

1035-N1-423

Craig M Johnson* (johnsonc@marywood.edu), 2300 Adams Ave, Scranton, PA 18509. *Group Structure in Musical Inversions.*

A musical inversion of a segment of notes across a pivot note symmetrically reflects each note across the pivot. If an entire piece of music in the key of x is inverted across a pivot note p , let $I_p(x)$ be the new key of the inverted piece. Six particular pivot notes give a set of inversions I_p that can be given a natural structure that identifies the set as a coset of a subgroup of the dihedral group of order 12. This is an example of the use of music to provide an effective introduction to concepts in group theory. (Received September 06, 2007)