provide a palatable introduction to many of the problems of power reactors to a far wider class of readers.

The Elements (Reprint of 2nd Edition). By Euclid. Introduction and commentary by Sir Thomas Heath. Vol. 1, 432 pp.; Vol. 2, 436 pp.; Vol. 3, 546 pp. Dover Publications, Inc., New York, 1956. Clothbound $4.00 each; paperbound $1.95 each. *Reviewed by Arthur Beiser, New York University.*

It is, of course, presumptuous to review a work that has been famous for 2300 years, but since Euclidean geometry seems currently to be regarded as merely the stem for the prefix "non", it is in order to call attention to the reprinting by Dover of Heath's edition of the *Elements*. Euclid himself originated very little of the material, but his masterly synthesis of the geometry known at the time of Alexander was applauded even by his contemporaries. Until the present century Euclid was the standard introduction everywhere to geometry and logical reasoning; with the discovery of geometries not requiring the parallel postulate, and with Euclid's rigor decried by Peirce and others ("riddled with fallacies"), the *Elements* are no longer in such favor. Then why read Euclid today? Heath quotes a story: "Some one who had begun to read geometry with Euclid, when he had learnt the first theorem, asked Euclid, 'But what shall I get by learning these things?' Euclid called his slave and said 'Give him threepence, since he must make gain out of what he learns.' "

Heath's introduction to and thorough annotation of the *Elements* are, in their way, as remarkable as their subject. The text and language of Euclid are analyzed in detail, and an astonishing amount of historical information is provided on the origins of each proposition and its fate at the hands of subsequent editors and critics. Comparisons with modern ideas are furnished; thus one learns with some surprise that "there is an exact correspondence, almost coincidence, between Euclid's definition of equal ratios and the modern theory of irrationals due to Dedekind", a notion that is demonstrated in detail. Heath's commentary is far from dull, and dipping into these inexpensive volumes is a tonic for those moments when one questions the intelligence and sanity of his species.

Numerical Analysis. By Zdeněk Kopal. 556 pp. John Wiley & Sons, Inc., New York, 1955. $12.00. *Reviewed by J. Hilsenrath, National Bureau of Standards.*

This is an advanced undergraduate text and a handbook of selected branches of numerical analysis. Since it is intended as a text for a second course, some of the more usual topics of numerical analysis are not covered. A major portion of the book is devoted to application of numerical mathematical techniques to the integration of differential equations and to boundary value problems. The usual finite difference calculus is treated in chapters on polynomial interpolation and numerical differentiation. Mechanical quadratures and