Discrete and Algorithmic Geometry

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Sheet 4

UNDER CONSTRUCTION

Writing

(1) The (k,d)-*hypersimplex* is the polytope $\square_0^d \cap \{x \in \mathbb{R}^d : \sum_{i=1}^d x_i = k\}$, where $\square_0^d$ is the 0/1-cube $\square_0^d = \{x \in \mathbb{R}^d : 0 \leq x_i \leq 1 \text{ for all } i \in [d]\}$. A d-polytope P is k-*simplicial* if all k-dimensional faces of P are simplices. P is k-*simple* if all k-dimensional faces of the polar polytope P^Δ are simplices.

Turning in your work

Put your answers into a .pdf file. To turn it in, use `gpg` and the public key `julian.gpg.pub` in the `github` repository to create an encrypted copy that is only readable by me. Then commit and push this encrypted file to the repository.