CREATIVE MATH. 12 (2003), 11 - 14

Some geometric transformations and their connections to complex numbers

GHEORGHE MICLĂUŞ

ABSTRACT. In the twelve form textbooks ([2], [3]) are presented some groups of geometric transformations: homotheties, translations, rotations etc.

In this paper we will present two geometric transformations and we will show their relationship to groups of complex functions of the same type, namely isomorphic structures: the group of the rotations of a polygon with n vertices and Klein's group.

At the end, we will show that the type of the group of the rotations of a regular polygon with four vertices (the square) and Klein's group of geometric transformations exhaust all types of groups of order 4.

COLEGIUL NAȚIONAL "MIHAI EMINESCU" MIHAI EMINESCU 5, 440014 SATU MARE, ROMÂNIA

 $E ext{-}mail\ address: miclaus5@yahoo.com}$