Day 3

1:30pm-2:30pm

• Apply Custom Data Formats

How to make your cell formats look the way you want (https://customformats.com/)

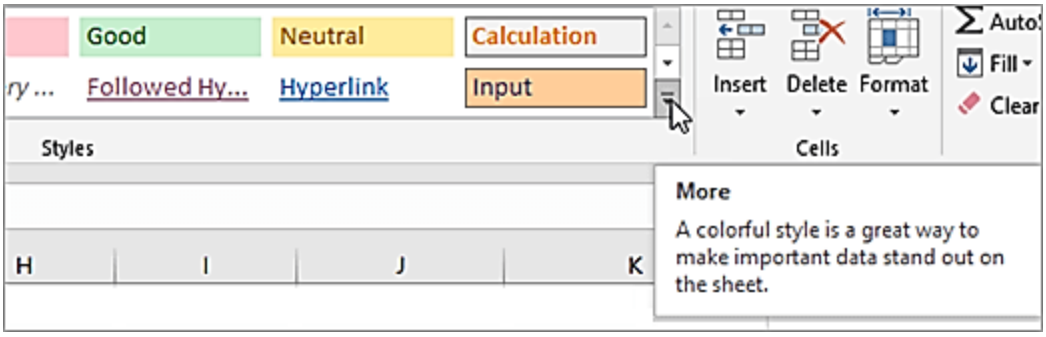
Custom Cell Formats	Text Before Formatting	Custom Format	Formatted Text
Brackets for negative values	-500	#,##0;(#,##0)	(500)
Red and brackets for negative values	-500	#,##0.00;[Red](#,##0.00)	(500.00)
Credit Card Numbers	4555123456789101	Formula required	4555 1234 5678 9101
Day of the week in full	27/03/2010	dddd	Saturday
Day, date, month and year	27/03/2010	ddd dd mmm yyyy	Sat 27 Mar 2010
Month	27/03/2010	mmmm	March
Phone Numbers	755551234	00 0000 0000	07 5555 1234
Phone Numbers with Brackets	755551234	(00) 0000 0000	(07) 5555 1234
Fractions	10.5	# ??/??	10 1/2
Trailing Dots	Monday	@*.	Monday.....
Prefixed with text	597	"INV" 0000	INV 0597

You can also use this custom number format for credit cards and long phone numbers:
[<=99999999999]###########;#### #### #### ####

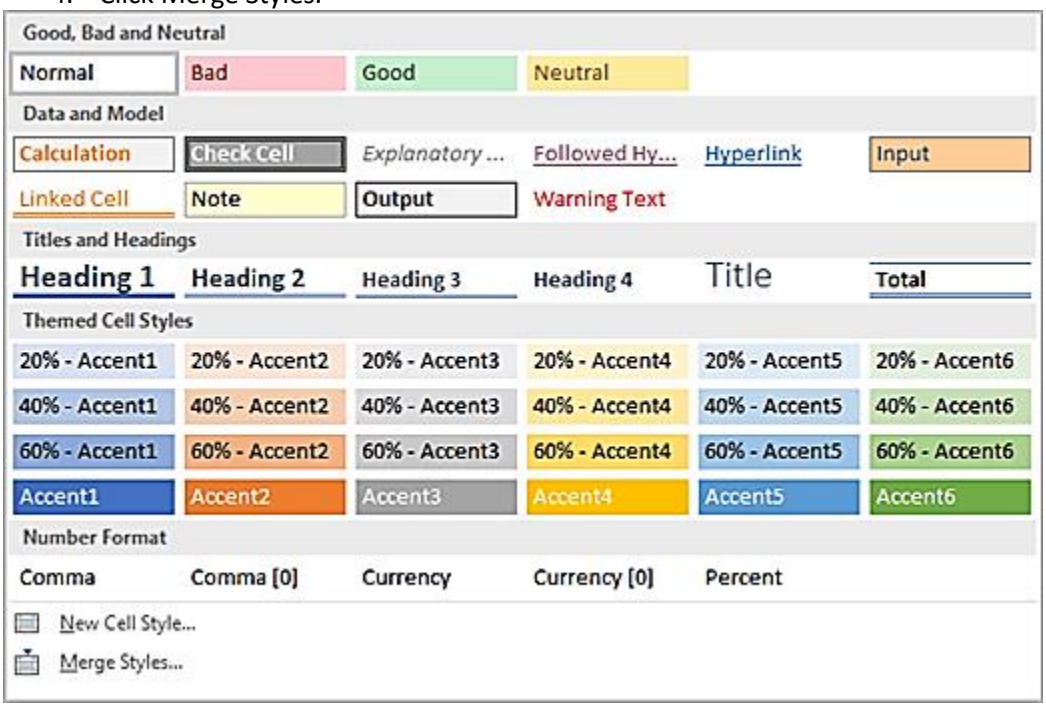
• Apply Custom Styles and Templates

If you want to make the cell styles that you create in or copy into a workbook available in all future workbooks, you can save them in a template that is used for all new workbooks. After you exit and restart Excel, the cell styles that you saved in your template workbook will be available in all new workbooks that you create.

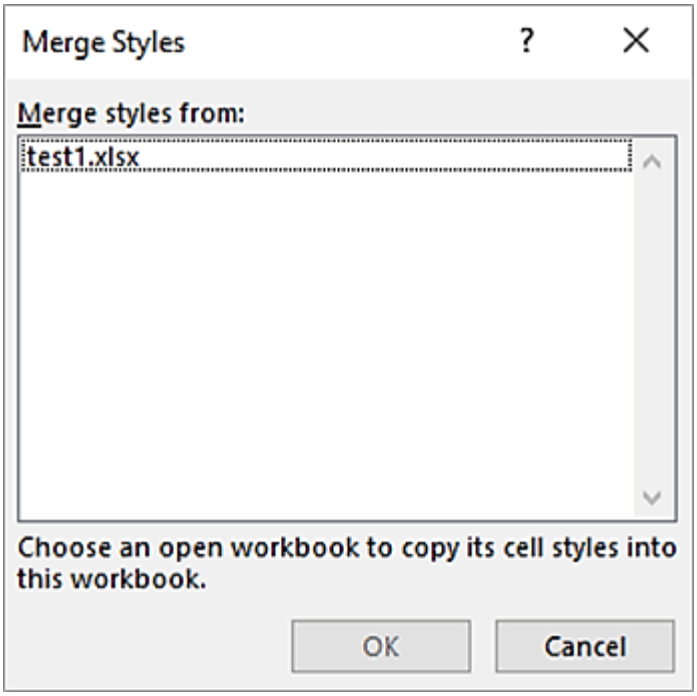
1. Open the workbook that contains the styles that you want to make available.
2. On the File tab, click New and select Blank Workbook.
3. On the Home tab, in the Styles group, click the More button More button next to the cell styles box.



4. Click Merge Styles.



5. In the Merge Styles dialog box, in the Merge styles from box, click the workbook that contains the styles that you want to copy, and then click OK.



6. If both workbooks contain styles that have identical names, you must indicate whether you want to merge these styles by doing the following:
    a. To replace the styles in the active workbook with the copied styles, click Yes.
    b. To keep the styles in the active workbook as they are, click No.

7. On the File tab, click Save As.
8. In the File name box, type Book.
9. In the Save as type box, click Excel Template, or click Excel Macro-Enabled Template if the workbook contains macros that you want to make available in the template.
10. Click Browse and then locate and select the XLSTART folder.
    a. Note: In Windows 10, the XLSTARTfolder is typically located in C:\Program Files(x86)\Microsoft Office\root\Office 16\XLSTART.

11. Click Save.

After you exit and restart Excel, the cell styles that you saved in Book.xltx (or Book.xltm) will be available in all new workbooks that you create.

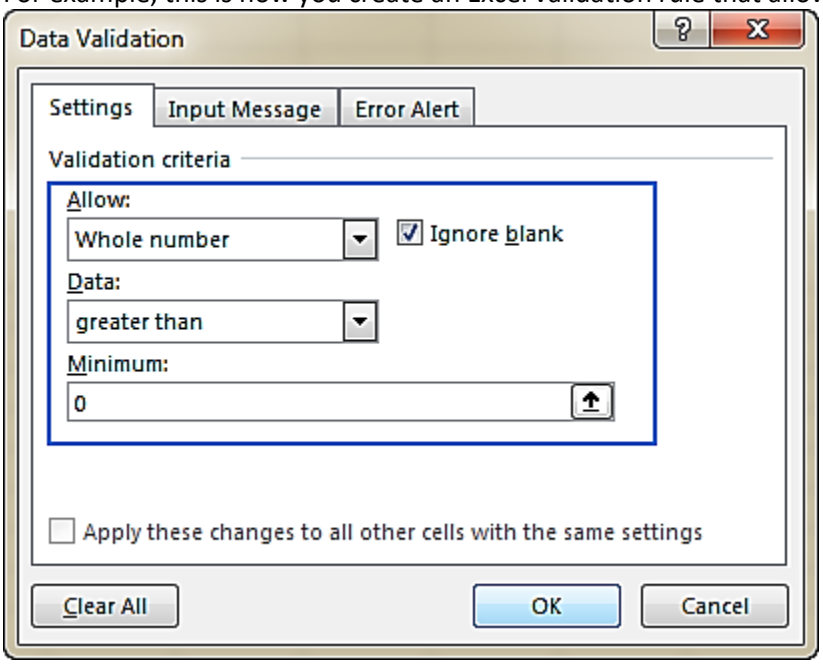
• Create user input validation using data validation method

Whole numbers and decimals

To restrict data entry to a whole number or decimal, select the corresponding item in the Allow box. And then, choose one of the following criteria in the Data box:

- Equal to or not equal to the specified number
- Greater than or less than the specified number
- Between the two numbers or not between to exclude that range of numbers

For example, this is how you create an Excel validation rule that allows any whole number greater than 0:

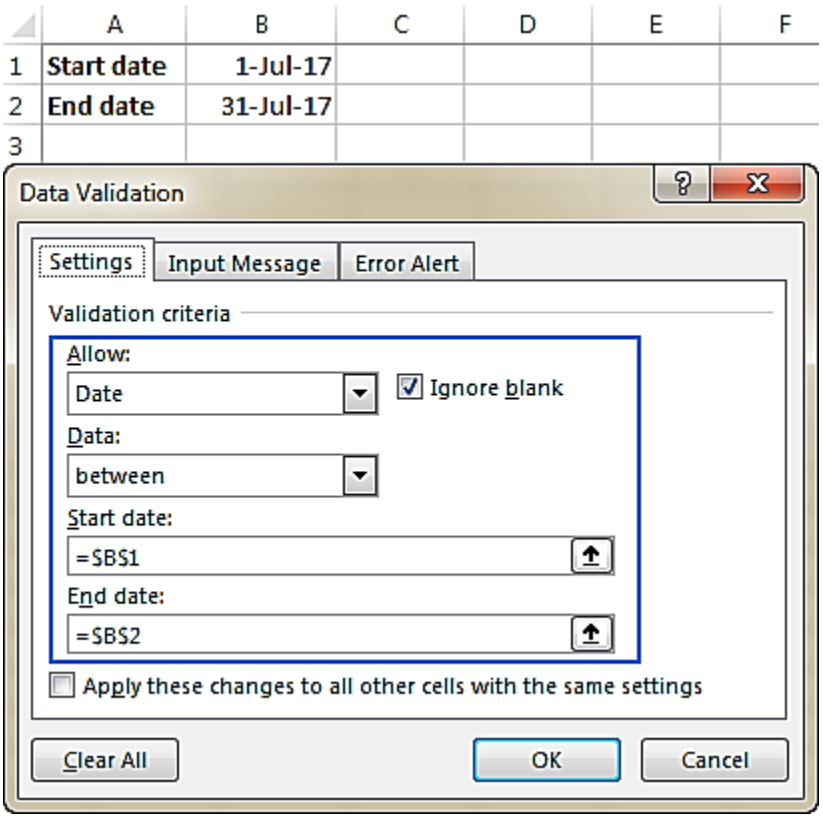


Date and time validation in Excel

To validate dates, select Date in the Allow box, and then pick an appropriate criteria in the Data box. There are quite a lot of predefined options to choose from: allow only dates between two dates, equal to, greater than or less than a specific date, and more.

Similarly, to validate times, select Time in the Allow box, and then define the required criteria.

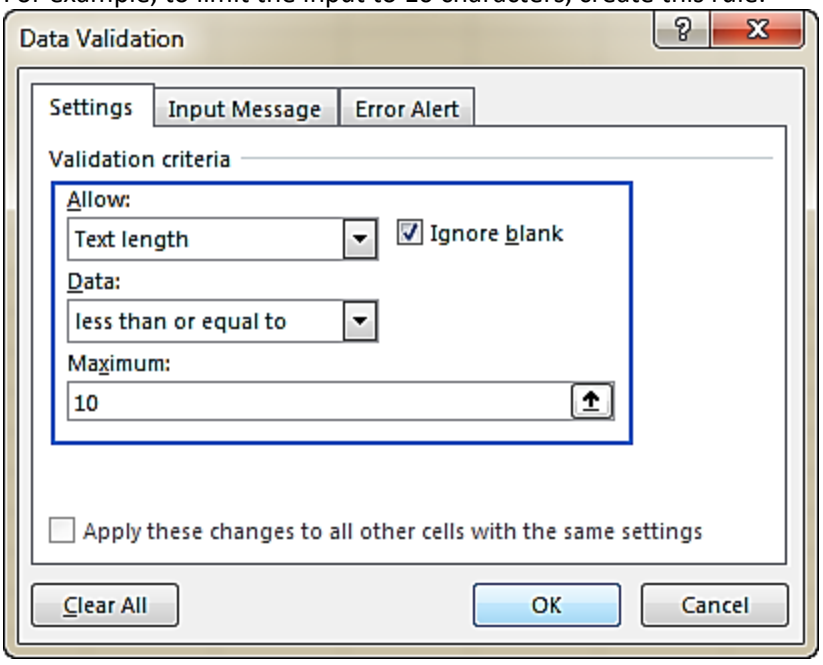
For example, to allow only dates between Start date in B1 and End date in B2, apply this Excel date validation rule:



Text length

To allow data entry of a specific length, select Text length in the Allow box, and choose the validation criteria in accordance with your business logic.

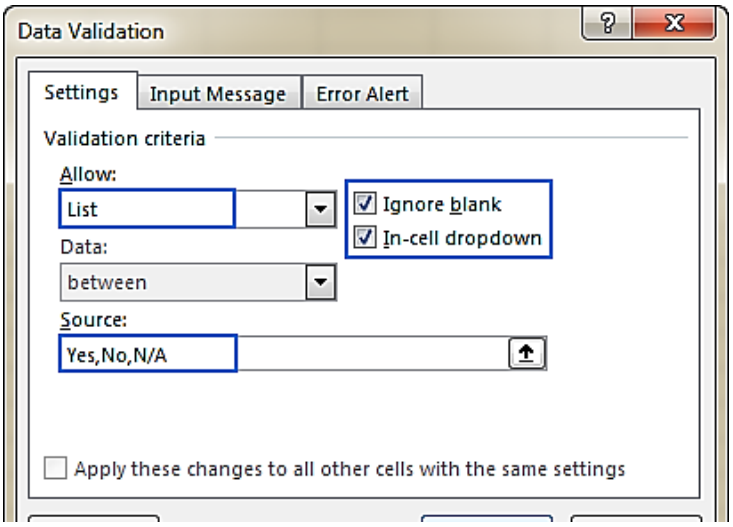
For example, to limit the input to 10 characters, create this rule:



Excel data validation list (drop-down)

