# Winter 2017, Math 148: Week 5 Preliminary Problems 

Due: Thursday, February 9th, 2017 Applications of Finite Fields

Preliminary problems. These problems should be completed before discussion on Thursday.
(P1) Find two mutually orthogonal latin squares of order $n=3$.
(P2) Find all 1-dimensional linear subspaces of $\mathbb{F}_{3}^{2}$, the 2-dimensional vector space over $\mathbb{F}_{3}$.

