

Stat 305 - Section 3 - Quiz 3 Topic Outline

1. Continuous random variables (Ch. 5.2)
 - a. probability density functions (pdf)
 - b. cumulative distribution functions (cdf)
 - c. quantiles
 - d. expected value, variance, and standard deviation
 - e. special continuous random variables:
 - i. Exponential(α)
 - ii. Normal(μ, σ^2)
2. Joint distributions and independence (Ch. 5.4)
 - a. Joint distributions (discrete random variables)
 - b. Marginal distributions (discrete random variables)
 - c. Conditional distributions (discrete random variables)
 - d. Independence (discrete random variables)
3. Functions of several random variables (Ch. 5.5)
 - a. Distributions of functions of random variables.
 - b. Expectations and variances of linear combinations.
 - c. The Central Limit Theorem