1. (20 points) **Prepare for Exam I**

Here is a checklist for helping you prepare for the first exam:

- The first exam will be on 3/6/2023 (more than 20 points).
- This exam will cover Chapter 1 and Chapter 2.
- You cannot bring any cheat sheets, books, laptops, phones, etc. Your phone will be placed together elsewhere in the exam.
- You can bring a simple calculator if you want to.
- One question is about propositional equivalences. Tables of “Logical Equivalences” will be provided.
- One question is about translating from nested quantifiers into English or vice versa.
- One question is about using rules of inference to build arguments (§1.6 Example 6 and 7). A table of “Rules of Inference” will be provided.
- One or two questions are about proof strategies such as proofs by contraposition, contradiction, cases, etc.
- One question is about concepts of sets such as power sets and Cartesian products.
- One question is about set operations by the Venn diagram.
- One question is about concepts of functions.
- One or two questions are about sequence summations.
- One question is about matrix multiplication.
- There could be other bonus questions.
- Have a nice weekend and good luck!