## TUTORIAL QUESTION FOR ALGEBRAIC STRUCTURES - WEEK 3 $\,$

- **3.1.** Let G denote the set of all  $2 \times 2$  real matrices with determinant equal to 1. Show that G is a group with respect to multiplication.
- **3.2.** Let G be a group such that  $x^2 = e$  for all  $x \in G$ . Prove that G is abelian.

Date: 12th October 2016.