

dent should know the things contained in this book before he enters the university. This makes the volume interesting, as it shows us what is considered a good university preparation in Italy. This is not so different from our own ideas, but many of the subjects here treated we reserve for a course in college algebra. However, many conceptions which we teach in college algebra or at a later period the Italian student gets before he begins his second course in algebra for which the present book is intended. Some of these conceptions are interval, independent variable, inverse function, geometric representation of a function, and sequence of numbers.

The book contains seven chapters the titles of which will sufficiently indicate the contents: Calculus of combinations; Continued fractions; Analysis of indeterminates of the first degree; Inequalities and systems of inequalities; Discussion of equations and problems and equations of second degree; Finite and continuous functions, limits, indeterminate forms; Maxima and minima, discussion of functions. The book also contains an appendix on geometrical conics. Each chapter closes with an excellent set of problems.

Ordinarily the Italian student devotes much more time to the study of elementary mathematics than the American student. But as here indicated, the time is not spent in anticipating college work, as is often done by preparatory schools in this country, but is devoted to doing more thoroughly the ordinary elementary work.

The presentation shows the author to be a master. But the general appearance of the book from the publisher's point of view would not be considered good in this country.

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College Algebra. By H. L. RIETZ and A. R. CRATHORNE.
New York, Henry Holt, 1909. xiv + 261 pp.

THE introduction to this text is concerned with the reasoning in the transition from numerical to literal quantities. Addition and multiplication are regarded as fundamental operations and no attempt is made to define them. Their laws, including their commutative, associative, and distributive properties, are given as assumptions. Subtraction is then defined with reference to addition, and division with reference to multiplication. The algebraic use of these four operations including the laws of real indices is discussed in some detail in the same chapter. The