ON THE STRUCTURE OF SOME GROUPS
CONTAINING $L_2(7)$ wr $PSL(3, 3)$

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Abstract

In this paper, we generate the wreath product $L_2(7)$ wr $PSL(3, 3)$ using only two permutations. Also, we show the structure of some groups containing the wreath product $L_2(7)$ wr $PSL(3, 3)$. The structure of the groups founded is determined in terms of wreath product $(L_2(7)$ wr $PSL(3, 3))$ wr C_k. Some related cases are also included. Also, we show that S_{91k+1} and A_{91k+1} can be generated using the wreath product $(L_2(7)$ wr $PSL(3, 3))$ wr C_k and a transposition in S_{91k+1} and an element of order 3 in A_{91k+1}. We also show that S_{91k+1} and A_{91k+1} can be generated using the wreath product $L_2(7)$ wr $PSL(3, 3)$ and an element of order $k + 1$.