Presentation Guidelines

Before class you will have an opportunity to volunteer to present proofs. If more than one student volunteers, the student with the fewest number of presentations has priority. If no one volunteers, I will call on someone to present what they have. The problems chosen for presentation will come from the Daily Homework assignments. Each student in the audience is expected to be engaged during another student's presentation.

Recall the grading rubric from the syllabus:

$\checkmark +$: Completely correct and clear proof or solution. Great!
$\checkmark$: Essentially correct with small flaws/significant progress has been made and is well explained
$\checkmark -$: Incomplete/incorrect with only minimal progress made toward a solution

Again, you should not let the rubric deter you from presenting if you have an idea about a solution that you'd like to present, but you are worried that your solution is incomplete or you are not confident your solution is correct.

As the presenter: Your goal is to make the ideas of the proof clear to the class rather than to prove to me that you have completed the problem. A secondary goal is to get feedback for how you could improve the clarity of your exposition.

- Before presenting, you should have your solution written down in detail and have gone over the major ideas and transitions so that you can make your proof clear to others.

- For some proofs I will ask students to write their solutions on the board before presenting. For other proofs, you will be presenting in real time. In this case, as you write your solution on the board you should explain your reasoning.

- Be ready to answer questions regarding your work to the best of your ability.

As the audience: Your goal is to understand the proof the presenter provides by giving your complete attention to them and asking questions when necessary. Your secondary goal is to provide polite and respectful feedback regarding the structure or exposition of their proof.

- You are encouraged to ask questions of the presenter but you should do so in a professional and courteous manner.

- If you have questions, comments, etc. you should raise your hand and direct these to the presenter rather than asking your neighbor.

- Be encouraging of the presenter! If you have a polite suggestion to make, you could also offer some positive feedback as well.

- If you are unsure of a nice way to begin a question/comment, here are some suggestions/examples:

  - "I like how you explained the first part but could you explain the second part again?"
  - "I like how you did . . . . I found another approach . . . "
  - "I understand what you are doing and agree with some of it but I think I'm getting something different for this part. . . "
  - "What I appreciate about your solution is how you did . . . that enabled you to . . . "

Portfolio Guidelines

Your submissions for the class portfolio must be typed using LaTeX. This is a program that is designed for typing math, so lots of things that are hard to do in other word processing programs are easy to do in LaTeX.

We will be using a program called Overleaf (at overleaf.com) to type up our portfolio. (If you have another way you like to use LaTeX please fell free to use it.)

For each of your portfolio submissions start by open a copy of the class template - there is a link to it on the course website. Change the x.yz to your problem number, add your name in the place of "author" and replace "date of final version" with the current date. Then add the problem statement and your proof!

Some things to know about LaTeX:

- Whenever you are typing math symbols they should be surrounded like this $...$ by dollar signs. If you want an equation to be displayed like

$$5 \equiv 2 \mod 3$$

then you write

```
\[5\equiv 2 \mod 3\]
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There is a difference between "Let x be an integer" and "Let x be an integer". We want the first!

- If you need to type $\gcd(a_1, a^3)$ you write

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$\gcd(a_1,a^3)$
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- If you want $\mathbb{N}$ for the natural numbers or $\mathbb{Z}$ for the integers type

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$\N$ or $\Z$
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- You can add comments to what you write by starting a line with %.

There are many introductions to LaTeX, but once you have written up your first problem you can usually find what you need by Googling. Overleaf has an introduction that might be useful and I also like the Detexify website

http://detexify.kirelabs.org/

If you are looking for a tex symbol you can draw it and the computer will guess what you are looking for.