Name . . . . . ,

1. - 4.	5.	6.	Σ.

1a) 1b) 1c)

1d) 1e) 2)

3) 4)

1. 25 students went to a cinema with 12 rooms. In how many ways can they choose rooms if
a) students are different and rooms are different,
b) students are identical and rooms are different,
c) students are different and rooms are identical,
d) students are identical and rooms are identical.
e) students are identical and rooms are different and in every room there are at least 2 students.
2. In how many ways n identical boys and m identical girls ($m \geqslant n$) can stand in a queue in such a way that there is no two boys next to each other.
3. There are 3 countries, and 4 different candidates from each country. In how many ways can we form a committee with 5 people such that there is at least one person from every country in it.
4. We choose 6 shoes from n different pairs of shoes ($n \geqslant 6$). In how many ways can we do it without choosing any pair?
5. How many sequences without repetitions are there of the digits $1, 2, 3, 4, 5, 6, 7, 8, 9$ in which 1 is not in the first place, 5 is not in the 5th place and 9 is not in the last place.
6. Evaluate $S(n, n-2)$.