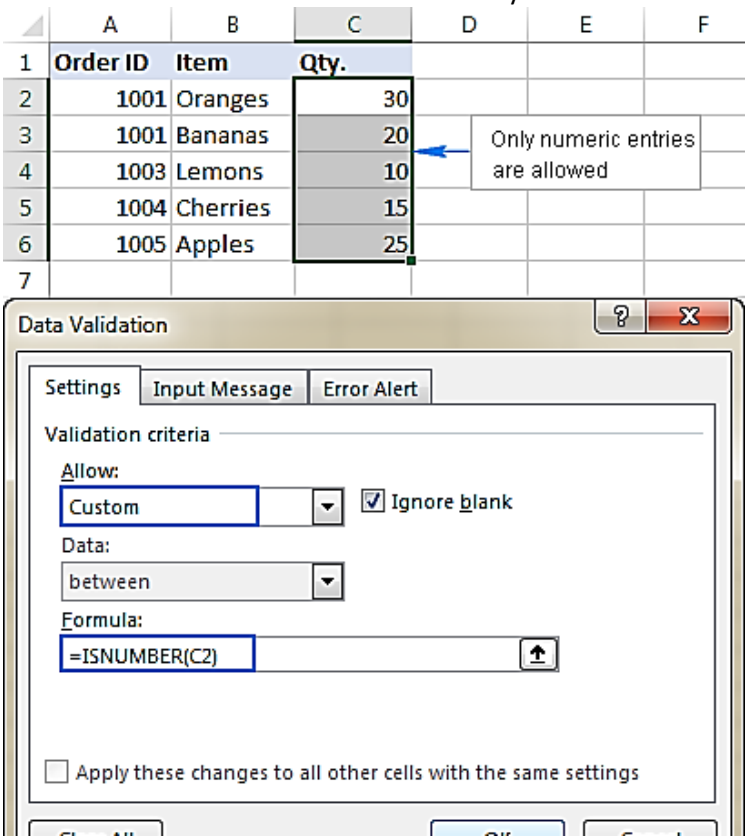
To add a drop-down list of items to a cell or a group of cells, select the target cells and do the following:

Open the Data Validation dialog box (Data tab > Data Validation).
On the Settings tab, select List in the Allow box.
In the Source box, type the items of your Excel validation list, separated by commas. For example, to limit the user input to three choices, type Yes, No, N/A.
Make sure the In-cell dropdown box is selected in order for the drop-down arrow to appear next to the cell.
Click OK.

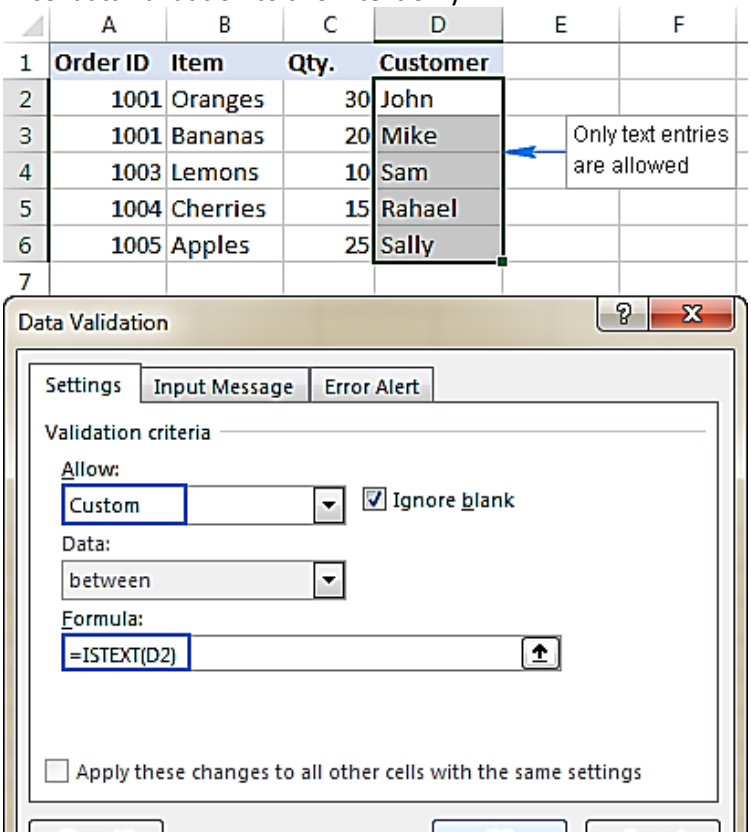


Custom data validation rules

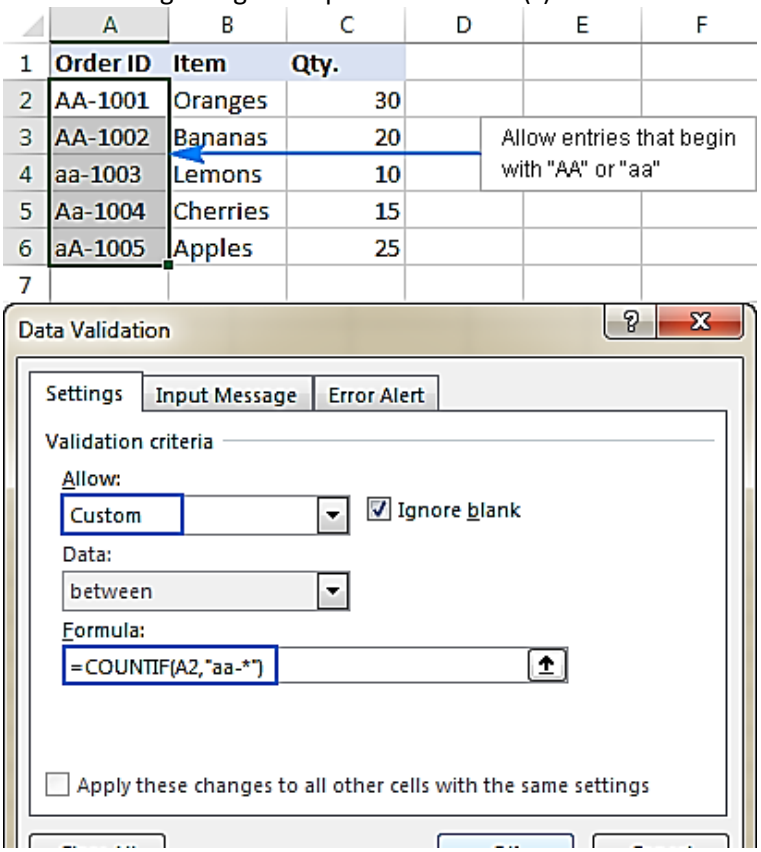
Excel data validation to allow numbers only



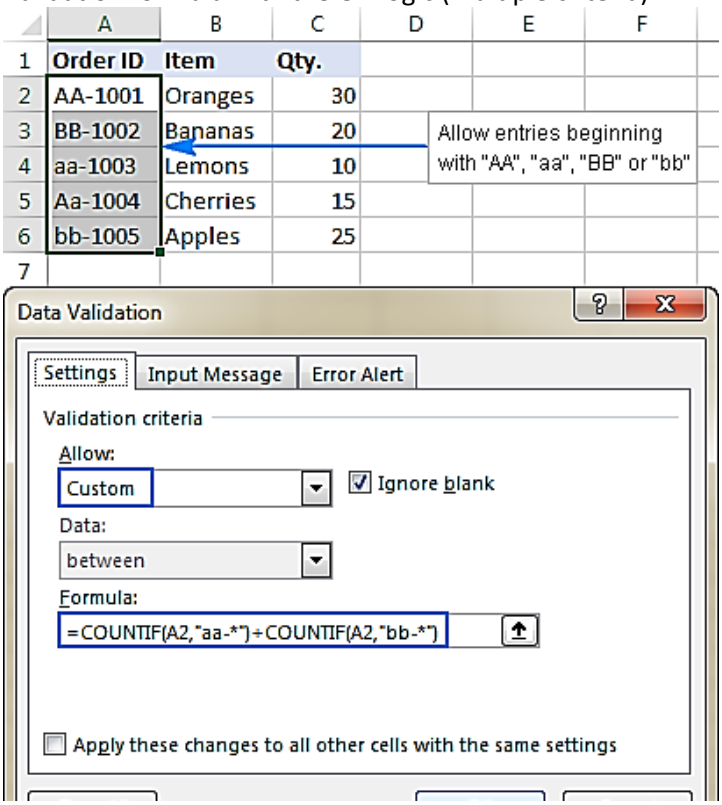
Excel data validation to allow text only



