

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).