Homework 5

Due May 8th, 2019 by noon

This homework is not graded. The purpose of this homework assignment is to help you train for the midterm exam.

"Reading" Assignment

Review the mathematical derivations covered in classes. Do not passively read the handouts.

Do it yourself, several times, without notes

Exercise 1

In this exercise, you will compute the subdifferentials of several functions.

- $f(\beta) = \|\beta\|_1^2$

- $f(\beta) = \|\beta\|_2^1$

- $f(\beta) = \left(\max(0, x^T\beta)\right)^4$