Adkins, William A.; Weintraub, Steven H.

Algebra. An approach via module theory. (English) Zbl 0768.00003

Graduate Texts in Mathematics. 136. New York: Springer-Verlag. x, 526 p. (1992).

From the preface: "Perhaps the principal distinguishing feature of this book is its point of view. Many textbooks tend to be encyclopedic. We have tried to write one that is thematic with a consistent point of view. The theme, as indicated by our title, is that of modules (though our intention has not been to write a textbook purely on module theory). We begin with some group and ring theory, to set the stage, and then, in the heart of the book, develop module theory. Having developed it, we present some of its applications: canonical forms for linear transformations, bilinear forms, and group representations." The book is very carefully written. All new concepts are illustrated by many examples. Any chapter ends with exercises (totally more than 400). The book will be of use for any person studying the first year graduate algebra course.

Contents:

Reviewer: J.Ponizovskij (St.Peterburg)

MSC:

00A05	Mathematics in general
12-01	Introductory exposition (textbooks, tutorial papers, etc.) pertaining to field theory
13-01	Introductory exposition (textbooks, tutorial papers, etc.) pertaining to commutative algebra
15-01	Introductory exposition (textbooks, tutorial papers, etc.) pertaining to linear algebra
16-01	Introductory exposition (textbooks, tutorial papers, etc.) pertaining to associative rings and algebras
20-01	Introductory exposition (textbooks, tutorial papers, etc.) pertaining to group theory