Linear Systems

Math 214 Spring 2006 Fowler 307 MWF 2:30pm - 3:25pm
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Class 30: **Wednesday April 19**

TITLE Review for Exam 2
CURRENT READING Poole 3.5, 3.6, 4.1-4.5, 5.1-5.3

Summary
Let's review the main concepts and ideas in the class since the last exam by engaging in a concept map exercise.

Homework Assignment
NONE. Suggestion: Review Questions at the end of Chapter 4 and Chapter 5

Subspaces Associated with Matrices; Dimension and Basis

Linear Transformations

Applications of Linear Alebra: Graph Theory

Eigenvectors and Eigenvalues of 2x2 Matrices

Determinants

Eigenspaces of $n \times n$ Matrices

Diagonalization and Similarity

Computational Techniques for Computing Eigenvalues

Orhogonality and Projections Revisited

Orthogonal Complements and Orthogonal Projections

Gram-Schmidt Process and QR Factorization

Projection Matrices Formula; Orthogonal Diagonalization

(YOURS:) _____