Elements of Numerical Analysis, by Peter Henrici. John Wiley and Sons, Inc. New York, 1964. xv + 328 pages. $8.00.

The book is divided into three main parts besides the Introduction, which consists of 3 Chapters including one on Complex numbers. Part I consists of 5 Chapters and is concerned mainly with iteration and solution of equations. Part II deals with interpolation and approximation and consists of 6 Chapters. Part III is very brief and is devoted to Computational aspects, fixed point and floating point arithmetic and mainly to propagation of round-off errors.

An interating feature of the book is Chapter 8 on the Quotient-Difference method and its connection with Aitken-Bernoulli method. Another inclusion which distinguishes the book is a fairly complete discussion of Romberg integration in the Chapter on Numerical integration.

The reader will find very little algebra and matrix theory in this book. However the discussion of Newton's method for more than one variable and the theorem on contraction mapping in finite dimensional vector space adds to the merity of the book. Aitken's Δ^2-method, Bairstow's method for quadratic factors and Muller's method for finding the zeros of polynomials are welcome inclusions. Regarding Muller's method, a theoretical justification of the method has recently appeared (see Ostrowski, Journal SIAM, Numerical Analysis, Series B, 1964, pp. 104-130).

The book has many interesting and instructive examples and exercises throughout. It is written in a lively style and anyone using the book will find it rewarding.

There are a few minor misprints; for example, on p. 247, the first mean-value theorem is referred as the second. Chapter 10 begins on p. 198 but the contents lists it as 194. These and other minor slips, it is hoped, will be corrected in later editions. On the whole the book is an excellent introduction to the subject and can be used as a text-book in a 1 or 2 semester course on numerical analysis.

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"Proceedings of a Harvard Symposium on Digital Computers and their Applications", The Annals of the Computation Laboratory of Harvard University, XXXI, 1962. Harvard University Press, Cambridge, Mass. 332 pages. $18.00. (Published in Canada by S.J. Reginald Saunders and Co. Limited, Toronto.)

This volume gives the papers presented at a symposium at Harvard University in April, 1961. The contributions cover a wide