Sandra KempfMicrosoft Excel - Part 3

In the last lesson, we learned how to use the sum function formula. In the lesson, we will use the sum function formula again: However, we will also start to learn about two function formulas that are similar.

Data Entry (Spreadsheet)

- 1. Open up you Excel Your Name file and start a new page in your workbook.
- 2. Type the following information exactly as it is shown.

7	А	В	С	D	Е	F	G
1	Name		Assignment 2	Assignment 3		Total Points	Percentages
2	Points Possible	10		10			
3				,			
4	Ann	7	8	6	46		
5	Jorge	8	9	4	41		
6	Trina	9	6	10	20		
7	Maria	10	8	9	45		
8	Dwayne	5	4	6	25		
9	Mark	10	10	10	49		
10	Latisha	9	10	8	49		
11							
12	Highest						
13	Lowest						
14	Average						

- 3. Widen the cells to accommodate the longest entry in each column. (Put you cursor between columns. Remember to wait for the double-headed arrow before you double click.)
- 4. Place your cursor in the blue box with the 1 on in to select all of row 1(not cell A1). Your cursor will turn into a black →. Right click and the select Insert.
- 5. Click in cell A1 and type Comp App Gradebook and hit Enter.
- 6. Go back to cell A1 and change the font of the title to Times New Roman. Size 22.

We want our title to go across all of the columns of information, remember the last lesson. We learned about a special button that will "Merge and Center" our text.

- 7. Select cells A1 through G1.
- 8. Now click the Merge and Center button.
- 9. Next, Bold everything in Row 2.
- 10. Italicize everything in Row 3.
- 11. You might need to adjust column widths again since we change some to bold and italics.
- 12. At this point, Print Preview to see if it fits on one page. If it does not fit onto 1 page, you may need to change the Page Orientation. Go to Page Layout>Orientation and select Landscape.
- 13. Add Header as we learned in the previous lesson. (First and Last Name)

We will be using a couple of formulas to complete our grade book.

Maximum Function Formula

We are going to use some of the function formulas available to us in this lesson to find the highest, lowest and average score. We only find the minimum and maximum in this section. Minimum is abbreviated MIN and maximum is MAX.

- 1. Click in cell B13 and type =MAX(B5:B11) to find the highest score on assignment 1.
- 2. Click in cell C13 and type =MAX(C5:C11) to find the highest score on assignment 2.

Notice the 2 formulas we just entered are the same except for the letters of the columns.

- 3. Click in cell D13 and enter a formula to figure MAX (highest score). Look at the 2 previous formulas you entered and try to figure out what the formula should be.
- 4. Click in cell E13 and enter a formula to figure MAX (highest score). Look at the 3 previous formulas you entered and try to figure out what the formula should be.
- 5. Click in cell F13 and enter a formula to figure MAX (highest score). Look at the 3 previous formulas you entered and try to figure out what the formula should be.
- 6. Hit Save.

Minimum Function Formula

We are now going to find the lowest grade for each assignment and the test by using the minimum function.

- 1. Click in cell B14 and type =MIN(B5:B11) to find the lowest score on assignment 1. You should get 5 for the answer.
- 2. Click in cell C14 and type =MIN(C5:C11) to find the lowest score on assignment 1. You should get 4 for the answer.

Once again, formulas are the same except change the letters of the columns.

- 3. Click in cell D14 and enter a formula to figure MIN (lowest score). Look at the 2 previous formulas you entered and try to figure out what the formula should be.
- 4. Click in cell E14 and enter a formula to figure MIN (lowest score). Look at the 3 previous formulas you entered and try to figure out what the formula should be.
- 5. Click in cell F14 and enter a formula to figure MIN (lowest score). Look at the 3 previous formulas you entered and try to figure out what the formula should be.
- 6. Hit Save.

Sum Formula

Remember when we found the "sum" in the baked goods sold in a previous lesson. We typed =SUM(B3:F3).

- 1. In cell F3, type a function formula that will add the numbers in row 3.
- 2. Click in cell F5 and type a formula that will add all the numbers in Row 5.
- 3. 3 You need to create formulas in cells F6, F7, F8, F9, F10, and F11 to complete all the rest of the students' total points.
- 4. Hit Save.

