Math 331.1   Problem Set 5   Fall 2005

Due: Monday, Oct. 24, start of class

1. (a) Do page 192, Exercise 2.

    (b) Do page 192, Exercise 4.

2. Do page 192, Exercise 10 (after doing Exercise 7, which you should *not* turn in).

3. Do page 194, Exercise 16.

4. Do page 207, Exercise 4.

5. Do page 208, Exercise 10. Get the approximate solution by Euler's method on the *t*-interval $[0, 20]$ and start with $\Delta t = 0.25$. Be sure you're using Euler's method and not some more sophisticated one!

    [For this problem, you'll need to use Jode or another program, *not* the DETools (because the Euler's Method for Systems tool does not allow an arbitrary system).]

6. Do page 208, Exercise 12.

7. Do page 208, Exercise 14.