

- [M1] S. Montgomery, *Outer automorphisms of semiprime rings*, J. London Math. Soc. **18** (1978), 209–220.
- [M2] —, *Fixed rings of finite automorphism groups of associative rings*, Lecture Notes in Math., vol. 818, Springer-Verlag, Berlin and New York, 1980.
- [M3] —, *Prime ideals and group actions in noncommutative algebras*, Invariant Theory, Contemp. Math., vol. 88, Amer. Math. Soc. Providence, RI, (1989), pp. 103–124.
- [Mo] J. A. Moody, *Induction theorems for infinite groups*, Bull. Amer. Math. Soc. (N.S.) **17** (1987), 113–116.
- [NT] Y. Nakagami and M. Takasaki, *Duality for crossed products of von Neumann algebras*, Lecture Notes in Math., vol. 731, Springer-Verlag, Berlin and New York, 1979.
- [NA] T. Nakayama and G. Azumaya, *On irreducible rings*, Ann. of Math. (2) **48** (1947), 949–965.
- [N] E. Noether, *Nichtkommutative algebra*, Math. Z. **37** (1933), 514–541.
- [P1] D. S. Passman, *The algebraic structure of group rings*, Wiley-Interscience, New York, 1977.
- [P2] —, *Semiprime crossed products*, Houston J. Math. **11**(1985), 257–268.
- [P3] —, *Prime ideals in polycyclic crossed products*, Trans. Amer. Math. Soc. **301** (1987), 737–759.
- [Q] D. Quinn, *Integrality over fixed rings*, J. London Math. Soc. **40** (1989), 206–214.
- [Ri] M. A. Rieffel, *Actions of finite groups on C^* -algebras*, Math. Scand. **47** (1980), 157–176.
- [R] J. E. Roseblade, *Prime ideals in group rings of polycyclic groups*, Proc. London Math. Soc. **36** (1978), 385–447.
- [vdW] B. L. van der Waerden, *A history of algebra*, Springer-Verlag, Berlin and New York, 1985.
- [W] J. H. M. Wedderburn, *A type of primitive algebra*, Trans. Amer. Math. Soc. **15** (1914), 162–166.
- [Z] A. E. Zaleskii, *Irreducible representations of finitely-generated nilpotent torsion-free groups*, Math. Notes **9** (1971), 117–123.
- [ZN] A. E. Zaleskii and O. M. Neroslavskii, *On simple Noetherian rings*, Proc. Akad. Byelorussia SSR (1975), 38–42. (Russian)

SUSAN MONTGOMERY

UNIVERSITY OF SOUTHERN CALIFORNIA

BULLETIN (New Series) OF THE
 AMERICAN MATHEMATICAL SOCIETY
 Volume 24, Number 2, April 1991
 ©1991 American Mathematical Society
 0273-0979/91 \$1.00 + \$0.25 per page

Perfect groups, by Derek F. Holt and W. Plesken. Oxford University Press, Oxford, New York, 1989, xii + 364 pp., \$70.00. ISBN 0-19-853559-7

Around 1980 the completion of the classification of the finite simple groups was announced (see [G]). Group theorists of a