عنوان مقاله:

An Upper Bound for the Index of the Second n-Center Subgroup of An n-Abelian Group

محل انتشار:

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خلاصه مقاله:

Let n be a positive integer. A group G is said to be n-abelian, if (xy)n = xnyn, for any x, y ∈ G. In ۱۹۷۹, Fay and Waals introduced the n- potent and the n-center subgroups of a group G, as Gn = ⟨[x, yn]|x, y ∈ G⟩, Zn(G) = {x ∈ G|xyn = ynx, ∀y ∈ G}, respectively. Also, the second n-center subgroup, Zn ∈ (G), is defined by Zn ۲ (G)/Zn(G) = Zn(G/Zn(G)). In this paper, we give an upper bound for the index of the second n-center subgroup of any n-abelian .group G in terms of the order of n-potent subgroup Gn

کلمات کلیدی:

n-abelian group, n-center subgroup, n-potent subgroup