

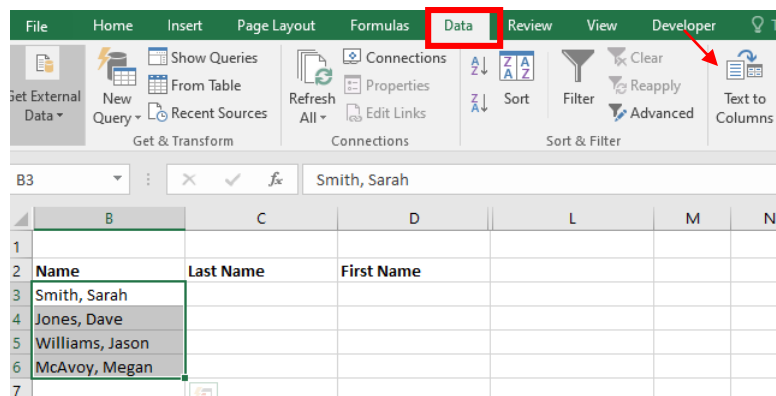
# Useful Excel Functions/Formulas

## Separate Data

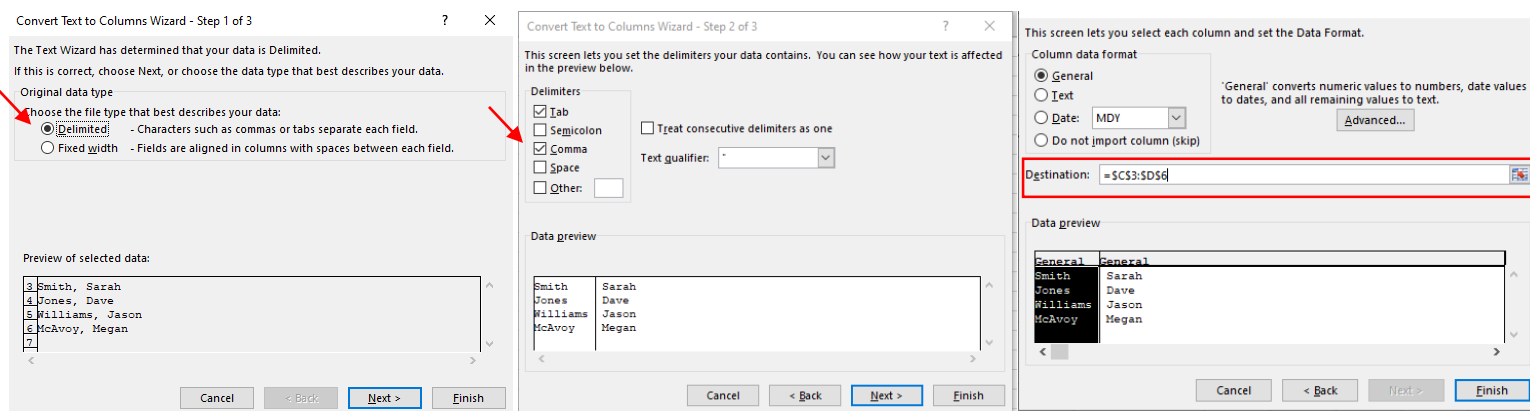
You may have a column of data that you want to separate into two distinct columns

	B	C	D
1			
2	<b>Name</b>	<b>Last Name</b>	<b>First Name</b>
3	Smith, Sarah		
4	Jones, Dave		
5	Williams, Jason		
6	McAvoy, Megan		
7			

- Select the data that you want to separate
- On the Data Tab select “Text to Columns”



- In the Wizard make sure “Delimited” is selected (Step 1), click Next, then make sure “Comma” is selected (Step 2), click Next, then you can choose your destination of where you want the data to be placed, click Finish.



