
Linear Systems

Math 214 Spring 2006
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Fowler 307 MWF 2:30pm - 3:25pm
<http://faculty.oxy.edu/ron/math/214/06/>

Week 9

Monday March 27 *Class 22:*

More Eigenvalues and Eigenvectors. We will be introduced to the concept of eigenvectors and eigenvalues of a matrix for $n \times n$ matrices.

Reading:

Poole, Section 4.3

Homework #21: (due in *Class 23*)

Poole, Section 4.3: 4,**5**,10,15,16,**17,18**,20,21,**23,33**. EXTRA CREDIT 34,36,38.

Quiz 7 and BONUS QUIZ Due

Wednesday March 29 *Class 23:*

Diagonalization. We will learn how to exponentiate a matrix by factoring it as a product of matrices where one of them is diagonal.

Reading:

Poole, Section 4.4

Homework #22: (due in *Class 24*)

Poole, Section 4.4: 2,5,6, **9, 10, 16,18**,21,22,24,25. EXTRA CREDIT 23.

Friday March 31 *Class 24:*

Computing Eigenvalues. Eigenvalues are cool. We'll learn some actual numerical techniques for computing the eigenvalues of a matrix.

Reading:

Poole, Section 4.5

Homework #23: (due in *Class 25*)

Poole, Section 4.5 : 3,4,5,**6,10,13,15**, 21, 25,**47, 54**. EXTRA CREDIT 45

QUIZ #8