

CSC 2600, Fall 2008
Topics in Computer Science: Convex Optimization

Assignment 2

Note: the two parts have different due dates.
Each part is due at the start of class.
No late assignments will be accepted.

The material you hand in should be legible (typed or neatly hand-written), well-organized and easy to mark, including the use of good English (when English is required). Short, simple answers and proofs will receive more marks than long, complicated ones.

Part A: (80 points total) Due Tues Nov 18. Answer the questions below from Chapter 4 of the text. You may use any results stated or proved in Chapters 1–4 or in the appendices (but not in Chapter 5).

- Question 4.1 (14 points total: 1 for the sketch of the feasible set, 2 for each of parts a-c, 3 for part d, and 4 for part e)
- Question 4.7 (a) and (b) (12 points total: 4 for part a, and 8 for b)
- Question 4.9 (7 points)
- Question 4.21 (a) and (b) (20 points total: 7 for part a case 1, 10 for part a case 2, and 3 for part b)
- Question 4.30 (5 points)
- Question 4.40 (b) (22 points total: 6 for QP, 6 for QCQP, 10 for SOCP)

Part B: Due: Tue Dec 2. Answer the questions below from Chapter 5 of the text. You may use any results stated or proved in Chapters 1–5 or in the appendices.

- Question 5.1
- Question 5.19
- Question 5.20
- Question 5.21
- Question 5.32

No more questions will be added