Weekly Excersize 5

Scott Day
Curtin FRC: Pre-season Training

November 25, 2016

Problem 1.
Find all Solutions to the equation $x^2 \oplus x = [0]$ in $\mathbb{Z}_4$

Proof. □

Problem 2.
(1) Prove: If $[a] \in \mathbb{Z}_n$ is a unit, then $[a]$ is not a zero divisor.
(2) Prove: If $[b] \in \mathbb{Z}_n$ is a zero divisor, then $[b]$ is not a unit.

Proof. □