Introduction to modern abstract algebra, by D.M. Burton. Addison-Wesley, Reading, Massachusetts, 1967. vii + 310 pages. $3.95.

The general content of this book is what one would expect. There are four chapters: the first is devoted to the usual preliminaries, and the remaining three to groups, rings, and vector spaces respectively.

Chapter II seems, unfortunately to be the worst. The author's style is dry and uninspiring at the best of times, and in this chapter the student is expected to introduce himself to abstract thinking by 110 pages of group theory culminating in the Jordan-Holder Theorem and the Sylow Theorems. It would seem to the reviewer that such theorems could be postponed and some more intuitive concepts, such as the direct product (which is relegated to the exercises) introduced and used to prove some worthwhile structure theorems. The chapter (and indeed the whole book) is not helped by the cumbersome and over-pedantic notation. For example, multiplication in groups is usually denoted by *, while multiplication in factor groups is denoted by x. (We were relieved, however, at the statement in Chapter 4:" In the sequel a vector space over the field (F, +, .) will be denoted merely by V(F) rather than the correct but cumbersome notation (((V, +), (F, +, .), .)".

The chapter on rings is quite standard. There is some elementary field theory and a section on Boolean rings and algebras (including the Stone representation theorem).

The last chapter, on vector spaces, is introduced through the algebra of matrices (which he proves is a simple ring). This is used as a model of a vector space. The general theory of vector spaces is then developed, for the most part with no restriction on dimension. For example, the existence of a basis is shown using Zorn's lemma. The uniqueness of the cardinality of a basis is shown only in the finite-dimensional case.

The whole book is rigorous and clearly written, and Chapters III and IV seem to be quite good. However, there seems to be little to recommend it over the several excellent texts already available which treat the subject at the same level.

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Foundations of the calculus, by H.F. DeBaggis and K.S. Miller. Saunders, 1966. $5.00.

This book deals with differentiation and (Riemann) integration and their prerequisites (limits, etc.) following the footsteps of Karl Menger, and in particular using his notation in which $\underline{j}$ denotes the identity function. This approach involves (i) clearly distinguishing between a function f and a typical value f(x) thereof and (ii) working as far as

https://doi.org/10.1017/S0008439500029234 Published online by Cambridge University Press