Due Time: 11:59pm, Monday November 20, 2017 Submit to Gradescope

The homework is about duality. For the first exercise, we practice through a problem with one scalar variable. For the second exercise, we practice the matrix operations. For the third exercise, we derive the dual using inequality constraints in matrices. The three exercises worth 1 point each and are graded by completion. For the assignments, we run two experiments. The problems and data files for the experiments are posted in the directory of the first author of the textbook. The assignments are graded by the results. The first assignment worths 3 points and the second worths 4 points.

I Exercises from textbook chapter five: 5.1, 5.9, 5.40

II Assignments The two problems are selected from the Additional Exercises posted at the following website.

http://stanford.edu/~boyd/cvxbook/bv_cvxbook_extra_exercises.pdf

II.1 A4.1.

II.2 A16.9