

**Math 224**  
**Daily Objectives**  
**Class Session 7**  
**Tuesday, September 18, 2007**

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**2.2: Independence and Dimension**

- Definition of rank of a matrix; dimension of row space is equal to the dimension of column space
- Finding a basis for the row space of a matrix, the column space of a matrix, and the nullspace of a matrix
- Rank equation
- Invertibility criterion

**2.3: Linear Transformations of Euclidean Spaces**

- Definition of a linear transformation
- Bases and linear transformations
- Standard matrix representation of a linear transformation