecules, matrices and matrix algebra, quantum mechanics, statistical mechanics, numerical calculations, linear integral equations and group theory.

An advanced course, based upon this text, for physicists and chemists, could afford to be supplemented by material on linear systems, transforms, approximate and asymptotic evaluating of integrals, and some elementary theory of acoustics and hydrodynamics.

Some illustrative problems are worked as examples, others, often supplementary to the text material, are included as student exercises. Typographical errors were fairly numerous in the first printing.

This book has been enthusiastically received by graduate students of physics, chemistry and mathematics, although not without criticism of certain sections. It has stimulated considerable interest in the topics covered.

PAUL C. CROSS

O sentido da nova lógica. By Willard Van Orman Quine. São Paulo, Livraria Martins Editora, 1944. 252 pp.

This is a well organized exposition of modern formal logic addressed to the general philosophical reader. There is at the end a list of the principles most often referred to, a list of all the formal definitions (in symbolic notation), an extensive bibliography, and an alphabetical index. All these will help the studious reader who wishes to master the technique, but the book is not equipped with exercise material, nor designed for classroom drill. The style, at least up to the last chapter, is reasonably simple, with well chosen local illustrations and appropriate cautionary remarks. Rarely, except on questions of ontology, does the author present at length, and then dispose of, views opposed to his own. Throughout the text, generous but brief remarks attribute credit to previous workers.

Following an illuminating introduction, the text falls into four chapters: I Theory of composition, II Theory of quantification, III Identity and existence, IV Class, relation and number. In I, truth value tables (called "quadros") are treated in detail. This treatment covers the translation from everyday language to the more precise, symbolic notation. As distinguished from the "if-then" rule of composition of propositions, the author here, as previously, reserves "implication" to state a relation between propositions. If " $\sim(p \cdot \sim q)$," then " p implies ' q '," where ' p ', ' q ' are substantives, naming the