
Math 4363 - Combinatorics Homework 6

Due - Sunday 5 April 2020 11:59pm

- At a party, seven people check their hats into the cloakroom. In how many ways can their hats be returned so that
 - no one receives his/her own hat?
 - at least one person receives their own hat?
 - at least two people receive their own hats?
- Determine the number of ways to place 6 non-attacking indistinguishable rooks on the 6-by-6 board shown below, where forbidden positions are marked with an 'X'.

