

Math 113(2) - Comments for HW7

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October 11, 2018

Some general comments:

1. **DO NOT CHEAT!**
2. Please use staplers or clips, not just fold the left-upper corner of papers!
3. Try to write well! - maybe this will be harder than the first one...
4. If you can, try to use \LaTeX .
5. For questions that requires proofs, I almost not give any partial credits.

Section 11, Problem 39

You have to check that it is closed under the operation, has identity and inverse for each element. You can also use the theorem that H is a subgroup of G iff $ab^{-1} \in H$ for any $a, b \in H$.

Section 13, Problem 46

Everyone did well, but it is better to use multiplicative notation for the operation of G' since additive notation is usually for abelian groups.

Section 14, Problem 12

You also need to check that it is not order 1, i.e. not an identity. Otherwise, you get only 9 points. (At least, you have to mention it., or you can list the elements in $\langle(1, 1)\rangle$ so that $(3, 1)$ is not in there.)