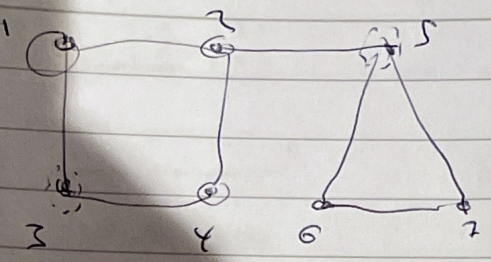
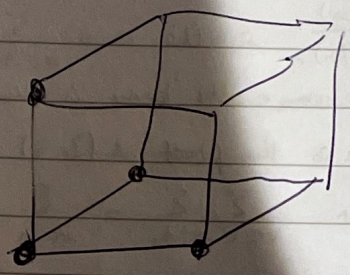
COMBINATORICS



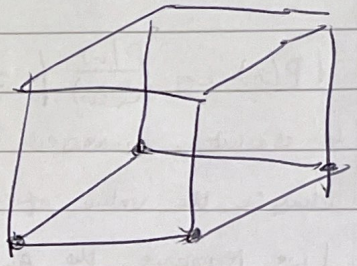
{ } = boundary

boundary of $\{1,2,4\}$ = $\{3,5\}$

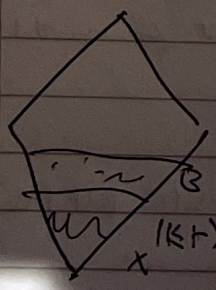
$|A| = 4$ in Q_3



Ball $|b(A)| = 3$



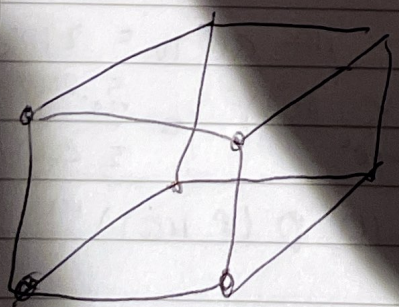
Sub cube $|b(A)| = 4$



A

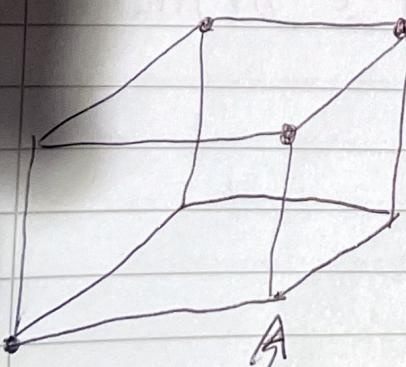
Q_4

i - sections



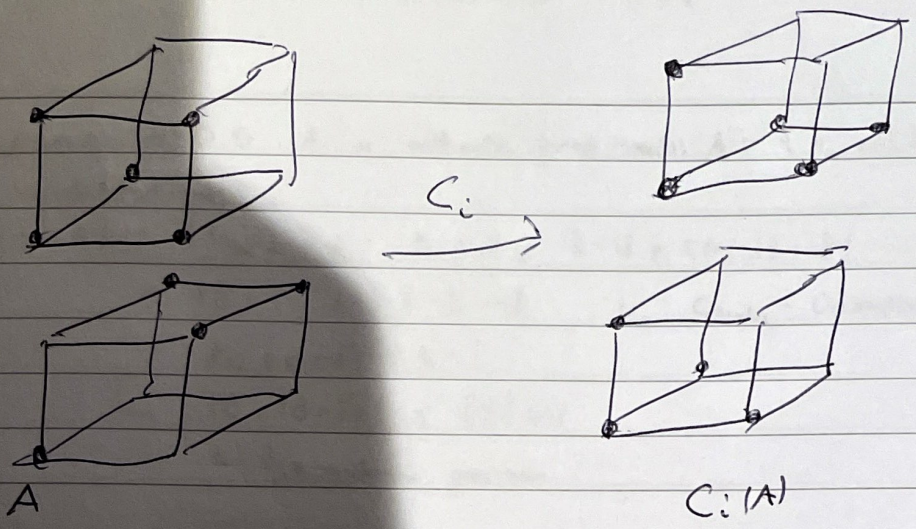
$\leftarrow A_+^{(i)} = A_+$

i

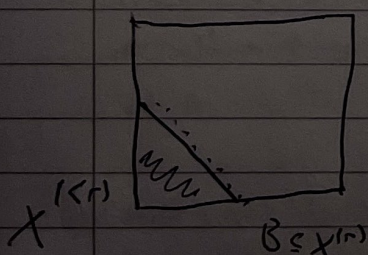


$\leftarrow A_-^{(i)} = A_-$

A

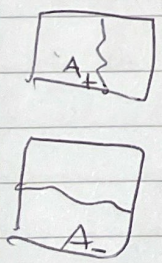


$|C_i(A)| = |A|$. $C_i(A)$ "looks more like" a Hamming ball than A does.



Hoppen implies KK.

Proof of Hoppen



A