

EA30 R Reference Card

November 26, 2019

Getting help

`help.start()` Opens an interactive html page with several help resources

? ‘function’ to get help with a specific function, don’t include the quotation marks!

`args()` to see the arguments that a function is expecting

Creating and Importing Data

`c()` combine or concatenate values, separated by commas

`data.frame()` create data frame

`read.csv()` read csv file into a data frame

Statistical Analysis

Regression

`lm()` create a linear model ($y = f(x)$ or $y \sim x$)

ANOVA, t-test, etc

`t.test()` test two vectors

`aov()` create an object analysis of variance, where $y = f(x)$ or $y \sim x$

Tests for Association

`chisq.test()`

`fisher.test()`

Logistic Regression

`glm($y \sim x$, family=binomial(link=‘logit’))`

Statistical Results

`summary()` coerce object into summary table

`coef()` extract coefficients from a model object (e.g. `lm`)

`plot()` when you plot a model, you’ll get four diagnostic plots that can be used to evaluate the assumptions.

`predict()`

Visual Display

`plot()` arguments can be in x,y or in a $y \sim x$ formula to create scatter plots

`boxplot()` boxplots are used for categorical predictors

`abline()` using values to create vertical, horizontal, or diagonal lines

`par()` controls display parameters

lots of text ...