

COMM 205 Midterm Review Session

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1. Have your packages ready. If you don't have a printed or electronic version, talk to me BEFORE the session starts
2. Go through the review material (function descriptions) BEFORE the session starts if possible. It'll take you 5-7 mins only, but it'll save time for more practice problems.



Numerical vs. text formulas

Return number

- COUNTIFS/SUMIFS
- VLOOKUP
- LEN
- FIND/SEARCH

Return text

- IF
- VLOOKUP
- LEFT/RIGHT/MID
- TRIM
- SUBSTITUTE/
REPLACE



Quotation marks: general rule

- Always use with text
- Don't use with numbers, cell references, or formulas



IF, AND, OR

- IF – quotation marks are needed for text, but not for numbers, cell references, or formulas
- AND/OR – logical operator should be inside
 - $\text{AND}(A2>2, B2>2)$
 - $\text{NOT AND}(A2,B2)>2$
- AND/OR – NO cell arrays in arguments



COUNTIFS, SUMIFS

Criteria can be in form of a number, cell reference, or text

- Criteria should be enclosed in “_”:
 - **Logical operator** OR any text
- Criteria should NOT be enclosed in “_”:
 - Any cell reference
 - Any formula (either cells or numbers)
- Numbers can be or be not enclosed in “_”



COUNTIFS vs. SUMIFS

=COUNTIFS(criteria_range1,criteria1,...)

even number of arguments

=SUMIFS(sum_range,criteria_range1,criteria1,...)

odd number of arguments



VLOOKUP

- The value you want to look up must be in the first column of the range of cells you specify in `table_array`
- `lookup_value` can be a cell, number, or “text”
- Tip: make a table array an absolute reference
- For approximate search: sort `table_array` numerically (ascending) or alphabetically (A-Z)



LEFT/RIGHT/MID (L/R/M)

- L/R/M– if num_chars is omitted, it is assumed to be 1
- L/R/M– spaces should be counted



CONCATENATE, & operator

- Don't forget to insert “_” between words
- You can use cells, “text”, numbers
- E.g. if A2=Love, then to get ‘Love u 2’, we would use
=CONCATENATE(A2,“ ”,“u”,“ ”,2)
- Alternatively, use &: =A2&“ ”&“u”&“ ”&2



LEN, TRIM, SUBSTITUTE, REPLACE

- TRIM – removes all spaces from text except for single spaces between words
- SUBSTITUTE/REPLACE – text can be “text” or a cell reference
- SUBSTITUTE/REPLACE – both are case sensitive



SUBSTITUTE vs. REPLACE

- Use SUBSTITUTE when you want to replace specific text;
=SUBSTITUTE(text,old_text,new_text,...)
- Use REPLACE when you want to replace any text that occurs in a *specific location*.
=REPLACE(old_text,start_num,num_chars,new_text)



SUBSTITUTE: instance_num

- Specifies which occurrence of old_text you want to replace with new_text. If you specify instance_num, only that instance of old_text is replaced. Otherwise, every occurrence of old_text in text is changed to new_text (Office.com, 2015)
- Counts within **text** argument!

SUBSTITUTE examples

A2=Itty bitty,

- =SUBSTITUTE(A2,5,"t","l",2)

New A2=Itly bitty

- =SUBSTITUTE(RIGHT(A2,5),"t","l",2)

New A2=bitly

- =SUBSTITUTE(RIGHT(A2,5),"t","ll",2)

New A2=bitlly



FIND, SEARCH

- FIND – Case sensitive + NO wildcards
- SEARCH – NOT case sensitive + Wildcards
- FIND/SEARCH – return the number of characters from the start of `within_text`, counting the characters you skip if `start_num` is greater than 1 (Office.com, 2015)

E.g. A2=MIS Midterm. $\text{FIND}(\text{"M"}, \text{A2}, 4) = 5$.

Same for $\text{SEARCH}(\text{"M"}, \text{A2}, 4) = 5$.



FIND vs. SEARCH

- No function is better than the other. Your choice depends on what you need:
 - you need to find specific Capital letters – FIND
 - you need to use wildcards – SEARCH
- Wildcards:
 - ? – exactly one character;
 - * - a series of 0 or more characters.
 - ~ - to look for ? or * or ~



References

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