

Google: St Petersburg Game? Find a theorem by Pascal

Other stuff not in text: Ramsey Thm, Convexity, Generating fns.

Book: Generating Functionology.

Reading finish Ch 2. Double-counting wikipedia.

Thm: \forall finite group G , $\exists n$ s.t. $G \cong S_n$

PF exercise

- A matrix (a_{ij}) is called bistochastic if all $a_{ij} \geq 0$ and $\sum_{i=1}^n a_{ij} = \sum_{j=1}^n a_{ij} = 1 \quad \forall i, j$.
- Permutators: $\begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$, etc

Theorem (Dempster): every bistochastic matrix can be represented as a convex combination of permutators.