

## Worksheet 18

1. Prove that  $\mathbb{R} \cong \mathbb{R}_{>0}$ .
2. Prove that  $\mathbb{Z}/4\mathbb{Z} \cong \mathcal{U}(5)$ .
3. Let  $H < S_4$  be  $H = \langle (1\ 2), (3\ 4) \rangle$ . Prove that  $\mathbb{Z}/2\mathbb{Z} \times \mathbb{Z}/2\mathbb{Z} \cong H$ .