
Differential Equations

Math 341 Fall 2010
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MWF 2:30-3:25pm Fowler 307
<http://faculty.oxy.edu/ron/math/341/10/>

Worksheet 26: Wednesday November 17

TITLE Review for Exam #2

CURRENT READING Blanchard, 3.1-3.7 and 5.1-5.3

Homework Assignments due Wednesday November 18

Section 5.4: 2, 13, 14, 16, 17, 19.

Chapter 5 Review: 3, 4, 5, 6, 7, 8, 11, 12, 25, 27, 28.

SUMMARY

We shall review the topics for Exam #2 (Chapter 3 and Chapter 5).

Gradient Systems and Lyapunov Functions

Hamiltonian Systems

The Linearization Technique

Trace-Determinant Plane

Second-Order Linear ODEs

Linear Systems of ODEs with Repeated Eigenvalues or Eigenvalues Equal to Zero

Linear Systems of ODEs with Complex Eigenvalues

Linear Systems of ODEs with Real Eigenvalues

Straight Line Solutions

Linear Systems of ODEs