

SMAI-2020-Homework 4

Name: Avani Gupta
Roll no : 2019121004

Ans 1: True. SVD decomposition breaks down any invertible transformation into a composition of three geometrical transformations: rotation, scaling, and reflection.

The matrices \mathbf{U} and \mathbf{V}^* represent rotation or reflection of the space, while Σ represents the scaling.