



Mail Merge & Equation Editor

Fall 2017

Equation Editor

- The Equation Editor is used to insert mathematical equations into MS Office documents
- Go to the Insert tab and select Equation

P11.1

- Type the following slide into in a Word document entitled **PUNetIDequation.doc** using the Equation Editor. Everything on the slide is to be typed into the Word document exactly as the slide appears.

P11.1 Continued

The following is a famous identity by D.H. Lehmer derived from the arcsin series, and it is used to compute approximations of π using computers to millions of decimal places

$$\sum_{n \geq 1} \frac{-9n + 18}{\binom{2n}{n}} = 2 \frac{\pi}{\sqrt{3}}$$

where $\binom{2n}{n}$ is the binomial coefficient $\frac{(2n)!n!}{n!}$ and by definition the factorial of a positive integer n is $n! = n(n - 1)(n - 2) \dots (3)(2)(1)$.

Mail Merge in Word

- Why use mail merge?
- Steps to using mail merge
 - Select the **Mailings** tab
 - Select **Start Mail Merge** then **Step by Step Mail Merge Wizard**

Mail Merge Wizard

1. **Select the Document Type** (the type of form you would like to create)
Letters
2. **Select the Starting Document** (the document into which you would like to merge the data.) **Use the current document**
3. **Select Recipients** (generally the file that contains the information that you would like to merge into the Starting Document chosen in Step 2) **Use an existing list** then **Browse** and find the Excel file used for the merge
4. **Write your letter**, which includes inserting the fields from the Recipients file you chose in Step 3). Typically, inserting is done by choosing **More Items** at the bottom of the Wizard dialog box and then inserting accordingly.
5. Add the merged fields to your letter by Inserting Merge Fields from the **More items...** section.
6. **Preview your letters.**
7. **Complete merge.** You can either merge to a file or directly to a printer.

P11.2

1. Grab the text file grades.txt from the CS130 Public folder on Turing
2. Create an Average column and calculate each student's average as a percent to zero decimal places (e.g. 90). Use total points achieved divided by total points possible. **NOTE:** Don't just change the column to percentage to 0 decimal places. This won't work in the merge!!!
3. Create a Grade column that shows a student's grade (90-100A, 80-89B, 70-79C, 60-69D,0-59F)

P11.2 Continued

4. Create a Word document **StudentGrades.doc** that mail merges each student's grade into a mail merge document that can be printed and handed out to each student. The document is on the following slide.

P11.2 Continued

Mail Merge the Data

ID#: Student ID# (merge field)
From: Your Name
RE: Course Grades
Date: October 16, 2017

Course Grades:

Quiz1: (merge field)
Quiz2: (merge field)
Quiz3: (merge field)
Quiz4: (merge field)
Exam1: (merge field)
Exam2: (merge field)
Final: (merge field)
Average: (merge field)%
Grade: (merge field)

Write an R script to

- a) Change the directory to `c:/r-data` and then input the excel Grades worksheet into a data frame **grades**.
- b) Plot a Pie chart that represents the letter grades.
- c) Answers the following question:
Are the average grades for male and female students different? State your NULL Hypothesis and run the proper test. What is your conclusion?
- d) Plot a histogram of the Averages in increments of 5 if possible. That is 95-100, 90-95, ...