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# Linear Systems

Math 214 Spring 2008  
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Fowler 309 MWF 9:30 am - 10:25 am  
<http://faculty.oxy.edu/ron/math/214/08/>

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*Class 15: Wednesday February 27*

**SUMMARY** Review for Exam 1

**CURRENT READING** Poole 3.5 and 6.1

## Summary

Let's review the main concepts and ideas in the class so far by engaging in a concept map exercise.

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## *Homework Assignment*

*NONE. Suggestion: Review Questions at the end of Chapter 1, 2 and 3*

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Scalars and Vectors

Lengths and Dot Products

Projections and Equations of Lines

Equations of Planes

Understanding Linear Systems of Equations

Solving Linear Systems of Equations

Reduced Row Echelon Form and Rank

Elimination using Matrix Operations

Linear Independence and Span

Applications of Linear Systems

Matrix Properties

Matrix Algebraic Operations

The Inverse Matrix

Elementary Matrices and the Fundamental Theorem of Inverses (Version 1)

LU Decomposition and Permutation Matrices

(YOURS:) \_\_\_\_\_