Problem Set 3    Differential Equations    Due 4/2/08

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. Do #10 in §3.4 (you don’t need to turn in part c).

2. Follow the same directions for \( \frac{dY}{dt} = \begin{pmatrix} -3 & 10 \\ -1 & 3 \end{pmatrix} Y \), with initial condition \( Y_0 = (3,0) \).

3. Do #18 in §3.4

4. Do #20 in §3.4