

## Homework 1 — Introduction and Mathematical Tools

**Sections in CLRS:** pp 5–61, 1058–1069, 62–75, 1080–1093. Appendix B.1–B.3 should already be familiar to you—repeat if necessary.

### Exercises:

**pp 13** 1.2–3

**pp 21** 2.1–3 (but not the part about correctness)

**pp 27** 2.2–1, 2.2–3, 2.2–4

**pp 37** 2.3–3, 2.3–7

**pp 50** 3.1–1, 3.1–3, 3.1–4

**pp 57** 3–1 a och c, 3.3 (optional), 3.4

**pp 1062** A.1–1, A.1–7

**pp 1067** A.2–1

**pp 67** 4.1–1, 4.1–2, 4.1–6

**pp 72** 4.2–3, 4.2–4

**pp 75** 4.3–1, 4.3–2

**pp 85** 4.1

**pp 1091** B.5–3, B.5–4

**pp 1092** B–2 a

### Hints:

- Start early, some problems have many subproblems.
- If you have extra time you may want to look at other problems.