ease and profit the first time around, the reviewer would wish that he would step forward, and so declare.) Perhaps the least difficult here for nonspecialists would be the (nonetheless very meaty) papers of Erdös, Coxeter, and Hille, since the concepts there are relatively simple.

Marshall Hall's subject, like those of Erdös and Coxeter, can utilize some combinatorial and other computer calculations. Hall implies that since Novikov's other shoe may never drop, the Burnside Problem (not Conjecture) must still be considered open for all $n > 6$. Bing's paper is enriched with many spooky diagrams. It contains a number of theorems that begin: "A fake cube is real if . . . ", and an outsider must be forgiven for doubting that the best possible terminology has been chosen. Milnor's subject has a similar occupational disease, e.g.—"How to Recognize an Honest Sphere," and makes more direct contact with Bing's paper through work of Smale, Stallings, and Zeeman pertinent to both topics.

Problem for the reader: Compare Milnor's diagram on p. 175, Vol. II with Coxeter's identical diagram on p. 64, Vol. III. Is their identity accidental, or of significance?

D. S.

1. T. L. SAATY, Editor, *Lectures on Modern Mathematics, Volume* I. Reviewed in *Math. Comp.*, v. 18, 1964, RMT **45**, pp. 329–331.

15[G].—PHILIP J. DAVIS, *The Mathematics of Matrices*, Blaisdell Publishing Company, New York, 1965, xiii + 348 pp., 24 cm. Price $7.50.

The most suitable adjective to use in describing this book is the word "appropriate."

Designed for high school seniors or college freshmen, its level is appropriate, there being a lot of motivation for each definition and result.

The style is appropriate. It is written in an informal manner, which can be expected to attract inquisitive young minds to learn about seemingly mystical arrays of numbers. There is a minimum of formalism and abstraction, and there are interesting diversions which hold one's attention.

The title is appropriate, for the material in the book is selected from wide areas of matrix mathematics, with the algebra of matrices being only one of the topics (and even here, with matrices as rectangular arrays being inviolate).

Finally, it is appropriate that one of our profession's best mathematics expositors should apply his energies so generously to the problem of providing really good books suitable for school mathematics. He deserves our thanks.

A list of the chapter titles here cannot possibly impart much about the book. It proceeds from notation and arithmetic; through some transformation theory and associated geometry; on to operators, characteristic values, and applications; and ends with "Pippins and Cheese," a tasty conglomeration of diverse problems, topics for further study, and historical notes. There is only one way to appreciate this book: read it.

This reviewer has no critical remarks to make.

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