

MTH 4300: Algorithms, Computers and Programming II

Fall 2025

Section: STRA

Problem Set Guidelines

Your submission should follow this file structure:

```
lastname_firstname_problem_set_X.zip
└─ lastname_firstname_problem_set_X/
   ├── CMakeLists.txt
   ├── question1.cpp
   ├── question2.cpp
   └── question3.cpp
```

It'll make it easier for me to grade since I can just add a `build` directory and run CMake on my end.

Grading Criteria

Your problem set will be evaluated based on the following criteria:

Code Functionality

- **Correctness:** Programs compile without errors and produce expected output
- **Requirements compliance:** All specified features and requirements are implemented
- **Input/Output:** Proper handling of user input and clear, formatted output
- **Edge cases:** Appropriate handling of special cases (e.g., division by zero)

Code Quality

- **Code style:** Consistent indentation, meaningful variable names, proper spacing
- **Best practices:** Use of appropriate data types, proper use of `std::` prefix
- **Organization:** Logical code structure and flow
- **Comments:** Minimal but effective comments explaining complex logic (when needed)

Documentation and Submission

- **Sample output:** Clear demonstration of program execution with sample runs
- **File organization:** Proper `CMakeLists.txt` and source file structure
- **Submission format:** Files organized in a folder and submitted as requested