

Week 4 Quiz

May 31, 2025

Submission Instructions: Submit your work to UnivAI under "Quiz" within 20 minutes.

Model Learning Parameters: Given a Synchronous SGD model with the following parameters:

- Total Number of workers: 8
- Mini-Batch Size: 32
- Dataset Size: 10000
- Step size: 0.01
- Model Training Iterations: 10

Answer the following questions: (partial credits will be given if you write down your calculation process). No coding is required to answer this question.

1. Assuming the data sampler only takes each sample once (no replacement), how many samples are used after the training process?