

# MATH 307: Quiz 1 Solution

Shaochen (Henry) ZHONG, sxz517@case.edu

Due on 02/15/2021  
Spring 2021, Dr. Guo

## Problem 1

$$Z = -1 + i, |Z^2| = ?, \frac{|Z^2|}{Z} = ?$$

## Problem 2

$\mathbb{A} = 4^n, 4^m, \dots$  for  $n, m \in \mathbb{N}$ , is  $(A, \times)$  an Abelian group?

## Problem 3

If  $C(x)$  is polynomials with complexed value coefficient, is  $C(x), +, \times$  a field?