

MATH 21-373 - ALGEBRAIC STRUCTURES

Homework Assignment 5

- (1) 2.7.3
- (2) 2.7.9
- (3) 2.7.11
- (4) 2.7.13
- (5) 2.7.16
- (6) 2.7.17
- (7) 2.7.21
- (8) Prove that the group of rigid symmetries of a cube is isomorphic to S_4 . (Hint: A rigid symmetry of the cube gives a permutation of the 4 pairs of antipodal vertices.)