

ON THE STRUCTURE OF SOME GROUPS CONTAINING $\mu_9 wr \mu_{11}$

Basmah H. Shafee

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Abstract

In this paper, we will generate the wreath product $\mu_9 w r \mu_{11}$ using only two permutations. Also, we will show the structure of some groups containing the wreath product $\mu_9 w r \mu_{11}$. The structure of the groups founded is determined in terms of wreath product $(\mu_9 w r \mu_{11}) w r C_k$. Some related cases are also included. Also, we will show that S_{99k+1} and A_{99K+1} can be generated using the wreath product $(\mu_9 w r \mu_{11}) w r C_k$ and a transposition in S_{99k+1} and an element of order 3 in A_{99K+1} . We will also show that S_{99k+1} and A_{99K+1} can be generated using the wreath product $\mu_9 w r \mu_{11}$ and an element of order k+1.

Keywords and phrases: wreath product, linear group.

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