

R Review Session Outline

Connor Dowd

6PM October 1st 2018, Harper C05

1 Introduction to R

1.1 Download and Installation

1.2 Entering Commands

1.3 Interrupting R

1.4 Getting Help

2 Basics

2.1 Printing

2.2 Setting Variables

2.3 Listing/Removing Variables

2.4 Variable Types: float, character, factor, boolean, integer

2.5 Creating a Vector

2.6 Basic Math Operations: +,-,*,/,

2.7 Comparisons

2.8 Selection/subsetting

2.9 Vectorized functions

2.10 Defining a Function

3 Input/Output

3.1 Reading CSV

3.2 Writing CSV

3.3 Saving .RData

4 Flow Control

4.1 For loops

4.2 If statements

5 Data Structures

5.1 Matrices

5.2 Data Frame

5.3 Subsetting

6 Apply Family

6.1 apply

6.2 sapply

7 Random Numbers

7.1 rnorm, runif, rt

7.2 sample

7.3 Permutations – Boostrapping

8 Graphing

8.1 Scatterplots

8.2 Histogram

8.3 Coloring

8.4 Legends

9 Regression

9.1 lm

9.2 Coefficients

9.3 predict