Chapters 6-9 Concepts

Chapter 6

6.1 – Discrete Random Variables
• Definition
• Properties
• Expected Value

6.2 – Binomial Distribution
• Binomial Experiments
• Probabilities
• Mean, Standard Deviation

Chapter 7

7.1 – Normal Distribution
• Probability as area
• Properties
• Standard Normal

7.2, 7.3 – Areas under normal curves
7.4 – Assessing Normality
• Normal Probability Plots

7.5 – Normal Approximation to the Binomial
• Mean, standard deviation
• Continuity Correction (±1/2)

Chapter 8

8.1 – Sampling Distribution of the Mean
• For normal populations
• For large $n$ (Central Limit Theorem)

8.2 – Sampling Distribution of the Sample Proportion
• Mean, standard deviation
• Conditions

Chapter 9

9.1 – Confidence Intervals
• $Z$-intervals (know $\sigma$)

9.2 – Confidence Intervals
• $t$-intervals (don’t know $\sigma$)