## THE COMMUTATOR SUBGROUP IS NORMAL – PRACTICE

<u>Definition</u>: The commutator or derived subgroup of a group *G*, denoted by *G'*, is the set of all finite products of commutators in *G* where a commutator is a product of either the form  $a^{-1}b^{-1}ab$  or  $aba^{-1}b^{-1}$ .

<u>Theorem</u>: The commutator (or derived) subgroup of a group G is normal in G.

Proof: