

HOMEWORK – APPLIED LINEAR ALGEBRA – WEEKS 10 AND 11
MATH 310, FALL 2014 (22632)
MWF 10:00AM - 11:00AM, BH 308

See the table below for the homework assignments for Math 310, taken from *Linear Algebra and its Applications* (Fourth Edition) by David Lay. More challenging exercises are marked with a star and will not be used as a basis for weekly quiz problems.

CURRENT WEEK

Date	Section	Problems
Oct 27	5.3 Diagonalization I	1,3,5,6,7,11,13,15,19
Oct 29	5.4 Diagonalization II	1,3,5,7,9,11,13,15,17
Oct 31	4.9 Markov Processes	1,3,5,7
Oct 31	5.7 Differential Equations I	1,3,5,7
Nov 3	5.5 Complex Eigenvalues	1,3,5
Nov 3	5.7 Differential Equations II	9,11,13
Nov 5	In Class Review	Bring questions to class ...
Nov 7	Midterm 2	

PREVIOUS WEEKS

Date	Section	Problems
Aug 25	1.1 Systems of Linear Equations	1,4,7,8,11,12,18, 19*, 20*
Aug 27	1.2 Row Reduction and Echelon Form	1,2,3,4,7,11,19*
Aug 29	1.3 Vector Equations	1,3,5,9,11,13,15,19,20, 22, 29*, 30*, 31*
Sep 3	1.4 The Matrix Equation $Ax = b$	1,2,3,4,5,7,9,13,14,17, 18, 25, 15*, 26*
Sep 5	1.5 Solution Sets of Linear Systems	1,3,5,7,11,14,17, 28, 29
Sep 8	1.7 Linear Independence	1,3,5,7,9,11,12,15,16,23,24,31,41*,43*
Sep 10	1.8 Intro to Linear Transformations	1,2,3,4,5,11,13,17,19,20,23*,35*,36*
Sep 12	1.9 Matrix of a Linear Transformation	1,2,3,4,5,8,13,14,15,17,18,21,29,30
Sep 15	2.1 Matrix Operations	1,2,3,4,5,7,10,12,18,22*
Sep 17	2.2 Inverse of a Matrix	1,2,3,4,5,6,7,31,32,33,37*,38*
Sep 19	2.3 Invertible Matrices	1,2,3,4,5,6,11,12,33,34
Sep 22	2.5 Matrix Factorizations	2,3,4,5,7,9,10,12,16,17,18,31*,32*
Sep 24	3.1 Introduction to Determinants	1,2,3,9,10,12,25,26,37*,38*
Sep 26	3.2 Properties of Determinants	1,2,3,4,5,7,9,21,23,24,26,32*,34*,36*
Sep 29	3.3 Matrix Factorizations	2,3,4,5,7,9,10,12,16,17,18,31*,32*
Oct 1	In Class Review	Bring questions to class ...
Oct 3	Midterm 1	
Oct 6	4.1 Vector Spaces & Subspaces	1,2,3,5,6,9,10,11,13,14,15,17
Oct 8	4.2 Null & Column Spaces	1,2,3,4,6,7,9,10,11,12,15,16,17,18,21,22,27,31,32
Oct 10	4.3 Bases	1,2,3,5,6,9,10,11,13,15,16,19
Oct 13	4.4 Coordinates	1,3,5,7,9,11,13,17,27,29,31
Oct 15	4.5 Dimension	1,3,5,7,11,13,15,17,19,21
Oct 17	4.6 Rank	1,3,5,7,17,31,32
Oct 20	4.7 Change of Coordinates	1,3,5,7,8,9,12,13
Oct 22	5.1 Eigenvectors & Eigenvalues	1,3,5,7,9,13,15,17,19
Oct 24	5.2 Characteristic Equation	1,3,5,7,9,13,15,16