Math 250 – Spring 2025
Suggested Exercises

Textbook: Lay, Linear Algebra and its Applications, 6th Edition.

Section 1.1: 3, 7, 8, 11, 13, 17, 19, 23-26, 35
Section 1.2: 2, 7, 9, 15, 19, 21, 23, 41, 43
Section 1.3: 5, 6, 9-14, 15, 17, 18
Section 1.4: 1-4, 5, 6, 7, 11, 12, 15, 21, 22, 36
Section 1.5: 5, 8, 11, 18, 23, 26, 41-44
Section 1.7: 1-4, 7, 8, 13, 14, 29, 30, 34, 35, 37, 38
Section 1.8: 2-6, 9, 11, 19, 20, 31, 40, 43
Section 1.9: 5, 6, 15, 16, 17, 18, 22, 33, 37, 38
Section 2.1: 1, 2, 6, 7, 8, 9, 11, 12, 25, 26, 28
Section 2.2: 1, 7, 41, 43, 45
Section 2.3: 1-8, 21-25, 34, 41
Section 3.1: 3, 4, 12, 13, 25-30
Section 3.2: 8, 9, 11, 12, 15-20, 22, 24, 37, 40, 41, 45
Section 3.3: 16-18, 19, 20, 21, 23 (optional section)
Section 4.1: 1, 2, 5-10, 19, 22
Section 2.8: 1-4, 5, 6, 11, 12, 31-34
Section 4.2: 1, 4, 5, 15, 17, 19, 24
Section 2.9: 1, 3-6, 11-13
Section 4.3: 1-6, 9-11, 13, 14, 16, 43, 44
Section 4.4: 2, 3, 7, 8, 13, 14, 31-33, 35
Section 4.5: 3, 6, 9, 11, 12, 16, 27, 29, 31, 32, 34, 36, 37, 39
Section 4.6: 1, 2, 5, 6, 8, 15, 16
Section 5.1: 1, 3, 14, 15, 17, 18, 33, 34
Section 5.2: 7, 8 (find the eigenvalues and the eigenvectors), 9, 10, 17; Section 5.5: 3, 4
Section 5.3: 4, 5, 7-12, 19
Section 5.4: 1, 3, 4, 5, 7, 8, 9, 13, 21-25 (optional section)
Section 6.1: 1-8, 11, 14, 17, 34 (find a basis in this subspace), 35, 36
Section 6.2: 3, 5, 6, 9, 17, 21, 22, 35, 36
Section 6.3: 1, 3, 4, 8, 9, 11, 13, 15
Section 6.4: 3, 4, 9, 12, 16
Section 6.5: 3-6
Section 6.7: 3, 5, 7, 31
Section 7.1: 7-12, 16, 17, 18, 23, 24
Section 7.2: 4, 5, 6, 11, 12, 13
Section 7.3: 1, 3, 5, 7 (optional section)
Section 7.4: 1, 3, 7, 14 (optional section)