

Math 344 – Fall 08
Section 001 - Caughman
Homework #2
Due Thursday 10 – 9

1. Can a finite 2-D figure with a non-trivial rotation symmetry have exactly one reflection (flip) symmetry? Justify.

2. Determine how many symmetries a square has. For each symmetry:
 - a. Write a verbal description of the symmetry.
 - b. Draw a diagram to illustrate the symmetry (show how the figure moves and what happens to the points).
 - c. Express each symmetry in terms of F (where F is an appropriately chosen flip symmetry) and R (where R is an appropriately chosen rotational symmetry).