Getting the Most out of Homework Study Groups

A study group is useless if the smartest person is demonstrating the problems. You will learn more by watching mistakes being made, and from having your own mistakes brought to your attention. Everyone in a study group should take a turn explaining a homework problem to members of the group. It will be important then to find a group of students who are working and thinking about the kinds of problems you are working on. When you go to the evening Homework Study Group Sessions you should bring the solutions to the homework problems you have already solved, the list of problems you are having difficulty solving, and your textbook with you. The session will provide an opportunity for students to work together on the problems they find most challenging.

If you attend the session before you have completed some portion of the assignment yourself, you should try to find other students who have not yet started the homework, and work for a time by yourself and in consultation with those other students. We anticipate that there will be four kinds of groups that form somewhat naturally at the study group sessions:

- A. Groups of people who have completed almost all of the assignment and are interested in understanding how to solve a very few and likely very challenging problems.
- B. Groups of people who have completed at least half of the assignment, including most or all of the computational problems.
- C. Groups of people who are having trouble getting started.
- D. People working alone. Some people may choose to work alone for a time and to check in with a group when they want to compare what they have been thinking about with others.

Students are free to join any group, and to move from group to group. But when a group reaches 4 members it should split into two smaller groups of 2 or 3, so that everyone can participate.

HSG facilitators will try to help students find a productive group to work with by observing their level of participation in the sessions. Facilitators can suggest that students might want to join a different group that is working on problems that they could participate in discussing and solving.

Studying Math is Different from Studying Other Subjects

- Math is learned by **doing** problems. Do the homework regularly (even before it is due) and discuss your solutions and ideas with others. Solving problems helps you think about the concepts and techniques you need to know, and how to apply them.
- Math is NOT a spectator sport. You will get very little out of watching or listening to other people solve problems, unless you then try to solve the problem or something like it yourself. The things you will remember best, and that will form the basis of real understanding, are the things you have figured out for yourself.