1124-20-10 **David Terna Achaku*** (achakudt@yahoo.co.uk), Federal University Lafia, P.M.B. 146, Lafia, Nigeria. *On Character of index 2 Subgroups.*

In this work we use constructed character tables of symmetric groups, tensor product and orthogonality relations as our working tools. For (ρ, V) as a representation of the group G, and $\rho : G \longrightarrow GL(V)$ as a group homomorphism and placing a restriction on the map ρ to H a subgroup of G denoted as $\rho|H$ we obtained a representation for H. We then define an inner product on $[G]$ as $\langle , \rangle_H$ thinking of H as a group in itself. We were then ready and proved that characters of S_n always take values in integers however, this is not true for A_n and may not be even real valued.

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