Math 439: Homework 2

Please complete the following exercises below and write up your solutions consistent with the directions in the syllabus. Your solutions are due on Wednesday, September 18th at 11:00AM in the appropriate box outside my office door (please drop it in the box on your way to class). If you get stuck on any part of the homework, please come and see me. More importantly, have fun!

Exercise 1. Please do Exercises 2.I (You will need to assume that **X** is not the power set) and 2.K of Bartle.

Exercise 2. Please do Exercise 2.L of Bartle.

Exercise 3. Please do Exercises 2.N and 2.O of Bartle.

Exercise 4. Please do Exercises 3.A, 3.C and 3.D of Bartle. Note: How should the sequence $\{a_n\}$ be chosen in 3.D for μ to be "counting measure"? Can 3.D be generalized to spaces X which are different from $\mathbb{N}$? If so, what should our requirement be for X?