Due date: Wednesday, December 6, 1995 in class.

You are to work in your present groups that were assigned the last time we handed out playing cards. These groups should not be any larger than 4 persons and no fewer that two people. Each group will turn in one paper with all your names on it. To try to insure that everyone does their share of the work each name should have a percentage after it that represents the percentage of the work that the group as a whole felt that each person did. Thus if the people in the group are A, B, C, and D and everyone put about the same amount of work into the project, then everyone would be rated 25%. If however person A put in a lot of effort and person C only only did a little bit the numbers might look like A 40%, B 25%, C 10% D 25%. As long as all the numbers are above 10 % this will not effect the grade, but anyone who does less than 10 % will be penalized.

I am going to be harder on style this time. I want to emphasize that it is **not** important to use a word processor or the like to to these assignments. You are much better off spending the time on rereading and rewriting what you have done. What is the best way to get a good write up is to have one or more members of the group write a first draft and then have other members either write the second draft. Keep going back and forth like this until you have a copy you are all happy with.

The problem is the Fermentation Problem in your text (exercises 8–11 on pages 172–173). Your solutions should be written up as if they were to be included in a solution manual, readable by, and useful for, students like yourselves. You may use Maple or calculators, but you should report exactly what you used these tools to do. If you need help printing worksheets or graphs we can certainly help you. Your best bet will be to modify the worksheets `growth.ms` and/or `volterra.ms`.

To encourage you to spend as much time on the writing as the mathematics I will be willing to give you all the help you want on the mathematics, using the computer, etc., up until a couple of days before the project is due at which time you have to do it all yourself. As I am willing to give very big hints, and even help with the work, it will is a very bad idea not to start soon.