Introduction to R/RStudio

Lab Exercise 1: Introduction to R/RStudio

1. Install R, then install RStudio

2. Solve the following equation:

$$\frac{\sqrt{22^2 + 8}}{(3! + 1)(8\pi)}$$

3. Generate the following vector (call it "aa"):

3,5,3,4,6,5,1,8,3,2,4,5,3,6,4,2,4

a) Calculate the sample size, mean, variance and range of "aa"

b) Create a histogram of aa

For the next few questions look for a "fancy" solution, don't just retype the vectors.

c) Create a new vector called "bb" that is a reverse sorted vector of the scores in "aa"

d) Create a new vector called "cc" that contains only values in "aa" greater than 3

e) Create a new vector called "dd" from vector "aa", but make all values equal to 2 missing

4. Save your program above to your hard drive/flash drive (using the menus)

5. Simulate a Lotto 6/49 draw by randomly drawing 6 numbers between 1 and 49 (should you use replacement or not?)

6. Install the package "car" and make it active. Pull up the helpfile for the function "some" (you can do this using commands or the menus)