

**EXAM FOR “LINEAR ALGEBRA 4” (6LAG4)
SUMMER SEMESTER 2023/2024**

QUESTIONS SET NO. 2

1. Define projectivization of a linear map. Give examples of projectivizations. Give examples of maps between projective spaces which are not projectivizations of any linear map between corresponding linear spaces.

2. Give an example of a linear programming problem which has:
 - 1) no solutions;
 - 2) infinite countable number of solutions.

3. Prove that any affine map from a 4-dimensional affine space to a 3-dimensional affine space is not injective.