

**MATH 4306 Lab Activities 12**  
**Submissions due Thursday, May 2, 2002**

All group members must sign the submission attesting to the fact that they participated fully in doing this assignment.

Be sure to start ISETL with the .ini file that will give you access to the funcs as discussed in class last time. You should be able to start the activities immediately after arriving in class.

1. Copy the funcs from the wiki page <http://www.sci.tamucc.edu/wiki/Math4306/FunctionsForActivities4pt1> into an active ISETL session per the instructions at the top of that page.

SUBMIT: A statement that you have successfully copied the func name `_group_cosets` into an ISETL session.

2. Do the activity in Section 4.1.1, #2 (a,c,e,f,h,i,j), p 120. Be sure to use the obvious operation. Also, you can create a set in ISETL to answer questions i,ii.

SUBMIT: answers to questions i-v for each of the pairs.

3. Do the activity in Section 6.1.1, #3, p. 120.

SUBMIT: For each case in which  $\text{GlmodH}$  or  $\text{GrmodH}$  is not a group, the list of group properties not satisfied.

4. Do the activity in Section 6.1.1, #4, p. 120.

SUBMIT: A Cayley (multiplication) table for each group, along with the identity for the group and the inverse of each element. Also, identify isomorphic groups.

5. Read the activities in Section 6.1.1, #5,6, p. 121.

SUBMIT: Nothing