

Math 21-341 - Linear Algebra

Part of Homework Assignment 1

Due Sep 5

1. Let \mathbb{F}_4 be the set $\mathbb{F}_4 = \{0, 1, 2, 3\}$. If we define the operations of addition and multiplication on \mathbb{F}_4 by adding and multiplying modulo 4, will \mathbb{F}_4 be a field? Justify your answer.