



MINIMAL FINITE SIMPLE GROUPS WITHOUT THE BASIS PROPERTY

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Abstract

In [G. Higman, Finite groups in which every element has prime power order, J. London Math. Soc. 32 (1957), 335-342], it is shown all different kinds of solvable groups whose elements are of prime power orders. It is a very necessary step to investigate and classify all finite groups with the basis property, which are demonstrated in [A. Al-Khalaf, Frobenius groups with basis property, Baath Uni. J. Math. 44 (1993), 187-210]. In this work, we classify all minimal finite groups that do not possess the basis property while their proper subgroups do. Also, we emphasize the simple finite groups of this class of groups.

Keywords and phrases: basis property, weakly primary group, quasiprimary, metacyclic, semisimple, Suzuki group, completely reducible, minimal without the basis property.