 Microsoft Office Excel 2013

Lesson 3

Math & Text Functions

1. Open the Excel 3 Starter.
	1. Save the document with Excel 3 and your initials.
	2. Add a header with your name, filename, and period.
2. Part 1: Simple Functions – Click on the Part 1 Tab

IN THIS LESSON

* MATH FUNCTIONS:
	+ Sum
	+ Average
	+ Count
	+ Max
	+ Min
	+ Counta
	+ Countif
* TEXT FUNCTIONS
	+ Left
	+ Right
	+ Concatenate
	+ Proper
	+ Lower
	+ Upper
	1. 1A: SUM
		1. Use the SUM function to sum the numbers in A4:A12.
		2. DO NOT use autofill—do the formula 4 times, once for each column.
		3. Check your Score Sheet to be sure that you got a point for this section.
	2. Do the same for Parts B-D, using the Average, Min, and Max functions.
	3. Part 1E: COUNT
		1. Highlight F4-F55 to calculate how many numbers are in the list.
	4. Part 1F: COUNTA
		1. Use the COUNTA function to count text.
		2. Count the number of students listed in column H. The answer should appear in I49.
	5. Part1G: COUNTIF
		1. Use the COUNTIF function to calculate:
			1. How many male vs. female
			2. How many in each of the three grades
			3. How many in each of the five color teams.
				1. Remember to use “” around text you are counting, but not numbers.
		2. Check your score sheet to see if you received a point.
1. Part 2: Practical Uses for Sum, Average, Max, and Min
	1. 2A: Adding Time
		1. In C5:C14, enter the times as listed to the right.
		2. **Before entering**—change the format to time!
			1. Make sure to change the formatting of C5:C15 to the correct format—shown left.
			2. When entering, enter a “0:03:48” in order for it to format correctly.
		3. Sum the total in C15.
		4. Check the score sheet to see if you got it right.
	2. 2B: Figuring GPA with Averages
		1. Using the figure to the right, enter the numerical value for each grade for each quarter.
		2. AVERAGE each individual quarter’s grades.
		3. In J12, AVERAGE each of the quarter’s GPA to figure the cumulative GPA.
			1. =AVERAGE(H11,J11,L11,N11)
		4. In H11, J11, L11, N11 and J12, change the format to 2 decimal places.
			1. Hint: You can use the CTRL key to do it all at once!
	3. 2C: MAX, MIN, AVERAGE and SUM in a Judging Sheet
		1. In column J, find the average for each students score in singing, dancing and acting.
			1. Autofill down.
		2. In column K, find the MAX score for each student.
			1. You must enter the function by hand—using Autosum will not work because you do not want to include the numbers in column J.
		3. In column L, find the MIN score for each student.
		4. In column M, find the total score for each student.
		5. In J38, find the average of all the scores in column J. Do the average fro the min, max, and total columns as well.
		6. Sort the list by total score, with the highest score at the top.
			1. Check your score sheet.
2. Part 3: Combining Formulas & Functions
	1. Change the format in C6-C33 to %.
		1. Change the format to 1 decimal place.

FORMULAS:

* 1. In B3, enter the start weight by typing in =B6.
	2. In D3, enter any date as the start date.
	3. In G3, enter the end weight by typing in =B33.
	4. In A6, enter the start date by typing in =D3.
	5. In A7, enter the next week’s date by typing in =A6+7 (as in 7 days.)
		1. Highlight A7 and autofill down to fill in the rest of the dates.
		2. Change the start date in D3 and watch what happens.
	6. In G7, figure out the amount of weight lost in the first week.
		1. Autofill down.
	7. In D34, figure out the amount of inches lost around the waist.
	8. In E34, figure out the amount of inches lost around the hips.
	9. In F34, figure out the amount of inches lost around the chest.
	10. In C36, figure out the total amount of pounds lost.
	11. In C37, figure out the total amount of inches lost.
	12. In C38, figure out the average amount of weight lost per week. You will need column G for this.
		1. Change the number format to 1 decimal place.
	13. In C39, figure out the highest amount lost in one week.
		1. Change the number format to 1 decimal place.
	14. In C40, figure out the lowest amount lost in one week.
	15. In C41, figure out the % of body fat lost. (subtract)
	16. In C42, figure out what percentage of the starting weight in lbs of fat.
	17. In C43, figure out what percentage of the ending weight is lbs of fat.
	18. In C44, figure out the total loss of lbs of fat.
	19. In C45, use the proper count function to count the number of weeks dieting.
		1. Do not include the first week listed—that is the start weight!
	20. Check your score sheet.
1. Part 4: Text Functions
	1. 4A: CONCATENATE Function
		1. In C4-C15, use the concatenate function to combine the proper words together to make one word.
			1. If you get the correct answer, you will get one point showing in column D.
	2. 4B: LEFT, RIGHT, AND MID Functions
		1. Separate out the three parts of a phone number (area code, prefix, and line number).
		2. LEFT: Use the Left function to separate the first 3 digits.
		3. MID: Use the Mid function to separate the 4th number and the following 3 digits.
		4. RIGHT: Use the Right function to separate the last 4 digits.
		5. Autofill down.
	3. 4C: LOWER, UPPER, PROPER in Names
		1. In column B, change the formatting of the name to Uppercase.
		2. In column C, change the formatting of the name to Lowercase.
		3. In Column D, change the formatting of the name to Proper.
		4. Check your score sheet.
2. Part 5: Using Text Functions to create Logins
	1. 5A: In C5, use CONCATENATE to combine the name, last then first.
		1. You will need to put a space and comma inbetween.
			1. Example: =Concatenate(N56,”, “,N57)
		2. In D5, change the name to Proper.
		3. In E5, we want to get the name without any functions attached to it. Copy the names in D5-D14, and copy them. Then paste the VALUES ONLY in E5.
	2. 5B: Using the information in A18-C26, create logins for each name.
		1. In A29, use the LEFT formula to find the first 5 letters of the Last name.
		2. In B29, use the LEFT formula to find the first 3 letters of the first name.
		3. In C29, use RIGHT to find the last four digits of the student number.
		4. In D29, use CONCATENATE to combine the last name, first name, and student number parts.
		5. In E29, set it to lowercase.
		6. Check your score sheet.
3. Score & Print
	1. You should now have a total of 36 pts in G29. If you have any 0’s, go back and find your error.
	2. PRINT THE SCORE SHEET ONLY.
	3. Turn in.