
Differential Equations

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

Week 9

Monday October 25 : *Worksheet 17*

Linear Systems with Real Eigenvalues. We'll be introduced to a new kind of equilibrium point which is neither a sink or source. It's called a saddle!

Reading:

Blanchard, Section 3.3

Homework #17:

Blanchard, Section 3.3: 3, 4, 7, 8.

Wednesday October 27 : *Worksheet 18*

Linear Systems with Complex Eigenvalues We continue our march through analyzing all possible kinds of systems of linear ODEs by considering matrices that have complex eigenvalues.

Reading:

Blanchard, Section 3.4

Homework #18:

Blanchard, Section 3.4: 1, 2, 3, 4.

Friday October 29 : *Worksheet 19*

Special Cases: Repeated Eigenvalues. We conclude our survey of linear systems of ODEs by considering some of the special cases of matrices with repeated eigenvalues.

Reading:

Blanchard, Section 3.5

Homework #19:

Blanchard, Section 3.5: 3, 4, 9, 10, 17, 18.

EXTRA CREDIT HOMEWORK (DUE FRI NOV 5)

Blanchard, Chapter 3 Review: 4, 8, 11, 12, 13, 19, 20.

Blanchard, Chapter 4 Review: 1,2,3,4.