

Math 336
Spring 2024
Dr. Lily Yen

Quiz 1

Show all your work

Name: _____
Number: _____
Signature: _____
Score: ____/10

Problem 1: True or false. Prove your claim.

- a. $\cos(x) = \Omega(1)$.
- b. $\sum_{j \leq n} 2^j \sim 3n$.

Score: /4

Problem 2: Show that $\sum_{j=1}^n j = \Theta(n^2)$.

Score: /5

Problem 3: Is it true that if 4 students gather for a Graph Optimization party at Lily's office, there is always a student who knows an even number of other students?

Score: /1