MATH 251: ABSTRACT ALGEBRA I
WORKSHEET, DAY #27

Problem 1. Let $\sigma = (1\ 2\ 3\ 4\ 5) \in S_5$. Find $\tau \in S_n$ such that $\tau\sigma\tau^{-1} = \sigma^2$.

Problem 2. Let G be a group and suppose that the center $Z(G)$ has index n. Prove that every conjugacy class in G has at most n elements.

Date: Monday, 29 October 2007.