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
• 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.
The following is a famous identity by D.H. Lehmer derived from the arcsin series, and it is used to compute approximations of $\pi$ 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 $n! = n(n - 1)(n - 2) \ldots (3)(2)(1)$. 

Fall 2017

CS130 - Intro to Software Tools
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**
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.
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)
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.
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, …