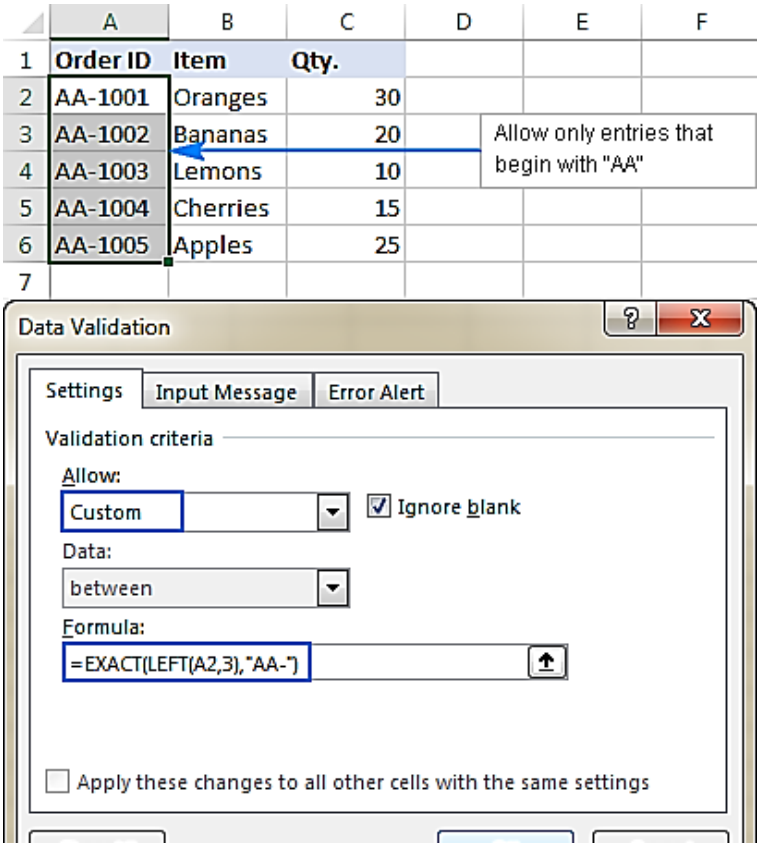
Allow text beginning with specific character(s)



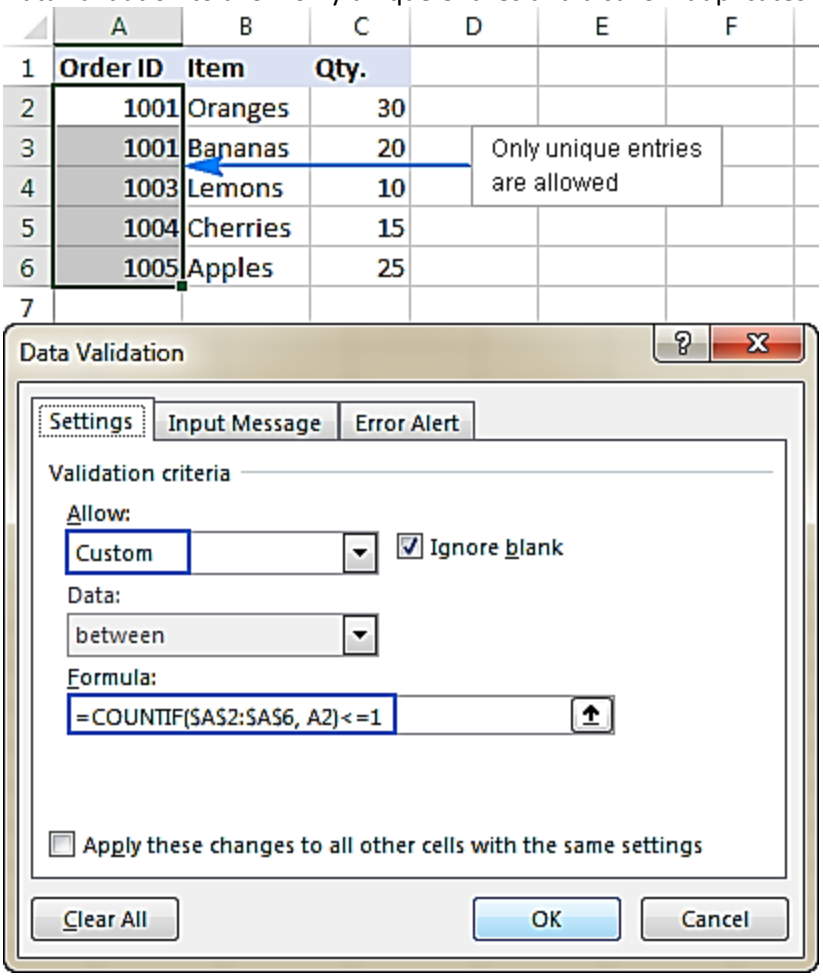
Validation formula with the OR logic (multiple criteria)



