

CSE 302: Problem Set 1

Student Name (ID: 1029384)

May 28, 2026

Problem 1

Let A and B be two finite sets. Prove that:

$$|A \cup B| = |A| + |B| - |A \cap B|$$

Problem 2

Evaluate the limit of the sequence:

$$\lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n$$