

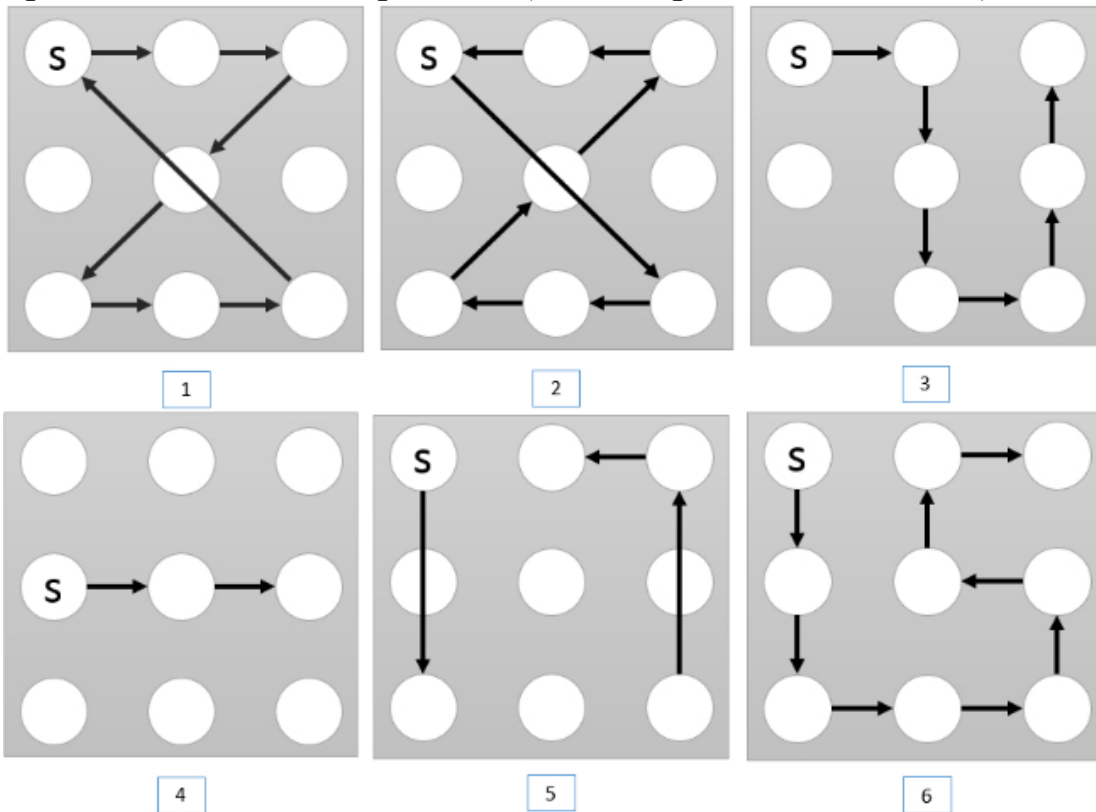
# Combinatorics HW 1.1

Student ID:

Name:

Score:

1. A T-shirt will be printed with a magic square of size 3. How many different prints are possible?
2. According to the video, which pattern(s) below match the description of a logical passcode for Android phones? (You can pick more than one)



3. 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)
4. 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?

$$\begin{bmatrix} 2 & 3 & & \\ & 4 & & \\ & & & \\ & & & \end{bmatrix}$$