Abstract algebra I Homework 3

B13902022 賴昱錡

Due: 1st October 2025

1)

(a)

$(\mathbb{Z}/15\mathbb{Z})^{\times} = \{\bar{1}, \bar{2}, \bar{4}, \bar{7}, \bar{8}, \bar{11}, \bar{13}, \bar{14}\}$ and $\mathbb{Z}/8\mathbb{Z} = \{\bar{0}, \bar{1}, \bar{2}, \bar{3}, \bar{4}, \bar{5}, \bar{6}, \bar{7}\}$

(b)

(c)

(d)

(e)

(f)

(g)

(h)

2)

3)

(a)

(b)

4)