MATH 4306 Lab Activities 9
Submissions due Thursday, April 4, 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. Do the activity in Section 3.3.1, #1, p. 108.

SUBMIT: A statement that you have been able to successfully run the func PR on the given sets. Hint: Don't forget to use the built in Zmod, amod, S3, S4, and composition .

2. Do the activity in Section 3.3.1, #2, p 109.

SUBMIT: A statement that H .oo x = x .oo H for every, some or never for each subgroup H. Recall that the notation used on page 88 is cycle notation. Using tuple notation, K1 = {[1,2,3,4], [2,1,3,4], [1,2,4,3], [2,1,4,3]}.

3. Do the activity in Section 3.3.1, #3, p. 109.

SUBMIT: Answers to the questions for each of the given situations. Recall that the subgroup generated by 6 in Z24 is {6, 6+6, 6+6+6,…}. You can enter it in ISETL by naming elements or the gen func if you have it.

4. Do the activity in Section 3.3.1, #4, p. 109.

SUBMIT: Your observations about the results of the previous activities.

5. Do the activity in Section 3.3.1, #5, p. 109.

SUBMIT: A statement that you have working funcs left_coset and right_coset.

6. Do the activity in Section 3.3.1, #6, p. 109.

SUBMIT: A statement that you have a working func GmodH.

7. Do the activity in Section 3.3.1, #8, p. 109.

SUBMIT: A list of situations for which GmodH is a group.