

1135-05-1960 **Lindsey-Kay Lauderdale*** (llauderdale@uttyler.edu). *On the fixing sets of finite groups*. Preliminary report.

The *fixing number* of a graph Γ is the minimum number of labeled vertices that, when fixed, remove all nontrivial automorphisms from the automorphism group of Γ . The *fixing set* of a finite group G is the set of all fixing numbers of graphs whose automorphism groups are isomorphic to G . Previously, authors have studied the fixing sets of both abelian groups and symmetric groups. In this talk, we will discuss the fixing sets of dihedral groups and symmetric groups. (Received September 25, 2017)