PREP 5

Reading. (BB) Read Section 4.3 through Theorem 4.3.6.

Exercises. Work out the following problems.

From page 203:

(1) Problem 18(b).
(2) Problem 19.
(3) Write out the multiplication table for the set $\mathbb{Z}_3[x]/\langle x^2+1\rangle$ of congruence classes modulo x^2+1. Does every element have a multiplicative inverse?