

## Assignment #1

**Due:** by 4pm, Feb. 12 (in-class). Late entries will not be accepted. No email submissions (will not be accepted).

**Reading:** Chapter 2 of the course textbook (S. Boyd, L. Vandenberghe, Convex Optimization, Cambridge University Press, 2004). Study carefully all examples, make sure you understand them and can repeat them with the book closed. Remember the learning efficiency pyramid!

- 1) Problem 2.1 in the course text.
- 2) Problem 2.7 in the course text.
- 3) Problem 2.9, (a) and (b), in the course text.
- 4) Problem 2.12, (a) to (e), in the course text.
- 5) Problem 2.15 in the course text, (a) to (g) only.
- 6) Problem 2.16 in the course text.
- 7) Problem 2.25 in the course text.

### **Important rules (deviation will be penalized):**

*Please give your solutions in the order indicated above. Start each new problem on a new page (no 2 problems on the same page).*

Please include in your solutions all the intermediate results and their numerical values (if applicable). Detailed solutions are required, not just the final answers.

Make sure your handwriting is readable and is sufficiently large so it can be read without a microscope; otherwise, it will be ignored.

**Plagiarism** (i.e. “cut-and-paste” from a student to a student, other forms of “borrowing” the material for the assignment) is absolutely unacceptable and will be penalized. Each student is expected to submit his own solutions. If two (or more) identical or almost identical sets of solutions are found, each student involved receives 0 (zero) for that particular assignment. If this happens twice, the students involved receive 0 (zero) for the entire assignment component of the course in the marking scheme and the case will be send to the Dean’s office for further investigation.