

This homework does NOT need to be turned in. These are just good additional practice problems.

Exercises 14: 27, 38, 39

Exercises 15: 35, 36, 39, 42

Additional exercises:

1. Prove that the quotient group of a cyclic group is cyclic.
2. Find $\mathbb{Z} \times \mathbb{Z} / \langle (2, 2) \rangle$. (Hint: The coset representatives of $\langle (2, 2) \rangle$ come in two types; try to describe them. It may help to draw a picture.)