

Math 422: Abstract Algebra II
Homework 8, Due Monday, April 7

- Chapter 14: # 47, 51, 52.
- Chapter 15: # 11, 14, 18, 60.

Also prove the following, which was used in class: Let R be a commutative ring and suppose I, J are ideals of R such that $I \subset J$. Prove that I is an ideal of J , J/I is an ideal of R/I , and $R/J \cong (R/I)/(J/I)$ as rings.