

## Homework 4

**Reading assignment:** Sections 5.4, 11.3, 11.4, 11.5 in the textbook. Chapter 1 (LU factorization) in the *Additional Lecture Notes* on the course website (under **Files/Additional lecture notes**). You can skip section 1.5.

### Homework problems

1. Exercise A5.6 (b).
2. Exercise A6.3.
3. Exercise A6.9.
4. Exercise A6.15.
5. Exercise A6.16.
6. Exercise A7.5.
7. Exercise A7.10. This is an application of the result in Exercise 4.3 on homework 3.