

# MATH 593: Fifth Homework Assignment: Tensor Products

Due Friday October 14, 2005

**This week's reading:**

10.5 by Monday October 10.

Sections 11.1, 11.2, 11.3 by Friday October 14 (these are important to read carefully—this should be a review of linear algebra I am assuming you already know well).

Section 11.4 (determinants) by Friday October 14

Section 11.5 (tensor, symmetric and exterior algebras) by Monday October 17.

**Exercises:** All problems are from Dummit and Foote, *Abstract Algebra*, third edition.

Section 10.4: 2, 3, 4, 5, 6, 7, 8\*, 9\*, 10\*, 11, 12, 13, 14\*, 15\*, 16, 17, 18, 19, 21\*, 24, 25\*, 26\*, 27\*

Only the starred\* problems will be collected. Please type or write them up neatly on separate paper.