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# Linear Systems

Math 214 Spring 2007  
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Fowler 307 MWF 2:30pm - 3:25pm  
<http://faculty.oxy.edu/ron/math/214/07/>

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## Week 9

**Monday March 26** *Class 22:*

**Determinants.** We will learn all sorts of ways to compute determinants of matrices.

Reading:

Poole, Section 4.2

Homework #20: (due in *Class 23*)

Poole, Section 4.2: 4,6, 7, **10**, 15, 26, 27, 32, **33**, **48**, **49,50,51,52**. EXTRA CREDIT 46.

**QUIZ #7 DUE**

**Wednesday March 28** *Class 23:*

**MORE Eigenvalues and Eigenvectors.** We will expand our knowledge to include eigenvalues and eigenvectors of  $n \times n$  matrices.

Reading:

Poole, Section 4.3

Homework #21: (due in *Class 24*)

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

**Friday March 30** *Class 24:*

**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.

**Quiz #8**