## **Math Camp 2: Convex Optimization**

## **Description**

We give a **very** brief introduction to key concepts in optimization theory such as convex sets, convex functions, convex optimization, and Lagrange multipliers, and duality. Rather than being at all comprehensive, we try to indicate what results will be used in 9.520 and present some intuitions about them.

## **Suggested Reading**

- Fletcher. Practical Methods of Optimization. Wiley & Sons, 1987.
- Bazaraa, Sherali, and Shetty. Nonlinear Programming: Theory and Algorithms. Wiley-Interscience, 1993
- Mangasarian. Nonlinear Programming. McGraw-Hill, 1969.