

**MAT 512 HOMEWORK 11. DUE ON MONDAY, MAY 9. OKAY TO SUBMIT
THROUGH FRIDAY MAY 13**

One goal for this course is for you to develop your skill in effectively communicating mathematics. With this in mind, you should clearly write up your solutions. A solution with little or no justification will receive little or no credit.

- (1) Write several paragraphs in which you describe the analogous algebraic structures of the ring of integers and the ring of polynomials over a field.
- (2) From chapter 14, do exercises 14.7, 14.10, and 14.15.
- (3) From chapter 15 do exercises 15.3, and 15.6

We did some of these in class. The point is to write them up carefully to make sure you understand each problem.