## HONORS ALGEBRA: HOMEWORK 7

## Due noon Wednesday 19th October 2022

Herstein, section 2.8, page 91, Questions 2, 4, 5, 8, 9, 10, 12

Herstein, section 2.9, page 96, Questions 1, 2, 3, 5, 6

Note: there is a typo in section 2.8, question 4: the hint should read: Assume  $a^3 = e$ ,  $b^7 = e$  and find some i such that  $a^{-1}ba = b^i \neq b$ , which is consistent with the relations  $a^3 = b^7 = e$ .