Math 256
Applied Honors Calculus IV: Differential Equations, Fall 2007

Homework Set 10
Due Friday, Nov 17, 2007

Reading. Chapter 3 of Keith Miller's Linear Algebra Notes. Omit topics following chapter review. Then the Black Book and the m-file Miller128-10.m for eigenvalues and eigenvectors.

Read Boyce and DiPrima 7.2, 7.3 to see what they propose for Linear Algebra.

Boyce and DiPrima section 7.1. Introduction of systems of differential equations.

Problems to Study.

- Indpendence etc. from Miller. Problems to study were suggested in HW9.

- Eigenvector/eigenvalue problems from Boyce and DiPrima. §7.3. 17-22, 24.

- Systems from mechanics, electromagnetism and mixing. Boyce and DiPrima §7.1/17-23. The mixing problems are accessible to all. The others have some baggage either from mechanics or electricity and magnetism.

Problems to Hand In.

- Independence from Boyce and DiPrima. §7.2/ 9,10

- Eigenvalues/eignevectors from Boyce and DiPrima. §7.3/ 15, 16, 23.