ECE 520.447 Information Theory and Coding

Homework # 2

Due Wednesday, February 12, 2014.

Read Chapters 3 from the Cover and Thomas book before starting the homework.

1. Problem 3.13 from Cover and Thomas: Detailed example of a typical set

2. Problem 3.7 from Cover and Thomas: Detailed example of data compression

3. Problem 3.2 from Cover and Thomas: Application of the AEP of Theorem 3.1.1

4. Problem 3.3 from Cover and Thomas: Application of the definition of Equation (3.26)

5. Optional: Problem 3.11 from Cover and Thomas: Complete proof of Theorem 3.3.1