Grading Rubric
MATH 348 Section C1, Fall 2015

Homework assignment: For each weekly homework assignment, I will choose about 4-5 problems to grade with a total of 15 points.

Writing assignment: Your writing assignment will be reviewed and graded based on the following criteria.

1. Logical correctness (4 points)
   Your answer and reasoning must be mathematically correct.
   - 4 points: The solution is correct and the argument is valid. There might be minor mathematical errors which do not affect correctness of the solution.
   - 3 points: There are some minor errors in the solution which make some parts of the argument invalid. However, all the steps still constitute a correct proof.
   - 2 points: Some major errors are present in the solution. Those errors lead to a serious flaw in the proof, but the approach is generally correct.
   - 1 point: The argument is mostly wrong. There is, however, at least one step in the proof which is correct.
   - 0 points: The proof is totally wrong. All steps in the argument are illogical.

2. Clarity and organization (2 points)
   The solution must be easily readable and understandable to anyone who knows math. It should be clear and well organized, so that the reader can follow your reasoning in the argument. All necessary steps in the proof must be included.
   - 2 points: The proof is well written and easy to read. All important steps are given and justified properly.
   - 1 point: Some parts are not clear or hard to follow. Some crucial steps are missing or presented without proper justification. The reader can still understand the main idea of the proof with some effort.
   - 0 points: It is hard or impossible to understand the argument because of the lack of justification in each important step of the proof and/or the solution is totally unorganized.
3. **Conciseness** (2 points)
A good proof should be concise, while it still contains all necessary details. Your argument should be brief, yet complete. Unused variables or symbols should not be included in the proof.

- **2 points:** The proof is concise. Removing any detail in the argument would significantly affect the presentation of the chief idea of the proof.
- **1 point:** The argument can be made shorter by cutting some unnecessary details. There are a few sentences which can be rephrased or removed since they are rambling or irrelevant to the key idea of the proof.
- **0 points:** Most parts of the proof are overly explained. It is hard or impossible for the reader to locate the core argument in the proof.

4. **Use of English and symbols** (2 points)
Besides the three components mentioned above, an appropriate use of English and mathematical symbols is also a key factor which constitutes a good proof. Your proof should consist only of complete and grammatically correct sentences. Technical symbols should be used only when they make the argument concise and easy to read.

- **2 points:** All sentences are complete and grammatically correct. Math symbols are used properly in the argument.
- **1 point:** Some sentences are not complete or ungrammatical. There may be some spelling mistakes or inappropriate word choice which makes the argument vague or confusing. Some symbols are used excessively.
- **0 points:** There are several grammatical errors and misspellings in the proof. The argument is unreadable due to the lack of proper use of language. / There are no connecting words; the proof is made of a series of equations and/or math symbols only.