

Topic	Practice Problems
1.1 Systems of Linear Equations	P. 11: 1--25 odd, 27, 29, 30, 33, 34
1.2 Row Reduction and Echelon Forms	P. 21: 1--31 odd, 34M
1.3 Vector Equations	P. 32: 1--25 odd, 26, 27M, 28M, 29--31, 33
1.4 The Matrix Equation $Ax=b$	P. 40: 1--15 odd, 19--36, 37M, 39M, 41M
1.5 Solution Sets of Linear Systems	P. 47: 1--21 odd, 23, 24, 26, 27--37 odd
1.7 Linear Independence	P. 60: 1--29 odd, 31, 33--39, 41M
1.8 Introduction to Linear Transformations	P. 68: 1--21 odd, 22, 23--35 odd, 37M, 38M, 39M
2.1 Matrix Operations	P. 100: 1--27 odd, 37M, 40M, 41M
2.2 The Inverse of a Matrix	P. 109: 1--23 odd, 31, 33, 35, 37, 38
2.3 Characterizations of Invertible Matrices	P. 115: 1--7 odd, 9M, 13--31 odd, (optional 33, 34)
2.8 Subspaces of \mathbb{R}^n	P. 151: 1--11, 15--33 odd 37M
3.1 Introduction to Determinants	P. 167: 1--13 odd, 19, 21, 23, 41, 44M, 46M
3.2 Properties of Determinants	P. 175: 1--7 odd, 15--20, 21, 25, 27, 28, 29, 21, 32, 35
5.1 Eigenvectors and Eigenvalues	P. 271: 1--21 odd, 22, 23--33 odd, 37M
5.2 The Characteristic Equation	P. 279: 1--27 odd, 28M, 30M
5.3 Diagonalization	P. 286: 1--21 odd, 22, 23, 29, 31, 33M
6.1 Inner Products, Length, and Orthogonality	P. 336: 1--19 odd, 20, 23--25
6.2 Orthogonal Sets	P. 344: 1--23 odd, 24, 27--30
4.1 Vector Spaces and Subspaces	P. 195: 1--3, 9--17 odd
7.2 Quadratic Forms	P. 406: 1--9, 11, 17M, 23--26