scheme of such a nature that most of the three-hundred thirty-six sections contain about fifty reviews, the reviews appearing chronologically within each section. Since the classification is inevitably based primarily on results obtained rather than on methods used, papers involving computational methods or related to mathematics of computation are not all collected in any one place. However, the section entitled "Tables and Computation; Evaluation of Constants" contains many of them and refers to many of the others. Needless to say, several other sections, such as the section "Mersenne, Fermat Numbers", contain reviews of many computational articles. Volume 6 includes both a subject index and a name index.

While it is easy to express regret that these volumes do not cover the entire period since Dickson's *History of the Theory of Numbers* (1920), the reviewer believes that such regrets exhibit an unwillingness to face the fact that completeness is an impossible dream. After all, Dickson's history itself is incomplete since, for example, it does not cover the law of quadratic reciprocity. As it is, these volumes contain reviews of practically every article in number theory since the demise of the *Jahrbuch über die Fortschritte der Mathematik*, which is no mean accomplishment. The arithmetical community owes Professor LeVeque a tremendous debt of gratitude for his dedication in fashioning this important research tool.

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23 [12.00].—HEWLETT PACKARD ADVANCED PRODUCTS DIVISION, HP-45 *Applications Book*, Hewlett Packard Co., Cupertino, Calif., 1974, 218 pp., 22 cm. Price $10.00 spiral-bound.

For two reasons this book will have a cursory interest to readers outside its intended audience of users of HP-series calculators.

First, keystroke sequences and examples are listed alphabetically for more than two-hundred purposes, including applications from algebra, geometry, statistics and numerical methods, among other areas. With a minimal understanding of the Polish logic of HP-series calculators, most of these sequences can easily be converted to use on other scientific calculators.

Secondly and primarily, these sequences are of interest more for their nature than for their specific solution. For they illustrate particularly graphically the recent innovations and inherent limitations of nonprogrammable calculators. To illustrate the advances in calculator capacities, they include directions for such calculations as Bessel and Gamma functions, multiple linear regression, and Gauss-Legendre quadrature, and readily suggest other potential extensions of hand-calculator usage.

At the same time, even in their most efficient form the most interesting of these routines require so many keystrokes as to be impractical in real use and to discourage efforts to create counterparts for unlisted topics. The longest sequence in the book, for three-variable linear regression, requires $155 + 32n$ keystrokes to process n 3-tuples of data, a number so large as practically to insure key misstroking.

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