Case-sensitive validation formula



Data validation to allow only unique entries and disallow duplicates



2:30pm-3:30pm

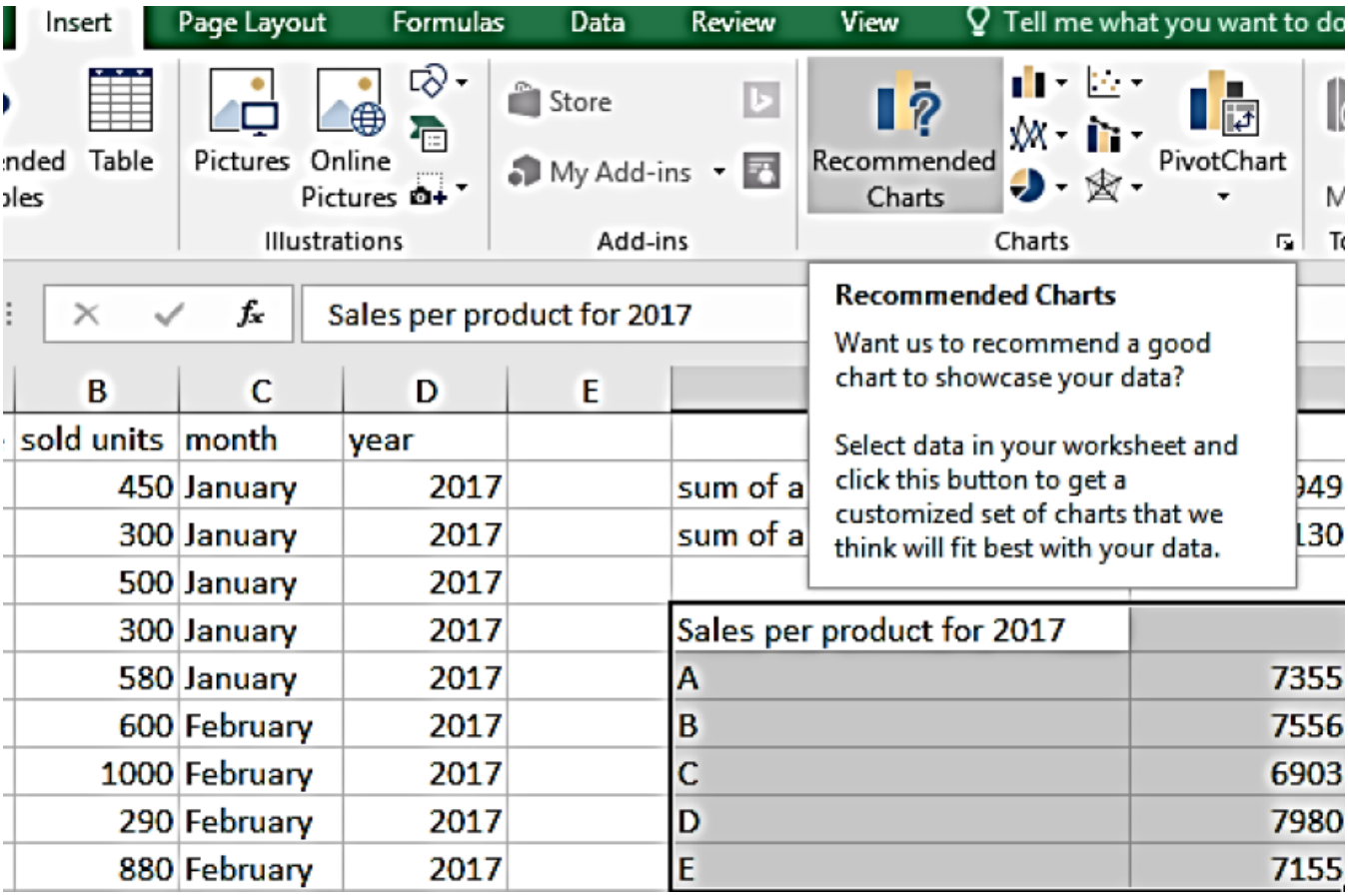
Creating Charts and Dashboard

1. Charts

→prepare data for chart

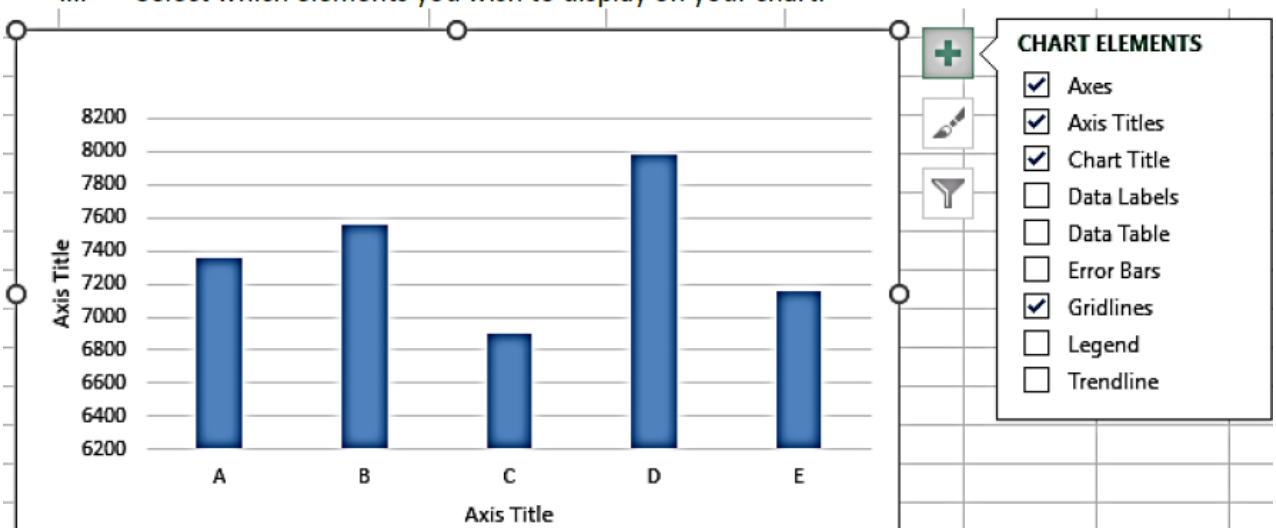
F	G
sum of all 2017 sales	36949
sum of all January 2017 Sales	2130
Sales per product for 2017	
A	7355
B	7556
C	6903
D	7980
E	7155

→highlight data range→insert→recommended charts

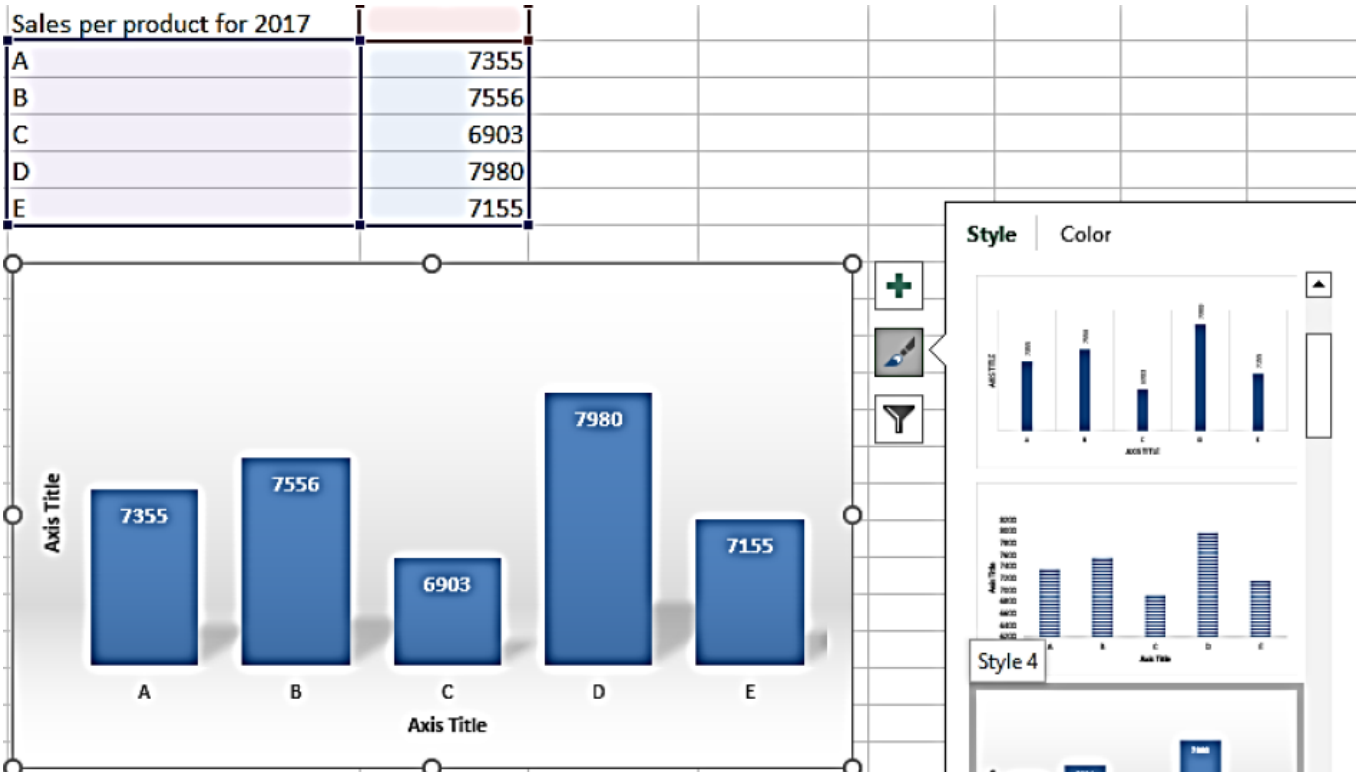


→choose a chart that best displays your data

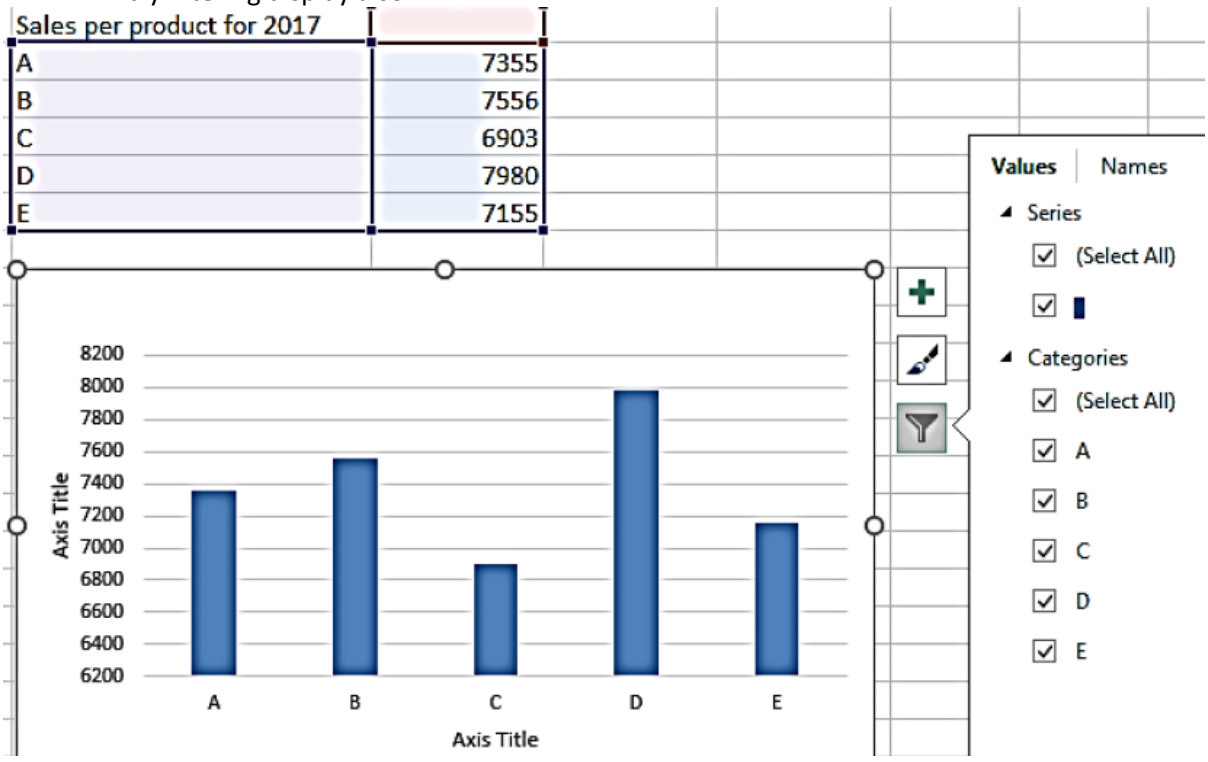
iii. Select which elements you wish to display on your chart.



