FC-group (one in which the conjugacy classes are finite), and on normal subgroups of $U(\mathbf{Z}/n\mathbf{Z}[G])$.

The third chapter of the book concerns the isomorphism problem discussed earlier, i.e. the problem of determining when $RG \cong RH$ implies $G \cong H$. Many basic results are discussed, but Dade's important example is unfortunately omitted. Chapter IV deals with the related problem of uniqueness of the coefficient ring: does $RG \cong SG$ imply $R \cong S$? As for the isomorphism problem, it is easy to see that the answer is negative in general, but one may still search for special conditions under which it becomes affirmative. Since little is known about this problem, the author confines his attention to the case where $G = \langle x \rangle$ is infinite cyclic. Hence, RG in this case is the ring $R\langle x \rangle = R[x, x^{-1}]$ of Laurent polynomials over R. For this special context, some results of Sehgal and Parmenter are presented, which show the answer to the uniqueness problem to be affirmative for some special classes of rings (perfect, commutative von Neumann regular, commutative local and a few others).

Further, there is a chapter on Lie properties of KG. Here, KG is viewed as a Lie algebra by the usual device of defining $[a, b] = ab - ba$. One may then ask for conditions that KG be solvable, nilpotent or whatever, when viewed as a Lie algebra in this fashion. As a sample, we cite the theorem of Passi, Passman and Sehgal: let K have characteristic $p \geqslant 0$. Then KG is Lie solvable if and only if G is p-abelian, if $p \neq 2$ or $p = 2$ and G has a 2-abelian subgroup of index at most two. (Here, G is called p-abelian if its derived group is a finite p-group; 0-abelian if it is abelian in the usual sense.)

The book concludes with a compilation of research problems which were stated at various points in the text. Forty-two such problems (of clearly variable difficulty) are nicely organized, with comments showing the connections between them. This chapter should be very useful for researchers in the field (especially beginners), and the author is to be congratulated for providing it.

The entire book is well written and carefully organized. It is inherent in the material that some of the proofs are computational and somewhat boring, but the dilettante can easily skip over the tedious parts, and follow the flow of ideas. The format and typography are uninspired, but straightforward enough to be undistracting. In all, this book is quite pleasing, as specialized works go, and I think that anyone with any interest in group rings will find some valuable nuggets in it.

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K-theory, an introduction, by Max Karoubi, Springer-Verlag, Berlin, Heidelberg, New York, 1978, xviii + 308 pp., $39.00.

What is a real vector space of dimension -2? What is an abelian group of order $1/3$? Assuming that the reviewer retains some measure of sanity, which