This assignment consists of 2 parts. All the problems from a given part gathered into a single packet separate from the other parts. If your solutions to a given part span more than one page, staple the pages together!

Also remember that you should include proper justifications for all of these problems! Even problems that are computational should include some sort of description of how you are attacking the problem, and your solution should clearly show any intermediate work necessary to complete your calculation. Anytime you make a significant claim on your paper, it should be backed up with an appropriate citation.

Part A (a) Do problem 23 from Chapter 3.

(b) Do problem 30(d,f) from Chapter 3.

(c) Do problem 31(d,e). [For an example of the flavor of the result you're aiming for, the numbers n which satisfy $\nu(n) = 3$ are precisely those numbers which take the form p^2 for some prime p. Your answers in this problem might allow for the possibility that n takes on one of a few different possible forms.]

Part B (a) Do problem 42(d,f) from Chapter 3.

(b) Do problem 55 from Chapter 3.

(c) Do problem 60 from Chapter 3.