→try changing chart styles



→try filtering display also



Application of basics of Sort and Filter

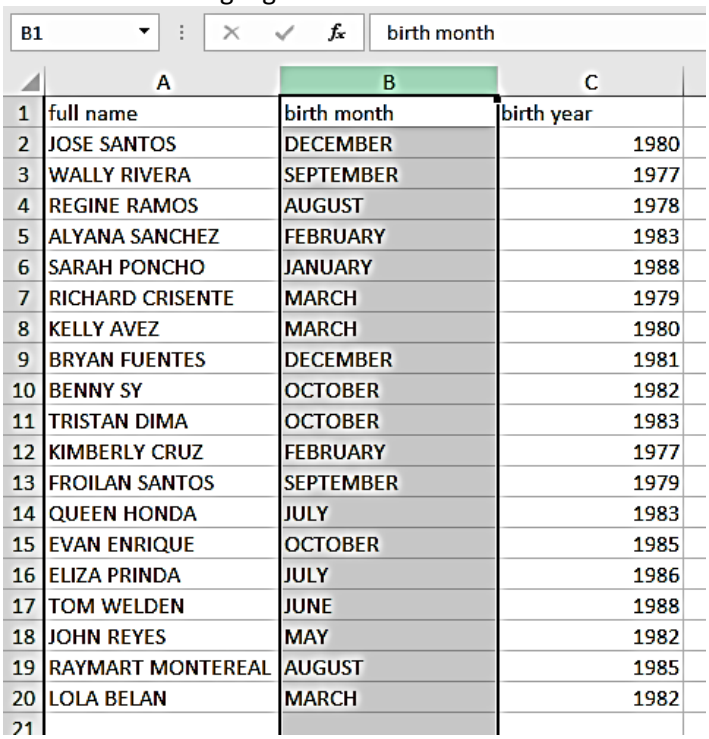
3:30pm-4:30pm

Application of Advanced Filter with Name Manager and logical symbols

Advanced Data Sorting

A. Using custom lists

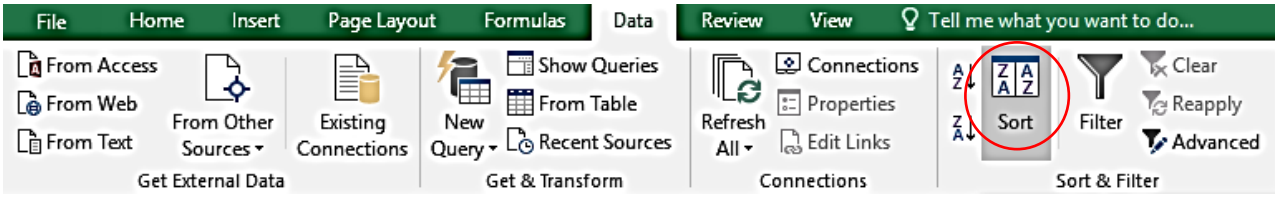
i. Highlight the column where to base the values to sort



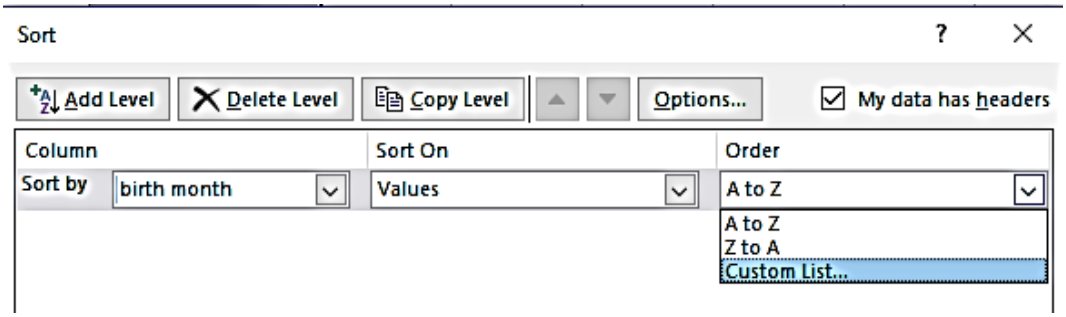
B1 | birth month

	A	B	C
1	full name	birth month	birth year
2	JOSE SANTOS	DECEMBER	1980
3	WALLY RIVERA	SEPTEMBER	1977
4	REGINE RAMOS	AUGUST	1978
5	ALYANA SANCHEZ	FEBRUARY	1983
6	SARAH PONCHO	JANUARY	1988
7	RICHARD CRISENTE	MARCH	1979
8	KELLY AVEZ	MARCH	1980
9	BRYAN FUENTES	DECEMBER	1981
10	BENNY SY	OCTOBER	1982
11	TRISTAN DIMA	OCTOBER	1983
12	KIMBERLY CRUZ	FEBRUARY	1977
13	FROILAN SANTOS	SEPTEMBER	1979
14	QUEEN HONDA	JULY	1983
15	EVAN ENRIQUE	OCTOBER	1985
16	ELIZA PRINDA	JULY	1986
17	TOM WELDEN	JUNE	1988
18	JOHN REYES	MAY	1982
19	RAYMART MONTEREAL	AUGUST	1985
20	LOLA BELAN	MARCH	1982
21			

