18.06 Problem Set 7
Due Wednesday, 5 November 2008 at 4 pm in 2-106.

Problem 1: Do problems 3 and 4 from section 6.1 in the book.

Problem 2: Do problem 22 from section 6.1.

Problem 3: Do problem 10 from section 6.2.

Problem 4: Do problem 35 from section 6.2.

Problem 5: Do problem 42 section 6.2.

Problem 6: Do problems 1 and 2 from section 8.3.

Problem 7: Do problem 12 from section 8.3.

Problem 8: Do problems 8 and 9 from section 8.5.

Problem 9: 1. If A has all zero eigenvalues is it the zero matrix? 2. If A^2 is the zero matrix , is A the zero matrix? 3. If A^2 is the zero matrix, does A have all zero eigenvalues?

Problem 10: 1. If A has all eigenvalues 1, is it the identity? 2. If A has all eigenvalues 1, what about the inverse of A? 3. Find a non-diagonal 2x2 matrix with eigenvalues x and y.