Stat 305 3 - Quiz II Topic Outline

1. Relationships between variables (Ch. 4.1-4.2)

   (a) Fitting and interpreting a regression line with least squares (SLR by hand)

   (b) Checking model usefulness with correlation and R^2

   (c) Calculating R^2 based on different output using appropriate formula.

   (d) Analyzing and interpreting computer output for fitted polynomial regression and multiple regression equations.

   (e) Finding residuals.

2. Discrete random variables (Ch. 5.1)

   (a) Probability mass functions (pmf)

   (b) Cumulative distribution functions (CDF)

   (c) Expected value, variance, and standard deviation

   (d) Special discrete random variables:

      i. Binomial(n, p)

      ii. Geometric(p)

      iii. Poisson(λ)