1056-20-277   **Joseph Kirtland*** (`joe.kirtland@marist.edu`), Department of Mathematics, Marist College, 3399 North Road, Poughkeepsie, NY 12601. *Finite Groups with Permutable Supplemented Subgroups.* Preliminary report.

A finite group $G = ABC$ for subgroups A, B, and C of G if for each element $g \in G$, then $g = abc$ where $a \in A, b \in B$, and $c \in C$. A finite group $G = (AB)C$ if $G = ABC$ and AB is a subgroup of G. However, if $G = (AB)C$ it does not imply that $G = A(BC)$ or that BC is a subgroup of G. This talk will investigate groups which do satisfy this transitivity condition ($G = (AB)C$ implies $G = A(BC)$) for proper subgroups. This examination will lead to a study of p-groups in which each subgroup not contained in the Frattini subgroup permutes with every other subgroup in the group. (Received August 24, 2009)

1