Problem Set 1 Differential Equations Due 1/30/06

You are encouraged to work in groups of two to four on this assignment and make a single group submission. Each problem is worth 5 points. For full credit indicate clearly how you reached your answer. All work must be legible and submitted on clean paper without ragged edges.

- 1. Find a general solution to the differential equation $\frac{dP}{dt} = kP(1-P)$.
- 2. Do problem #41 in §1.2, but with rates of 6.5% and 6% with 3 points.
- 3. Do problem #24 in §1.3.
- 4. Do problem #46 in §1.6.