

Homework Assignment Number Fourteen

This homework set requires ANOVA techniques. You are welcome to use a prewritten program available on the course website. It is also perfectly acceptable to write your own routines.

Read these instructions carefully.

If you want to use the prewritten MATLAB ANOVA solving routine:

- (1) Download from the website MATLAB routines page “anova.zip”.
- (2) Create a directory in your personal space called something like che301/odes.
- (3) Unzip the file “anova.zip” using WinZip. Extract all the files inside to the directory you have just created.
- (4) Start MATLAB
- (5) move to the directory you have created (e.g., `cd z:\keffer\che301\anova`)
- (6) Make sure that you extracted the files properly by looking at the directory contents (e.g., `dir`)
- (7.a) type `help anova_1factor` to view the instructions on how to perform 1-factor analysis of variance.
- (7.b) type `help anova_2factor` to view the instructions on how to perform 2-factor analysis of variance.
- (7.c) type `help anova_2kfactorial` to view the instructions on how to perform 2k-factorial analysis of variance.
- (8) You are ready to begin.

Notes:

- (a) For all these problems you can use the codes: `anova_1factor.m`, `anova_2factor.m`, and `anova_2kfactorial.m`
- (b) You can view these files using the *.m file editor in MATLAB.
- (c) You do not need to alter these files but you should look at them.

Follow these steps to do the homework:

- (1) Go to http://clausius.engr.utk.edu/che301/webhw/choose_action.html and print out a version of the homework. This will require your student id and assign you a unique homework set.
- (2) Work the homework problems as you usually would.
- (3) When you are finished and you have the answers, submit them back to http://clausius.engr.utk.edu/che301/webhw/choose_action.html

Notes:

- (a) The numbers in your homework will be different than everyone else’s homework.
- (b) No work will be turned into class. All work must be turned into the webpage by the deadline.
- (c) The grading scale for this assignment is 1 point for each correct answer and 0 points for each incorrect answer.
- (d) If you experience technical difficulties with this site, please email the instructor.
- (e) You can only submit your solutions once so make sure you have all the problems done before you submit your work. Warning: On Microsoft Internet Explorer, hitting the “enter” key is equivalent to hitting the “submit” button. So don’t hit “enter” until you are done. On Netscape, this is not a problem.