

**Quiz 9**

Week 14, Dec/12/2022

CS 280: Fall 2022

Instructor: Lan Xu

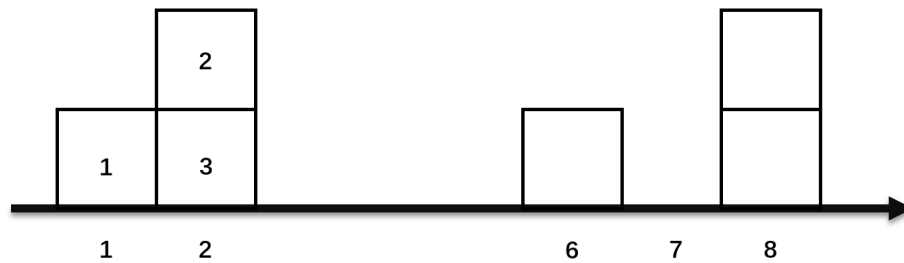
Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

On your left: \_\_\_\_\_

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**Problem 1.** (10 points) **EM distance and WGAN.** According to the given figure, plot all possible earth transportation plan and compute the Earth-mover distance for each plan. What are the problems of Vanilla GAN and how could Wasserstein GAN solve them, please give detailed explanation.



**Problem 2.** (10 points) **StyleGAN.** Please describe the difference and connection between StyleGAN and the vanilla GAN from the aspect of architecture, and provide your insights about why it improves.