**Math 422: Abstract Algebra II**
**Homework 4, Due Friday, February 29**

- Do the following problems from the text.
  - Chapter 10: # 7, 15, 19, 20, 39, 40, 50.
- An abelian group $Q$ is *injective* if whenever $Q$ is a subgroup of an abelian group $M$, then $M$ has a subgroup $H$ such that $M = Q \times H$ (there is a mistake in the definition given on the last assignment).

  Find an example of a nontrivial injective group.