Introduction

These notes are intended to be a summary of the main ideas in course CS 310: *Mathematical Foundations of Computer Science*. I may keep working on this document as the course goes on, so these notes will not be completely finished until the end of the quarter.

The textbook for this course is Keneth H. Rosen: *Discrete Mathematics and Its Applications*, Fifth Edition, 2003, McGraw-Hill. With few exceptions I will follow the notation in the book.

These notes contain some questions and "exercises" intended to stimulate the reader who wants to play a somehow active role while studying the subject. They are not homework nor need to be addressed at all if the reader does not wish to. I will recommend exercises and give homework assignments separately.

Finally, if you find any typos or errors, or you have any suggestions, please, do not hesitate to let me know.

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http://www.math.northwestern.edu/~mlerma/courses/cs310-05s/