

MATH 126
SOLUTION SET 4

NILS R. BARTH

1. Recall that the sum of the squares of the dimensions of the characters equals the order of the group. Thus, G cannot have both the trivial character and a character of dimension p , so all characters have dimension 1, so G is commutative.
2. See James and Liebeck, page 391.
3. See James and Liebeck, page 402.
4. N/A.