Your result is:

	B	C	D
1			
2	<b>Name</b>	<b>Last Name</b>	<b>First Name</b>
3	Smith, Sarah	Smith	Sarah
4	Jones, Dave	Jones	Dave
5	Williams, Jason	Williams	Jason
6	McAvoy, Megan	McAvoy	Megan
7			

## Combine Data

You may have two columns of data that you want to combine into one

	C	D	E
1			
2	<b>Last Name</b>	<b>First Name</b>	<b>Full Name</b>
3	Smith	Sarah	
4	Jones	Dave	
5	Williams	Jason	
6	McAvoy	Megan	

- In the new column type in the formula **=C3&", "&D3**

	C	D	E
1			
2	<b>Last Name</b>	<b>First Name</b>	<b>Full Name</b>
3	Smith	Sarah	=C3&", "&D3
4	Jones	Dave	
5	Williams	Jason	
6	McAvoy	Megan	
7			

Your result is:

	C	D	E
1			
2	<b>Last Name</b>	<b>First Name</b>	<b>Full Name</b>
3	Smith	Sarah	Smith, Sarah
4	Jones	Dave	
5	Williams	Jason	
6	McAvoy	Megan	

- You can then copy and paste this formula down to the other cells.

B	C	D	E
<b>Name</b>	<b>Last Name</b>	<b>First Name</b>	<b>Full Name</b>
Smith, Sarah	Smith	Sarah	Smith, Sarah
Jones, Dave	Jones	Dave	Jones, Dave
Williams, Jason	Williams	Jason	Williams, Jason
McAvoy, Megan	McAvoy	Megan	McAvoy, Megan

## Calculating Current Length of Stay for Active Clients

If you are working with a data set of **active clients** and you always want to know what their current length of stay in the program is, you can use the TODAY formula.

- In a cell in your spreadsheet type the formula **=TODAY ()**. “Today’s Date” will populate. Every time you open this spreadsheet “Today’s Date” will update.

Clipboard		Font	
H1		$\times$	$\checkmark$ $f_x$ =TODAY()
	G	H	I
1	Today's Date	3/12/2021	

In your data set for Current Length of Stay type in the formula **=\$H\$1-G3**

	G	H
1	Today's Date	3/12/2021
2	Program Start Date	Current Length of Stay
3	9/12/2019	=H\$1-G3
4	7/21/2020	
5	5/25/2017	
6	2/3/2021	

Your result is:

G	H
Today's Date	3/12/2021
Program Start Date	Current Length of Stay
9/12/2019	547
7/21/2020	
5/25/2017	
2/3/2021	

- You can then copy and paste this formula down to the other cells. Every time you open the spreadsheet the data will update based on “Today’s Date”

Today's Date	3/12/2021
Program Start Date	Current Length of Stay
9/12/2019	547
7/21/2020	234
5/25/2017	1387
2/3/2021	37

## VLOOKUP (a formula I use all the time)

If you have 2 spreadsheets and there is a variable in one spreadsheet that you need in the other, but you don't want to have to manually sort through to find the data for your specific clients, you can use the VLOOKUP formula.

- First, you have to have a common variable in both spreadsheets (example ID#)

Sheet 1

	F	G	H
1			
2	ID	DOB	Gender
3	A1234567		
4	B7891011		
5	C12131415		
6	D16171819		
7			

Sheet 2

	A	B	C	D	E
1					
2	ID	Name	Gender	DOB	Program
3	A1234567	Smith, Sarah	Female	5/25/1988	Counseling
4	B7891011	Jones, Dave	Male	8/1/1981	Counseling
5	C12131415	Williams, Jason	Male	12/15/2011	Foster Care
6	D16171819	McAvoy, Megan	Transgender	2/22/2002	Foster Care
7					

- The VLOOKUP formula in English reads like this: =VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])
  - lookup\_value = the common identifier in both spread sheets (the ID #, which in Sheet 1 is in column F)
  - table array = the table that you are going to find the lookup\_value in (this is Sheet 2, the table of data would be columns A-E and rows 3-6; written as \$A\$3:\$E\$6)
  - col\_index\_num = the column number on Sheet 2 for the variable you are trying to get into Sheet 1 (DOB is in column 4 (column D is the 4<sup>th</sup> column) and Gender is in column 3 (column C is in the 3<sup>rd</sup> column))
  - range\_lookup = if you want an exact match you would use FALSE, if you want an approximate match you use TRUE (I always use FALSE).
- For DOB, in Excel you would type this formula into your cell
  - =VLOOKUP(\$F3,Sheet2!\$A\$3:\$E\$6,4,FALSE)

	F	G	H	I
1				
2	ID	DOB	Gender	
3	A1234567	=VLOOKUP(\$F3,Sheet2!\$A\$3:\$E\$6,4,FALSE)		
4	B7891011			
5	C12131415			
6	D16171819			
7				
8				

Hint: This part of the formula refers to the name of the spreadsheet where you are looking up your data. This can change depending on where this workbook or spreadsheet lives on your computer. I often copy and paste this data into a separate sheet in the same workbook I am working in to avoid really long file pathways in my formula.

