

Math 126, Problem Set 4

This problem set is due November 2, 1998.

1. (25 pts.) Let G be a group of order p^2 where p is a prime. Prove that G is a commutative group.
2. (25 pts.) Problem 4, page 240, James and Liebeck.
3. (25 pts.) Problem 7, page 306, James and Liebeck.
4. (25 pts.) Decide on a topic for your final project. Write a short paragraph explaining what you plan to do. The final project consists of a paper less than six pages in length and an oral presentation which should take about half a class. The written paper is due Wednesday, December 2, 1998. The presentations will be given in class in December. The topic you choose should be relatively advanced. The aim of the paper is to explain the mathematics along with its details. The oral presentation should be aimed at explaining what you learned to the rest of the class.