

MATH 4306 Lab Activities 7
Submissions due Thursday, March 7, 2002

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

1. Read the activities in Section 3.1.1, #1,2, p. 83. You can copy the text of the `proc name_group` from the webpage <http://www.sci.tamucc.edu/wiki/Math4306/FunctionsForActivities3pt1>.

SUBMIT: Nothing. Please use the `proc name_group` in further activities.

2. Do the activity in Section 3.1.1, #3, p83.

SUBMIT: A list of which sets H were subgroups of the given groups G and a list of the sets H which weren't. Be sure to explain those that weren't. Remember that you will need to have defined the `func is_group` before you do this. You can find many of the `funcs` needed to write `is_group` at <http://www.sci.tamucc.edu/wiki/Math4306/FunctionsForActivities2pt1>

3. Do the activity in Section 3.1.1, #4 a - h, p. 84.

SUBMIT: A list of which sets H are subgroups and which are not. Also, include one copy of the text of your code for the `func is_subgroup`.

4. After completing Part A or B below, do the activities 13 and 14, pp 85,86.

SUBMIT: Nothing.

Do Part A below if the last digit of the student id number of the last person in your group (alphabetically) is even and Part B if it is odd.

Part A.

A1. Do the activity in Section 3.1.1, #6, p 84.

SUBMIT: The list of integers from 1 to 12 for which there is a subgroup of Z_{12} of that order.

A2. Repeat the activity in Section 3.1.1, #6, p 84 for the groups Z_{11} (and integers j from 1 to 11) and S_3 (and integers j from 1 to 6).

SUBMIT: The lists of integers for which there are subgroups of Z_{11} and S_3 of that order.

A3. Do the activity in Section 3.1.1, #10, p 85.

SUBMIT: Your relationship.

Part B.

B1. Do the activity in Section 3.1.1, #11 , p. 85.

SUBMIT: Your ISETL work on your efforts to find a conjugate of H by g that is a subgroup and one that is not.

B2. Do the activity in Section 3.1.1, #12, p. 85.

SUBMIT: Your ISETL work on your efforts to find a right coset of H that is a subgroup and one that is not.