

(Math 371) Homework 3:

Due October 2, 2007

All Exercises are from Algebra by Artin.

Exercise 1: Chapter 7 Exercises: 2.8 (p. 263)

Exercise 2: Chapter 7 Exercises: 2.9 (p. 263)

Exercise 3: Chapter 7 Exercises: 2.15 (p. 264)

Exercise 4: Chapter 7 Exercises: 2.16 (p. 264)

Exercise 5: Chapter 7 Exercises: 4.2 (p. 265)

Exercise 6: Prove that a matrix A is hermitian if and only if the associated form X^*AY is a hermitian form.

Exercise 7: Chapter 7 Exercises: 4.4 (p. 265)

Exercise 8: Chapter 7 Exercises: 4.15 (p. 266)