## Homework Assignment for Week 14

- 1. Section 6.2: Problems 1(a), 3(a), 5(a) (all in paper-and-pencil, no programming).
- 2. Section 6.5: Problems 4(a,c), 9(b), 10(b), 12(d), 13.

Problem 13 is a demonstration of the application of LU decomposition other than solving a linear system. What would be the number of operations (just count multiplications) of straight forward computation of the determinant of an  $n \times n$  matrix? In problem 12(d), just count the number of operations to leading order.