Zoheir Chebel University, Bordj Bou Arreridj, Algeria Abstract

The notion of hom-groups is defined as a generalization of a non-associative group. They can be obtained by twisting the associative operation with a compatible bijection mapping. In this, presentation, we give some definitions and properties related to Hom-groups. We introduce the different notions of actions concerning a Hom-groups. At the end, we give the different Sylow's Theorems for the Hom group with their proofs.