Computability and Complexity

Winter 2020

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Week 1/20 - 1/26 Report

January 27, 2020

Intention

This is a set of ideas you can think about or use them while writing your report for each week's reading. Writing reports for our reading each week is not mean to make you take notes, but make you think about what we have read. However, you may still use your report as a reading notes, whichever helps you read better.

You may write whatever you think while reading, questions, complains, or whatever. This might become your research interests in the future (who knows).

Ideas

- 1. Is reduction avoidable? In other words, can we use other methods to replace the process of reduction in a mathematics proof?
- 2. Is reduction solid? Do you think pure mathematics should include reduction? If yes, show why. If no, show your reason and consequences of this assumption.
- 3. Do you believe the Church-Turing thesis is true or false? And why?
- 4. What would happen if the Church-Turing thesis is wrong?