

Homework 2

*Assigned: 02/16/2021**Due: 02/26/2021***Homework must be L^AT_EX'd or it will not be graded.**

You are expected to provide complete and rigorous solutions to all questions. Do not leave portions of your solutions as “exercises for the grader.”

Problems from Boyd & Vandenberghe: 3.22(a-c), 3.26, 3.32, 3.36 (any 3), 3.39(a-c), 4.4, 4.5, 4.11, 4.12, 4.17

Bonus questions: Bonus questions are completely optional. If a certain threshold of correctness is exceeded, you will earn up to an additional 2 marks per question on your assignment grade. These are fun, challenging problems, and we ask that you try your best to get as far into the proofs/answers as you can *without consulting any outside sources!* Once you get stuck, indicate the point at which you were stuck in your solutions with a “**I made it this far on my own,**” after which, you should indicate what outside source you consulted in order to finish the problem, in accordance with the Penn Academic Integrity policy.

1. B&V 3.22(d)

2. B&V 3.39(d)

3. B&V 4.19

4. Additional exercises A3.12

https://web.stanford.edu/~boyd/cvxbook/bv_cvxbook_extra_exercises.pdf