

Homework Problems Related to Chapter 2 Concepts.
Due: February 22.

Prove or disprove the following statements.

10. Every starlike set in \mathbb{R}^n is convex.
11. The set $P = \{x \in \mathbb{R}^n \mid \|x\|_\infty \leq 1\}$ is a polyhedron.
12. The set of optimal points of a linear program is a polyhedron.

Complete the following textbook problems.

13. Exercise 2.3. You do not need to provide a proof.
14. Exercise 2.10.
15. Exercise 2.12.