PEER REVIEWER GUIDELINES

MATH 351: MODERN ALGEBRA I (SECTION 02) DR. PETER BONVENTRE

You will be asked weekly to peer review one of your classmate's Problem Sets. This action plays an important part in the development of critical writing and content goals for both you and your classmate. The ability to analyze an argument, reflect, identify errors, and provide constructive feedback is essential to your own work, and yields valuable information for your peer to use to help improve their work and reasoning.

In general, your goal is **not** to provide corrections. It is **not** to turn their work into "perfection" (again, to get an "A" on problem sets, you are only required to achieve a score of **I**: "in progress"). Instead, your mission is to observe, indicate, and provide guidance for improvement. This improvement is in the *direction* of Mastery, but it doesn't have to get there.

Finally, it is **totally okay** if you miss errors or are confused yourself about the proof. The point of this exercise is for both you and your classmate to learn and grow and develop these critical reading and writing skills.

Some examples for critical feedback:

• Spot points of confusions, in regards to either the concepts of Modern Algebra or the written presentation:

"I'm not sure what's happening after you reference Theorem 2.3"

• Identify misuse of Theorems and results, such as missing or unproven hypotheses, incorrect conclusions, wrong references;

"Theorem 1.7 deals with subgroups, while you seem to be using a result about cyclic groups. Could you instead have meant Theorem 1.11 or 1.16?"

- Notice if necessary steps have been omitted;
 - "The problem asks to prove N is a normal subgroup, but you have only shown that it is a subgroup."
- Observe if the proofs follow the writing goals;

"You do not identify what sort of object *X* is when you introduce it."

General comments (e.g. "the flow of the argument is correct") can be as important as the specific (e.g. "Theorem 2.3 has an additional hypothesis you have not considered").