## Math 224 Daily Objectives Class Session 4 Thursday, September 6, 2007

## **1.5:** Inverses of Square Matrices

- Definition of inverse matrix; uniqueness of an inverse
- Definition of an invertible matrix
- Inverse of an elementary matrix
- Computation of  $A^{-1}$
- Inverses of products (Thm. 1.10)
- AC = I if and only if CA = I
- Equivalent conditions for  $A^{-1}$  to exist (Thm. 1.12)
- Solving problems using inverses; multiplication on the left and right