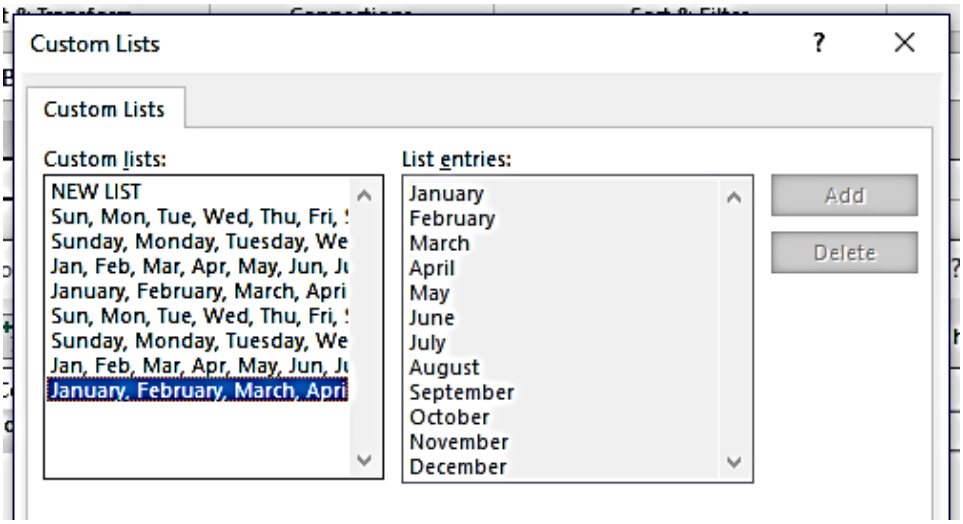
ii. Go to data→sort



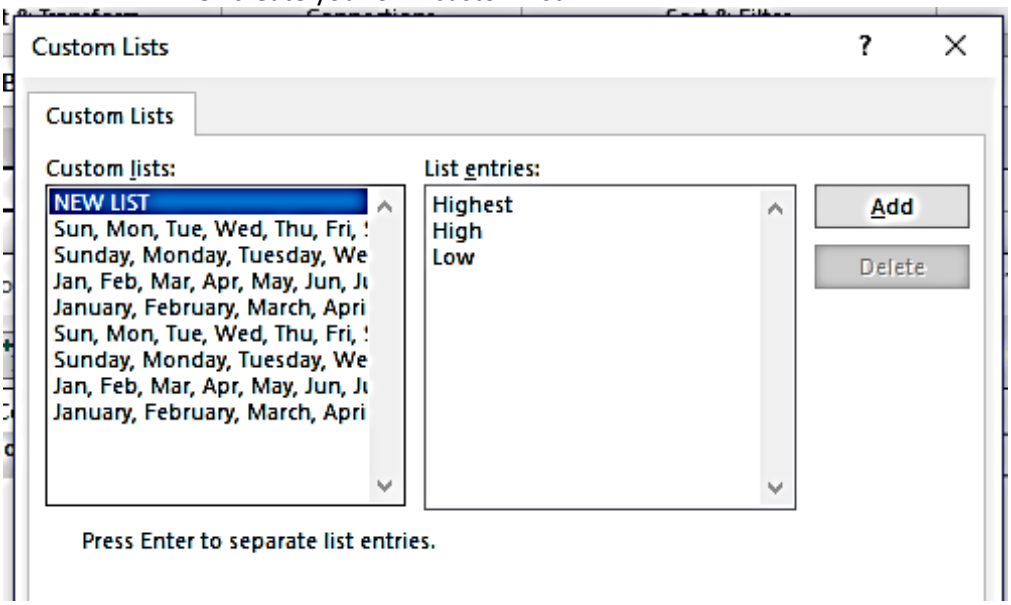
iii. Define which column and select custom list



iv. Select a custom list



v. Or create your own custom list

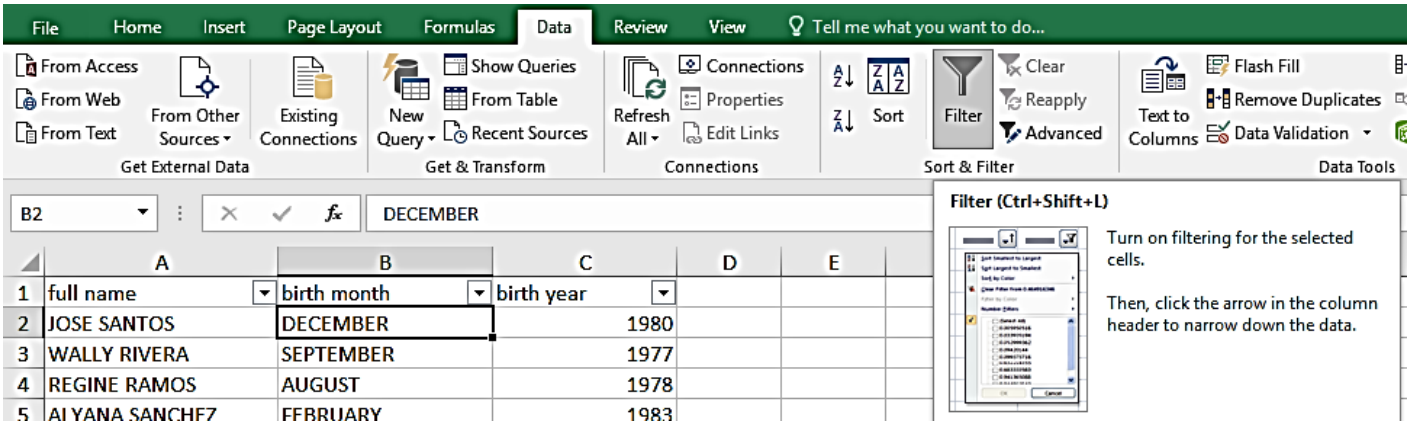


B. Using AutoFilters

i. Highlight a cell in a column where to base a filter

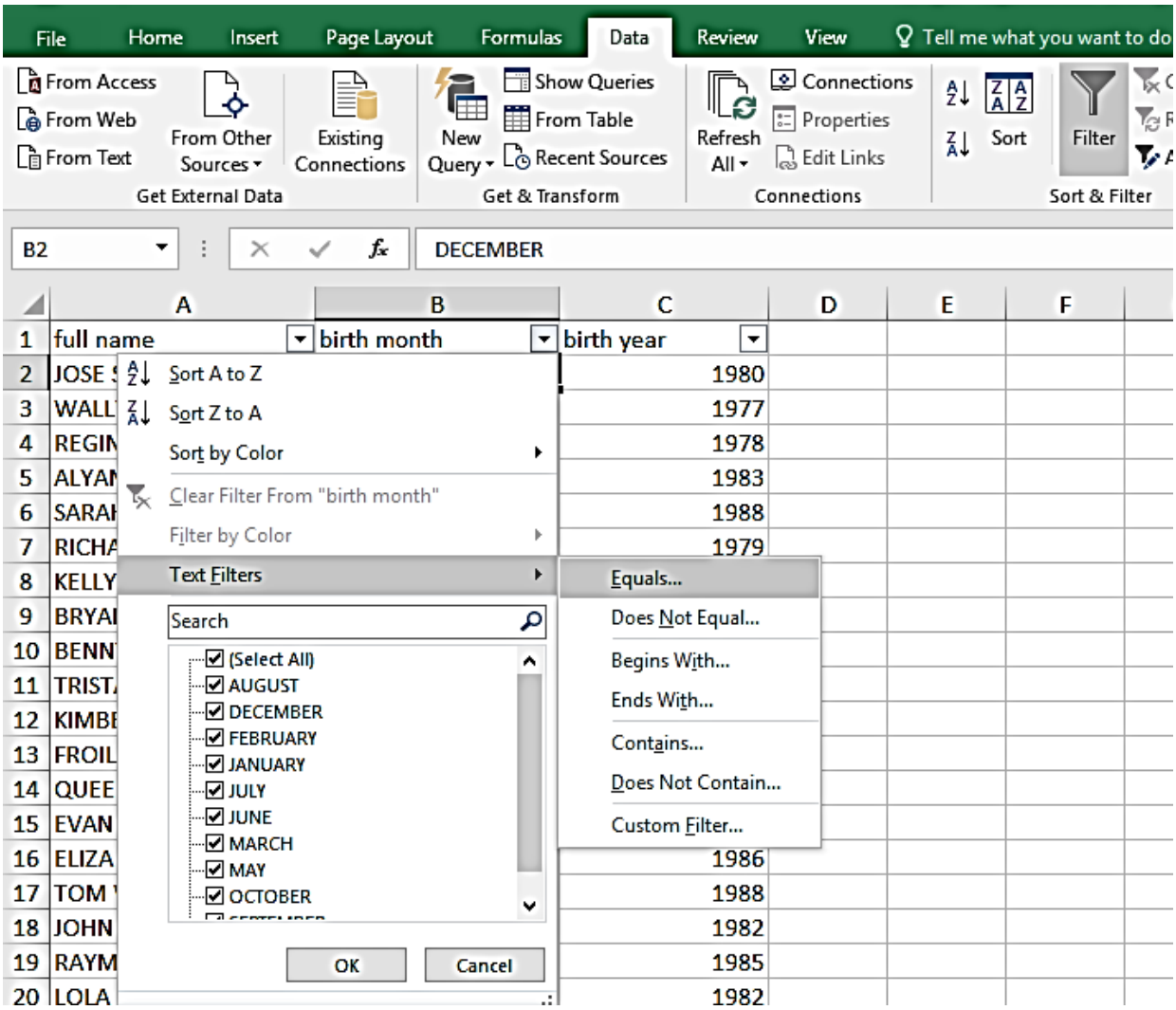
	A	B	C
1	full name	birth month	birth year
2	JOSE SANTOS	DECEMBER	1980
3	WALLY RIVERA	SEPTEMBER	1977
4	REGINE RAMOS	AUGUST	1978
5	ALYANA SANCHEZ	FEBRUARY	1983
6	SARAH PONCHO	JANUARY	1988

