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On c -normal maximal and minimal subgroups of Sylow p -subgroups of finite groups. (English)

Zbl 1050.20010

Arch. Math. 80, No. 6, 561-569 (2003).

A subgroup H of a finite group G is said to be c -normal in G if there exists a subgroup N of G such that $G = HN$ and $H \cap N$ is contained in $\text{Core}_G(H)$, the largest normal subgroup of G contained in H . For a prime p , the authors study the influence of the c -normality of the maximal subgroups of the Sylow p -subgroups of a group and the c -normality of some minimal subgroups on the structure of a group. They find some criteria for a finite group G to be p -nilpotent, p -supersoluble, or to belong to a saturated formation.

Reviewer: [Adolfo Ballester-Bolinches \(Burjasot\)](#)

MSC:

[20D20](#) Sylow subgroups, Sylow properties, π -groups, π -structure

[20D10](#) Finite solvable groups, theory of formations, Schunck classes, Fitting classes, π -length, ranks

[20D40](#) Products of subgroups of abstract finite groups

Cited in **2** Reviews

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Keywords:

finite groups; maximal subgroups; Sylow subgroups

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