MATH220: Discrete Structures

Spring 2014

# In-class Activity 01: Logic and Proof Wrap Up

Assignment is DUE as indicated on the course schedule. This assignment is designed to be completed in class.

This is a **group assignment**. Work with a group of 3-5, and submit as a group on Gradescope.

## Notes

**Your final submission must be readable**. It is your responsibility to write up your answers in a way that is easy to read and follow.

## Task

Each group will be assigned a proof technique:

* Direct
* Contrapositive
* Contradiction
* Induction

Your task is to put together a presentation that:

1. Explains how to do your proof technique (what are the general steps)
2. Demonstrates your proof technique on a specific proof that we have not yet done
   1. You can use an example from the textbook that we did not go over, or you can find an example online
   2. It is okay to look at a completed version of your proof, however you must be able to fully explain all the steps in your presentation

You presentation should be roughly 10 minutes long, and will happen in class on the last day of this assignment.

## Submission

Submit on Gradescope. Remember to tag your groupmates!

## Rubric

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| --- | --- | --- | --- | --- |
|  | Missing / Not Complete (0) | Approaching (2) | Meets (4) | Exceeds (5) |
| **Readability** | Assignment is unreadable or not submitted. | Assignment includes formatting, but significant improvements could be made. For example, clear labeling of problems and subparts, proofreading. | Assignment includes formatting, but minor improvements could be made. For example, clear labeling of problems and subparts, proofreading. | Assignment is well formatted and easy to read. Text has been proofread. |
| **Completeness** | Less than half of assignment is attempted. | Roughly half of assignment has been attempted. On the problems that have been completed, effort is evident.  OR  All of the assignment has been attempted, but effort is not evident in many parts. | At least 80% of assignment has been attempted. On the problems that have been completed, effort is evident.  OR  All of the assignment has been attempted, but effort is not evident a few parts. | All of the assignment has been attempted, and effort evident throughout. |
| **Correctness** | All answers are incorrect or missing. | Of the complete problems, at least half have been approached and completed correctly. | Of the complete problems, at least 80% have been approached and completed correctly. | All complete problems are approached and completed correctly. |