

1. IMPORTANT THEOREMS AND OTHER MATERIAL FOR THE COURSE MMG 200 (LINEAR ALGEBRA), FALL 2009

No proofs will be asked for at the exam, but understanding of some proofs might be useful to solve some of the problems.

Section 1.4: Theorem 4 (understand proof)

Section 1.6: Applications of linear systems

Section 1.7: Theorems 7 and 8 (understand proof)

Section 1.9: Theorem 10 (know how to construct a matrix for a given linear transformation)

Section 2.2 : Theorems 4, 5, 6 (know proof), 7 (know how to apply)

Section 2.3: Theorem 8, a,b, c,d, e,g,h (understand proof)

Section 2.8: 12 (know proof), 13, (know how to apply)

Section 2.9: Theorems 14, 15 (understand proof)

Section 3.1: Theorems 1 (know how to apply), 2 (understand proof)

Section 3.2 Theorems 3,4,5,6 (no proofs)

Section 5.1: Theorems 1, 2 (know proofs)

Section 5.2: example 5

Section 5.3: Theorem 5, 6 (understand proofs)

Sections 5.6 and 5.7: Understand how to use diagonalization for difference and differential equations.

Section 6.1 Theorems 2, 3 (understand proofs)

Section 6.2 Theorems 4,5,6,7 (understand proofs)

Section 6.3 Theorems 8,9, 10 (understand proofs)

Section 6.5 Theorem 13 (understand proofs)

Section 6.6 Understand application to 'linear models'

Section 7.1: Theorems 1,2,3 (no proofs)