Your result is:

	F	G	H
1			
2	ID	DOB	Gender
3	A1234567	5/25/1988	
4	B7891011		
5	C12131415		
6	D16171819		

- For Gender, in your formula you only need to change the col\_index\_num from 4 to 3
  - =VLOOKUP(\$F3,Sheet2!\$A\$3:\$E\$6,3,FALSE)

	F	G	H	I	J
1					
2	<b>ID</b>	<b>DOB</b>	<b>Gender</b>		
3	A1234567	5/25/1988	=VLOOKUP(\$F3,Sheet2!\$A\$3:\$E\$6,3,FALSE)		
4	B7891011				
5	C12131415				
6	D16171819				

Your result is:

	F	G	H
1			
2	<b>ID</b>	<b>DOB</b>	<b>Gender</b>
3	A1234567	5/25/1988	Female
4	B7891011		
5	C12131415		
6	D16171819		
7			

You can then copy and paste the formula to the rest of your cells.

	F	G	H
1			
2	<b>ID</b>	<b>DOB</b>	<b>Gender</b>
3	A1234567	5/25/1988	Female
4	B7891011	8/1/1981	Male
5	C12131415	12/15/2011	Male
6	D16171819	2/22/2002	Transgender
7			

## COUNTIFS

I use this formula (and its variation SUMIFS) a lot when I start analyzing assessment data. I am going to use CANS data as an example.

Your spreadsheet may look like this:

	E	F	G	H	I	J	K	L
1								
2	Assessment Date	CANS Item 1	CANS Item 2	CANS Item 3	CANS Item 4	CANS Item 5	CANS Item 6	# of Actionable Items
3	1/12/2021	1	0	N/A	2	2	0	
4	2/3/2021	3	1	0	1	1	2	
5	3/11/2021	0	0	1	0	0	N/A	
6	12/20/2020	3	2	2	N/A	3	1	

In the CANS it is common to want to know how many Items are rated as “Actionable” a rating of 2 or 3. To do this you can use the COUNTIFS formula.

- The COUNTIFS formula in English reads like this: =COUNTIFS(criteria\_range1, criteria1, criteria\_range2, criteria2, ....)
  - Criteria\_range1 = the range of data you want to count (in the example above cells F3 – K3)
  - Criteria1 = the value we want excel to count (in the example above we want to count the items rated a “2”)
  - Criteria\_range2 = the range of data you want to count (in the example above cells F3 – K3)
  - Criteria2 = the value we want excel to count (in the example above we want to count the items rated a “3”)
- The formula that you need to type for # of Actionable Items is: **=COUNTIFS(F3:K3,2)+COUNTIFS(F3:K3,3)**

	E	F	G	H	I	J	K	L	M
1									
2	Assessment Date	CANS Item 1	CANS Item 2	CANS Item 3	CANS Item 4	CANS Item 5	CANS Item 6	Total # of Actionable Items	
3	1/12/2021	1	0	N/A	2	2	0	=COUNTIFS(F3:K3,2)+COUNTIFS(F3:K3,3)	
4	2/3/2021	3	1	0	1	1	2		
5	3/11/2021	0	0	1	0	0	N/A		
6	12/20/2020	3	2	2	N/A	3	1		
7									

Your result is:

	E	F	G	H	I	J	K	L
1								
2	Assessment Date	CANS Item 1	CANS Item 2	CANS Item 3	CANS Item 4	CANS Item 5	CANS Item 6	Total # of Actionable Items
3	1/12/2021	1	0	N/A	2	2	0	2
4	2/3/2021	3	1	0	1	1	2	
5	3/11/2021	0	0	1	0	0	N/A	
6	12/20/2020	3	2	2	N/A	3	1	

You can then copy and paste the formula to the rest of your cells.

	E	F	G	H	I	J	K	L
1								
2	Assessment Date	CANS Item 1	CANS Item 2	CANS Item 3	CANS Item 4	CANS Item 5	CANS Item 6	Total # of Actionable Items
3	1/12/2021	1	0	N/A	2	2	0	2
4	2/3/2021	3	1	0	1	1	2	2
5	3/11/2021	0	0	1	0	0	N/A	0
6	12/20/2020	3	2	2	N/A	3	1	4