# Problem 1

Time spent: 2.5 hours

**Collaborators**: Zoe, Elmo, and I brainstormed together and figured out the basic idea. I also asked our prefect about the right way to phrase part of the proof.

## The Algorithm

Put the details of the algorithm here. Here is a *new term* introduced in this very first paragraph to illustrate one of the macros listed above.

And to illustrate another couple macros from above, here are  $\mathbb{Z}$  and  $\mathbb{N}$ , created in math mode by  $\backslash \mathbb{Z}$  and  $\backslash \mathbb{N}$ .

## Correctness of the Algorithm

Proof of the correctness of the algorithm goes here.

## Analysis of Runtime

Analysis of the runtime of the algorithm goes here.

# Problem 2

Time spent: 1 hour Collaborators: None

## The Algorithm

Put the details of the algorithm here.

#### Correctness of the Algorithm

Proof of the correctness of the algorithm goes here.

### Analysis of Runtime

Analysis of the runtime of the algorithm goes here.

# Problem 3

Time spent: X hours Collaborators: ...

## The Algorithm

Put the details of the algorithm here.

#### Correctness of the Algorithm

Proof of the correctness of the algorithm goes here.

### Analysis of Runtime

Analysis of the runtime of the algorithm goes here.