Week 7

Monday March 5 Class 16:

**Subspaces.** We shall introduce the concept of vector spaces and subspaces in a rather formal way.

**Reading:**

Poole, Section 3.5 and Section 6.1

**Homework #15:** (due in *Class 16*)

Poole, Section 3.5, 1,3,4,5,6,7,9,11,12. EXTRA CREDIT 10.

Wednesday March 7 Class 17:

**Basis and Dimension.** We continue to see how linear independence, rank, subspaces, dimension and span all inter-connect with each other.

**Reading:**

Poole, Section 3.5

**Homework #16:** (due in *Class 18*)

Poole, Section 3.5: 17, 18, 21, 24, 39, 40, 41, 42. EXTRA CREDIT 44, 50.

Friday March 9 Class 18:

**Introduction to Linear Transformations.** We begin to examine a graphical interpretation for the matrix operations we have been looking at.

**Reading:**

Poole, Section 3.6

**Homework #17:** (due in *Class 19*)

Poole, Section 3.6: 1,2,3,6,7,15,17,19. EXTRA CREDIT 28

**Quiz #6**