

Homework Assignment for Week 08

Assigned Nov 04, 2011.

1. Section 6.2: Problems 1(a), 3(a), 5(a), 31.
2. Section 6.5: Problems 4(a,c), 9(a,c), 10, 11.

Remarks: For problem 4 and 9, read Example 3 on page 394 and the lecture slides from last year's course homepage to find out how the permutation matrix P can be obtained (and why so). Next, check out the matlab/octave built-in function 'lu' and see if your answer is correct.

Problem 10 is a demonstration of the application of LU decomposition other than solving a linear system.

3. Review the formula and error bound for finite difference formula. You will still need them, through the rest of the semester.