

Math 331 Spring 2006
Assignment 5: Due by March 6

1. Find all the subgroups in S_3 . Is S_3 abelian ? Justify your answer.
2. If G is a group in which $x^2 = 1$ for all x in G , prove G must be abelian.
3. Let G be a group of order 4. Prove that either G is cyclic or $x^2 = 1$ for all x in G .