

Solvability and nilpotency of expanded groups with chain conditions

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Abstract. An earlier paper by the authors on abelian and central factors of expanded groups obtained a list of cases where solvability (nilpotency) of the group reduct of the expanded group, viewed as a nearring module over the nearring of 0-preserving polynomial functions of the expanded group, implies solvability (nilpotency) of the expanded group provided the expanded group has no nonabelian factors of order 2. In this note, we shall extend this list to include the cases where the expanded group has the ascending or descending chain condition on its ideals.

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