MATH 204 - ASSIGNMENT 1

Deadline: Midnight, February 7th 2013
Please submit your solutions via myCourses

On the course website, the folder

`www.math.mcgill.ca/dstephens/204/Assignments/Assign1/`

contains a personalized data set with your McGill ID number as the filename. This data set represents the results of an experiment conducted under a completely randomized design. For this assignment, you must carry out an analysis of variance of your data set to test whether there is any significant difference between the group means.

The data file contains two columns; the first contains a group label (`Group`), the second an observed response value (`Y`).

In your solutions, you should

(a) Give a brief description of the study data, giving the total sample size, the number of treatments, and the number of observations per treatment.

4 Marks

(b) Present the analysis of variance (ANOVA) table in standard format.

4 Marks

(c) Report the result of the test, including an appropriate critical value for the test.

4 Marks

(d) Comment on the validity of the test result from (c).

4 Marks

(e) Append a relevant boxplot and a means plot. Use these plots to interpret the results in (c) and (d).

4 Marks

You may use the template on p. 2 of this Assignment sheet to present your answers.

Name:	ID:

(a) Description

(b) ANOVA table:

(c) Result of the test:

(d) Comment on test result from (c):

(e) Boxplot and means plot (comment below and append separate plots):