Homework 1

Maths Introduction

Some modular arithmetic

1. Working with the following set of Integers $S = \{0,1,2,3,4,5,6\}$

What is

- a) 4 + 4
- b) 3 x 5
- c) what is the inverse of 3?
- 2. For S = {0,1,2,3,4,5,6}

 Can we consider 'S' and the operation '+' to be a group?
- 3. What is -13 mod 5?

Use cases

In your groups, think of some use cases of zero knowledge proofs What problems are there when using zkps in real world situations?