Average Function Formula

For this product, we will find out the average grade the computer class earned on each assignment.

1. Click in cell B15 and type =AVERAGE(B5:B11) to find the average score of Assignment 1 and hit Enter.

You should get 8.285714286. That looks like a very long number but later we will format the numbers to make them shorter.

2. Click in cell C15 and type =AVERAGE(C5:C11) to find the average score of Assignment 2 and hit Enter.

You should get 7.857142857.

- 3. A pattern has formed. You should be able to figure out what goes into D15 from the previous 2 steps. Figure the average for Assignment 3.
- 4. Do the same for E15 to find the average score for Test 1.
- 5. Do the same for E16 to find the average total points for students.
- 6. Hit Save.

Division and Percentage Formulas

We will now convert the total points earned into a percentage using a formula. This is what you should do to figure your grades in school. Many of your assignments are given to you in the format 90% or 100%. To get this number, you take the total number of points earned, divide by the total number of points possible, and then multiply by 100.

- 1. Click in cell G5 and type =F5/F5*100 to find Ann's percentage. You should get 100.
- 2. Click in cell G6 and type =F6/F5*100 to find Jorge's percentage.
- 3. Click in cell G7 and type =F7/F5*100 to find Trina's percentage.

Notice you only change the number for the numerator in the formula.

- 4. Figure all the students percentage in Column G by using formulas. Make sure you type the formula, because that is what you are being graded on.
- 5. Hit Save.

Sorting Data

 Select from A5 to F11. Then click on the Home Tab>Look for Sort and Filter Button on right>Select Sort from A to Z. You list should now be in alphabetical order with Ann's scores listed first and Trina's listed last.

Insert and Delete Rows

We just found out that a new student will be joining our class. We will need to insert a new row.

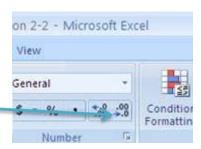
- 1. Put your cursor on the number 9 that is to the left of Maria's name. You cursor will turn into a black
- 2. Right-click and select insert.

You should now have a blank line to add the new student.

3. Type Leon for the student name and press Enter. Leave the scores blank.

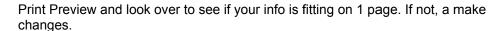
Changing the Number of Decimals

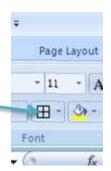
- 1. On the average row (Row 16), select from B13 to F16.
- 2. Click on the decrease decimal button, until only 2 place (tenths place) are showing in Row 16.



Adding Borders

- 1. Select boxes A2 to G16.
- 2. Find the borders button
- 1. Click on the drop down arrow next to it and click onto select all borders.
- 2. Hit Save.
- 3. Print Preview (Do Not Print)





YOUR FINISHED GRADEBOOK SHOULD LOOK JUST LIKE THIS. Now time for Data Analysis,

E,	A	В		D	E		G	
1	Comp Apps Gradebook							
2	Name	Assignment 1		Assignment 3		Total Points	Percentages	
3	Points Possible	10	10	10	50	80	100	
4								
5	Ann	7	8	6	46	67	83.75	
6	Dwayne	5	4	6	25	40	50	
7	Jorge	8	9	- 4	41	62	77.5	
8	Latisha	9	10	8	49	76	95	
9								
10	Maria	10	8	9	45	72	90	
11	Mark	10	10	10	49	79	98.75	
12	Trina	9	6	10	20	45	56.25	
13								
14	Highest	10	10	10	49			
15	Lowest	5	4	4	. 20			
16	Average	8.29	7.86	7,57	39.29	63.00		
17								

DATA ANALYSIS

- 1) In cell A20, type which student had the lowest score on Test 1?
- 2) In cell A21, type which student had the highest score on Assignment 3?
- 3) In cell A22, type which student had the highest percentage?

4) In cell A23, type yes or no to answer this question. Do you understand how to complete calculations?

Name the tab on the bottom of the page Lesson 3.

SAVE ASSIGNMENT

RUBRIC and SELF CHECKLIST! ☑

Skill	Self Check List 	Teacher's Checklist
Title		1 Point
Bold Column Headings		2 Point
Total Point Formulas		4 Point
Highest and Lowest Formulas		4 Point
Average Formulas		4 Point
	Total	/15 Points