



MODERN ALGEBRA
SPRING 2023

ASSIGNMENT 2.1
DUE JANUARY 25

Exercise 1. Construct Cayley tables for the groups \mathbb{Z}_7^\times , \mathbb{Z}_{15}^\times and \mathbb{Z}_{16}^\times .

Exercise 2. Prove that if G is a group in which every element is its own inverse, then G is abelian.

Exercise 3. Lang, exercise II.1.3.