Before starting the homework problems, read each section and write down carefully all the definitions and results in that section. Then work through the examples in the textbook.

Make sure you understand and can define the following terms clearly and precisely, in full sentences.

3.3  
span (of a set of vectors)  
null space (of a matrix)  
range (of a matrix)  
column space (of a matrix)  
row space (of a matrix)  

3.4  
spanning set of a subspace  
span (as a noun)  
span (as a verb)  
basis of a vector space (plural bases)  

3.3: 33, 35, 37, 38, 42, 43, 45, 50, 51, 52.

3.4: 1, 6, 9(a, b), 12, 21, 22, 28, 30, 31, 32, 34 (no computation is necessary), 36

In each section, do other problems from the same category if -- when attempting one of them -- you feel that you can use more practice.