R Functions for Final Exam

You will not need to generate any R commands for this exam. Some questions will show one or more commands and ask what the result(s) will be. Other questions will show a command together with its output and ask you to explain what the output means. To be able to answer these questions correctly, you will need to know what each function listed below computes, what the inputs to the function are, how to read its output, and the main situations in which it is used.

`:` – for creating vectors, e.g. `1:5`
`[]` – for selecting components of a vector, e.g. `X[Y==1]` or `d[3,5]`
`sum()`
`c()`
`hist()`
`plot()`
`mean()`
`median()`
`var()`
`sqrt()`
`summary()` – of a vector or data frame
`length()`
`dim()`
`pnorm()`
`qnorm()`
`runif()`
`rnorm()`
`round()`
`pbinom()`
`qbinom()`
`pt()`
`qt()`
`t.test()` – for one sample and for two
`abs()`
`cor()`
`pf()`
`qf()`
`lm()`
`summary()` – of a regression, i.e. of the output of `lm()`
`anova()`
`pchisq()`
`qchisq()`