



**BINARY TREES AND LATTICES OF A FINITE
ABELIAN p -GROUP OF RANK TWO**

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Abstract

Let G be a finite Abelian p -group of rank two. In this paper, we enumerate maximal chains, describe a method of constructing a binary tree on the basis of a subgroup lattice of G . The interesting problem of finding the number of maximal chains on the lattice is reduced to a counting technique on the derived binary tree. We illustrate with a specific example on a group of suitable order.

Keywords and phrases: Abelian group, maximal chains, subchains, binary tree.

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