Project Based Math 112, Fall 2001 Instructions for Projects

Group work: Be sure you get off to an early start, since projects require extensive thought and development of ideas as well as clear, concise writeups. Your group should meet shortly after the project is assigned to map out a solution strategy, and several more times during the actual solution period. Often when a group is writing up its report, someone finds that there is an error (or gap) in the proposed solution. Therefore, you should aim to have your report completed well before it is due. All the members of your group will receive the same grade.

Consultations: Each group will meet privately at least once with their instructor before the project is due. They will try to point you away from undue difficulties without giving away the heart of the project. You may consult with your instructor at any other time, or even the instructor of another Projects section, provided that instructor is willing and able to meet with you. You may not consult with students in other groups, or any other person other than the projects instructors and your group members. You may consult textbooks for formulas, etc, but not for copying without thinking. You must understand each step of every part of your solution.

Formal writeup: Type your final report on standard $8.5'' \ge 11''$ paper. Make sure you read *A Guide to Writing in Mathematics Classes* for details on what is expected. When you are finished with a part of the project, you might want to write up that part, to help avoid an all nighter the night before the project is due. Also, you should avoid a group setup where one person does the "thinking" and another types the whole report.

Audience: In writing your report, assume the reader is a student in another calculus class who has not worked on this project. Take as much pride in your report as you would if you were writing it for an employer on whom you wish to make a favorable impression.

Meetings: Meetings should have some structure and a time limit. Of course, if you are making progress by leaps and bounds you can extend the meeting, so long as no one has a conflict. You should each think about the project before the meeting. Before the end of any meeting you should decide what is to be done (and who is doing it) before the next meeting.

Log: Your group should keep a log. The log should be handed in with your final report. It should include at least the following: dates and times the group met, members who attended that meeting, brief summary of any decisions reached (e.g. Mary will type up this part, Pat will draw a graph, Chris will investigate $\alpha = 4$ for next time, etc.)

Evaluation of the experience: Each member should hand in an evaluation of the group's performance. Did your group work well cooperatively? Explain why or why not. These reports should be individual, and they will keep them confidential. These reports will not be used in assigning grades for the project. You should also include in the evaluations any suggestions, improvements, or comments about the project.