Institutionen för matematik KTH
Svante Linusson
7909444

## Hand-in-problems for Convex Polytopes VT13 Extra set of problems for PhD-students

Cooperation regarding the hand-in-problems is not permitted.
You must have written your solution on your own. Any external source used must be cited.

## List of Hand-in problems

15) Exercise 8.9 (i) and (ii) in "Lectures on Polytopes".
16) Exercise 8.27 in "Lectures on Polytopes".
17) Let $P=\Delta_{d}$ and $f$ a generic linear function. Prove that $\omega_{f}(P) \cup\{\hat{0}\}$ is the face poset of $C_{d-1}$, the $(d-1)$-cube. The notation $\omega_{f}(P)$ used in class is equivalent to (but easier defined than) $\Pi(P, f)$ of Definition 9.7 in the book.

Problems 15-17 are due 7/6.

Good Luck!!

Svante

