Combinatorics HW 1.1

Student ID: Name: Score:

1. A large tournament has 569 entrants in total. If it is a single elimination tournament, how many matches have to be played out before the champion can be decided? (Please calculate the precise value)
2. The figure below shows a partial 4X4 matrix，is there some way of filling up the rest of the omitted entries to produce a magic square of size 4？