

**Instructions.** Write all answers clearly on one piece of paper, and put all group members' names on the top of the paper. If you talk, you must do so **very quietly!**

1. Name the two types of symmetry groups introduced in Chapter 1.
2. Do all of the pairs of dihedral symmetries of the square commute (under composition)?
3. What is the purpose of a Cayley table of the set of motions of a plane figure?
4. Give an example of an object which might have a  $D_5$  dihedral symmetry group.