Year: 2020 Vol.: 96 Fasc.: 1-2

Title: On the residual of a finite group with semi-subnormal subgroups

Author(s): Alexander Trofimuk

A subgroup A of a group G is called seminormal in G, if there exists a subgroup B such that G = AB and AX is a subgroup of G for every subgroup X of B. We introduce the new concept that unites subnormality and seminormality. A subgroup A of a group G is called semi-subnormal in G, if A is subnormal in G or seminormal in G. In this paper, the \mathfrak{F} -residual of a group G = AB with semi-subnormal subgroups A and B such that $A, B \in \mathfrak{F}$, where \mathfrak{F} is a saturated formation and $\mathfrak{U} \subseteq \mathfrak{F}$, is studied. Here \mathfrak{U} is the class of all supersoluble groups and the \mathfrak{F} -residual of G is the intersection of all those normal subgroups N of G for which $G/N \in \mathfrak{F}$.

Address:

Alexander Trofimuk Department of Mathematics and Programming Technology Gomel Francisk Skorina State University 246019 Gomel Belarus