CSCI 338: Quiz 1 (due: Friday, March 5, 8:00pm)

Your Name:

This is an open-book quiz (not an attendance counting), so you should try your best. After you finish, upload a pdf file on D2L under Quiz-1. A solution will be posted on D2L after the deadline.

Problem 1

Given the set $A = \{-36, -25, -16, -9, -4, 1, 4, 9, 16, 25, 36\}$, is A countable? Why?

- A is countable.
- Any finite set is countable, A is finite, so A is countable.

Problem 2

Let B be the set of all complete graphs. Is B countable? Why?

We represent a complete graph with i nodes as K_i.

Then $f(i) = K_i$ is a correspondence between $\mathbb{N}$ and B.

$\therefore$ B is countable.