1064-20-263 **Anthony B Evans*** (anthony.evans@wright.edu), Dept. of Math. and Stat., Wright State Univ., Dayton, OH 45435. *The existence of strong complete mappings of finite groups.* Preliminary report.

A strong complete mapping of a group G is a bijection $\theta\colon G \to G$ for which both mappings $x \mapsto x\theta(x)$ and $x \mapsto x^{-1}\theta(x)$ are bijections.

A problem of interest is that of characterizing groups that admit strong complete mappings. We will study this problem with particular emphasis on finite abelian groups. (Received September 12, 2010)