# Introduction to Combinatorics Combinatorics of convex sets 

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1. For every member of $\mathcal{F}$ consider "good" translates of $C$.
2. A point $x$ is a centrepoint iff $x$ is in every open half-space $H$ containing more than $\frac{d n}{d+1}$ points of $X$.
3. Consider certain sets of hyperplanes parametrized in a natural way by vectors in $\mathbb{R}^{d+1}$.
4. This exercise is similar to Exercise 2.7.
5. Use Brunn-Minkowski inequality.
