

Part I. (60 points) Do all calculations in L^AT_EX + R + knitr. Insert computer text output and graphics to support what you are saying. For this assignment, all R code should well commented and be visible (`echo=TRUE`) in the document where you have written it.

- (30^{pts}) **1. stats package:** Go through the help to find out what is contained in the `stats` package. Learn how to use, and then Demonstrate, 15 functions (graphical or computational) of your choice, not including functions included in problem 2.
Start by getting help by typing `?stats` and clicking on “Index” at the bottom of the help page.
- (30^{pts}) **2. Selected stats functions:** Demonstrate functions for probability distributions in the `stats` package. Show results numerically and graphically. For simplicity, you can choose two of your favorite probability distributions to discuss.
To get started, type `?Distributions`.
- (a) (10 pts) Compute density or probability functions.
 - (b) (10 pts) Compute cumulative distribution functions and percentile functions.
 - (c) (10 pts) Generate random numbers.