

**List of helpful R functions**

ls	lists contents of R workspace
rm	removes objects from R workspace
save	save selected objects
$+, -, *, /, ^$	arithmetic operators
$\%*\%$	matrix multiplication
t	matrix transpose
solve	matrix inverse (and solving linear equations)
c	combines (concatenates) objects, simplest use is to make vectors
seq	creates vectors that are regular sequences
rep	replicates vectors
length	returns length of a vector
sum	returns the sum
mean	returns the mean
median	returns the median
sd	returns the standard deviation (N-1 in denominator)
min	returns minimum
max	returns maximum
sort	sort a vector (rearranges the vector in order)
order	returns indices of vectors that will order them
rank	returns rank of each element in vector
$==, <, >, <=, >=, !=$	comparison operators
, &	OR, AND
is.na	tests for missing value NA
which	does logical comparison and indicates which elements are TRUE that is, gives the TRUE indices of a logical object
any	does logical comparison returns 1 (TRUE) if any of the comparisons are TRUE that is, Given a set of logical vectors, is at least one of the values true?
exp	returns e to that power
log	returns natural logarithm (to the base e)
sqrt	returns square root
table	does frequencies and crosstabs
help	help page on specified function
cbind	combine by columns
rbind	combine by rows

matrix	create a matrix
vector	create a vector
is.vector	answers the question, is this a vector TRUE or FALSE
as.vector	attempts to coerce object into a vector
array	create an array
dim	dimensions of an array or dataframe
nrow	number of rows in an array or dataframe
ncol	number of columns in an array or dataframe
read.table	reads data from a text file
read.csv	reads data from a text file with comma separated data
write.table	writes a dataframe to a text file
is.data.frame	tests object to see if it is dataframe
as.data.frame	coerces object into dataframe
is.factor	tests object to see if it is a factor
as.factor	coerces object into a factor
attach	reference variables in a dataframe without having to use the dataframe name (undo this with detach)
head	list the first six rows
tail	list the last six rows
names	returns names of elements of object
colnames	returns or sets column names of object
rownames	returns or sets row names of object
subset	select part of a vector, matrix, or dataframe
merge	merge two dataframes
lm	multiple linear regression
glm	generalized linear regression
anova	analysis of variance
chisq.test	Pearson's Chi-squared Test for Count Data
summary	shows results of various model fitting functions
predict	predicted results from model
hist	histogram
boxplot	box plot
plot	scatterplot
lines	connects points sequentially with lines (added to a plot)
segments	add lines to a plot (between pairs of points)
text	add text to a plot
legend	add a legend to a plot
abline	add a line to a plot by specifying its slope and intercept; passing an lm object will result in adding the predicted line to the plot
x11	open another graphics window
pdf	open a pdf file for recording graphics
dev.off	close graphics device
par(mfrow)	arranges multiple plots on same page

sample	produces a random sample of the specified values
set.seed	sets the seed for next random sample same sample will be produced with same seed
rnorm	produces a random sample from a normal distribution
qnorm	quantiles (percentiles) of normal distribution
pnorm	CDF of normal distribution
dnorm	PDF of normal distribution
rbinom	produces a random sample from a binomial distribution