Project 2

INSTRUCTIONS:

1. <u>Exchange contact information with your group members.</u> This time your group will be assigned. I have tried to mix up the groups as much as possible. Be sure you have the phone number (and e-mail address) of each member of your group.

2. <u>Select your project.</u> Choose either A. or B. from the list of projects. Note that, in addition to including answers to all questions posed in the text, you must *identify* and *investigate* one additional question related to the problem. (This question often takes the form of a "what if" question: What if some of the parameters are changed? What if the model is changed? What if we ignore physical limitations and consider the model from a purely mathematical point-of-view? (*e.g.*, What if negative populations are considered in the predator-prey model?)

3. <u>Prepare your report.</u> Be sure your report is neat, well organized, answers each question, and – *this is very important* – written using complete English sentences. Pay special attention to the comments in the text about what your report should contain. NOTE: A Maple worksheet is <u>not</u> a report. You should use a genuine word processor; formulas may be entered manually and tables and graphs may be pasted into the final document. You may attach your Maple worksheet(s) *with all output and plots deleted* as an appendix to your report.

4. <u>Preliminary review.</u> I will comment on and critique any draft project report that is turned in by 5P.M. on April 20. (Preliminary reports are optional, but highly recommended.)

5. <u>Feedback and assistance.</u> I will provide feedback and general guidance on the projects until Tuesday, April 22. After this you are on your own.

6. <u>Final report.</u> The final report is due before 5P.M. on Monday, April 27, 1998.

PROJECT DESCRIPTION:

A. RLC Circuits (Lab 3.2, p. 341)

B. Predator-prey system with periodic prey immigration (Lab 5.2, p. 466)

GRADING CRITERIA

CATEGORY	POINTS
Mathematical Content (completeness, accuracy, correctness of results)	45
Presentation (effective use of mathematical notation, and graphics)	15
Creativity (exploration of a significant original and relevant question)	8
Style (appearance, English usage and grammar)	7
Total	75