

Math 113(2) - Comments for HW8

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Some general comments:

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

Section 14, Problem 35

7 points for the proof and 3 points for the example.

Section 15, Problem 4

If only the order of the group is correct, you may get 5 points. You must give a proof that the group is isomorphic to \mathbb{Z}_8 . It is enough to find a generator of the group, such as $(0, 1) + \langle(1, 2)\rangle$ or $(1, 1) + \langle(1, 2)\rangle$. Otherwise, you may only get 7 points. If you only mentioned that the element has order 8, you can't get the full credit. You must check that the group itself also has order 8. I gave 8 points for those solutions.

Section 15, Problem 37

Note that you can prove any group of order p^2 for some prime p is abelian, using this problem.