

MATH 1530 ABSTRACT ALGEBRA
PROBLEM SET 7, DUE THURSDAY MARCH 23 1PM IN CLASS

1. List the 12 elements of A_4 . No need to prove anything.

Optional and ungraded: Convince yourself that A_4 is isomorphic to the group of rigid motions of a regular tetrahedron.

2. Dummit and Foote page 95–96, problems 8, 18

3. Dummit and Foote page 106, problem 9.

Optional and ungraded: page 106 problem 10, proving the whole theorem.

4. Dummit and Foote page 111, problems 2, 12.