

## Concepts that You Should Understand for the Second Midterm:

User-Defined functions

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A linear equation

A system (of linear equations)

Augmented matrix (of a system)

(Row) Echelon Form

Reduced (row) echelon form

Pivots

Pivot columns

Pivot variables

Free variables

Consistent/Inconsistent system

Unique solution

Infinite number of solutions

Parametric vector form

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Linear Independence (of a set of vectors)

Span (of a set of vectors)

Trivial solution

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Linear transformation

Linearity properties

Standard matrix (of a linear transformation)

Domain

Codomain

Range

Onto

One-to-one

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Matrix multiplication

Invertible matrix

Singular matrix

Inverse (of an invertible matrix)

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Markov chains