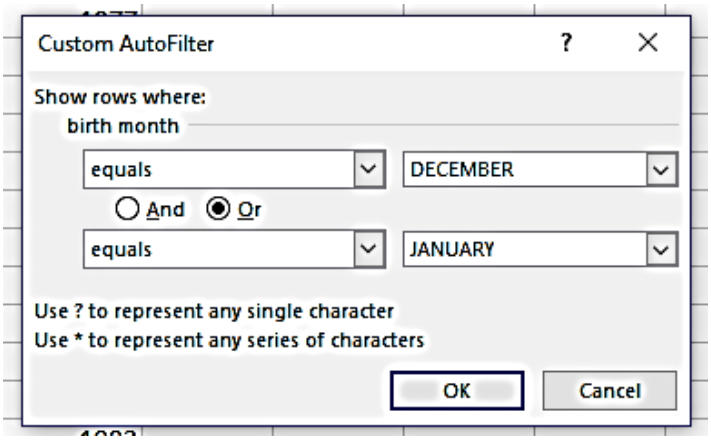
ii. Go to data→filter

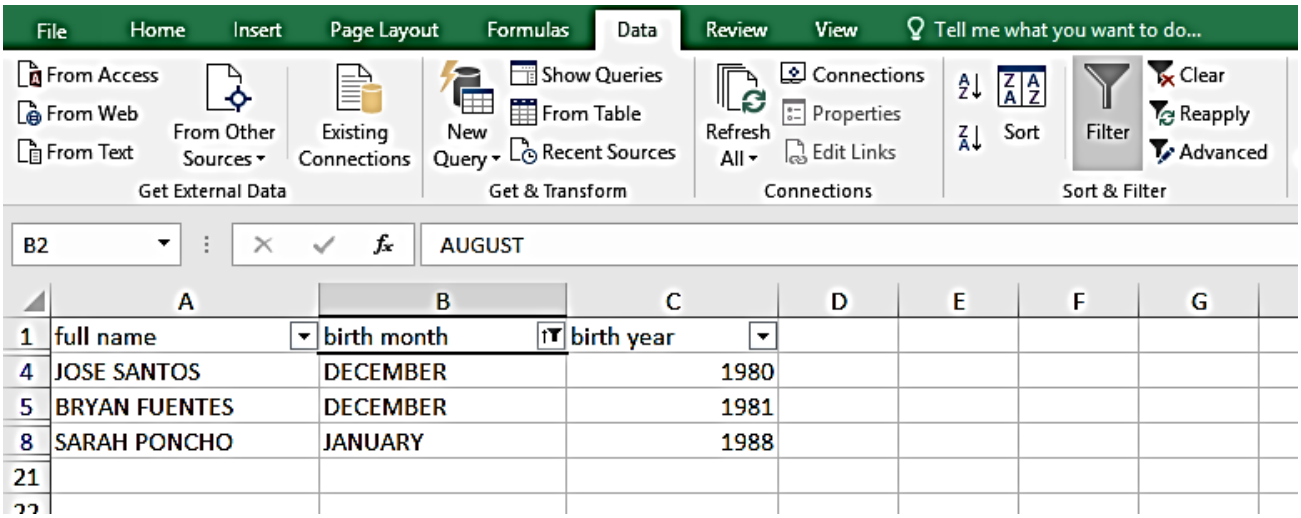


	A	B	C	D	E
1	full name	birth month	birth year		
2	JOSE SANTOS	DECEMBER	1980		
3	WALLY RIVERA	SEPTEMBER	1977		
4	REGINE RAMOS	AUGUST	1978		
5	ALYANA SANCHEZ	FEBRUARY	1983		

iii. Select a filter condition


File
Home
Insert
Page Layout
Formulas
Data
Review
View
Tell me what you want to do
From Access
From Web
From Text
From Other Sources
Existing Connections
Get External Data
New Query
Show Queries
From Table
Recent Sources
Get & Transform
Refresh All
Connections
Properties
Edit Links
Connections
Sort
Filter
Sort & Filter
B2
DECEMBER
full name
birth month
birth year
Sort A to Z
Sort Z to A
Sort by Color
Clear Filter From "birth month"
Filter by Color
Text Filters
Search
(Select All)
AUGUST
DECEMBER
FEBRUARY
JANUARY
JULY
JUNE
MARCH
MAY
OCTOBER
OK
Cancel
Equals...
Does Not Equal...
Begins With...
Ends With...
Contains...
Does Not Contain...
Custom Filter...


Custom AutoFilter
Show rows where:
birth month
equals
DECEMBER
And
Or
equals
JANUARY
Use ? to represent any single character
Use * to represent any series of characters
OK
Cancel



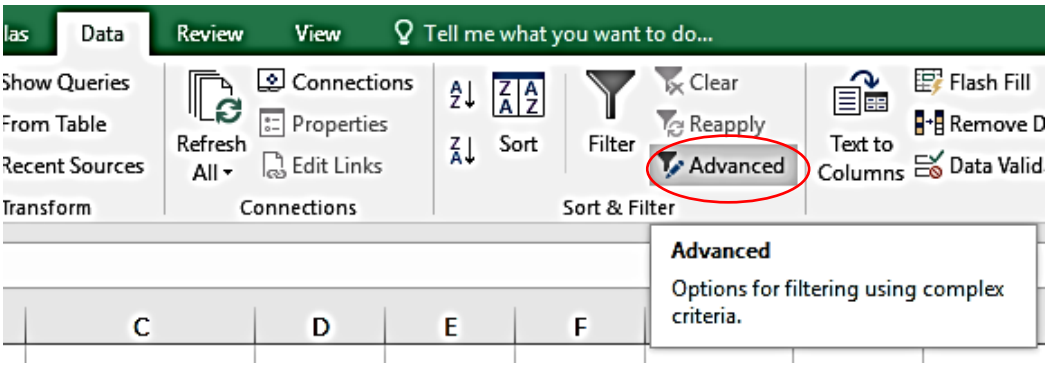
	A	B	C	D	E	F	G
1	full name	birth month	birth year				
4	JOSE SANTOS	DECEMBER	1980				
5	BRYAN FUENTES	DECEMBER	1981				
8	SARAH PONCHO	JANUARY	1988				
21							

C. Using Advanced Filters

i. To have better results, add a header row and make sure there are no blank rows
ii. Set up a condition/criteria. You can plance it anywhere on the page

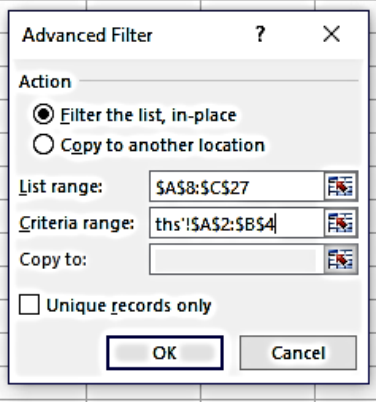
	A	B	C
1	Criteria		
2	birth month	birth year	
3	december	>=1980	
4	january	>=1980	
5			
6			
7			
8	full name	birth month	birth year
9	REGINE RAMOS	AUGUST	1978
10	RAYMART MONTEREAL	AUGUST	1985
11	JOSE SANTOS	DECEMBER	1980
12	BRYAN FUENTES	DECEMBER	1981
13	ALYANA SANCHEZ	FEBRUARY	1983
14	KIMBERLY CRUZ	FEBRUARY	1977
15	SARAH PONCHO	JANUARY	1988

iii. Go to data→advanced filter

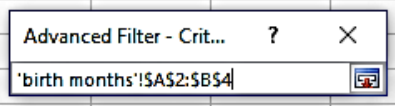


iv. Define the range to be filtered and define the criteria values to implement

	A	B	C	D	E	F
1	Criteria					
2	birth month	birth year				
3	december	>=1980				
4	january	>=1980				
5						
6						
7						
8	full name	birth month	birth year			
9	REGINE RAMOS	AUGUST	1978			
10	RAYMART MONTEREAL	AUGUST	1985			
11	JOSE SANTOS	DECEMBER	1980			
12	BRYAN FUENTES	DECEMBER	1981			
13	ALYANA SANCHEZ	FEBRUARY	1983			



	A	B	C	D	E	F	G
1	Criteria						
2	birth month	birth year					
3	december	>=1980					
4	january	>=1980					
5							
6							
7							
8	full name	birth month	birth year				
9	REGINE RAMOS	AUGUST	1978				
10	RAYMART MONTEREAL	AUGUST	1985				



v. Other conditions that you might use:

Wildcard characters in the Advanced Filter criteria

- Question mark (?) to match any single character.
- Asterisk (*) to match any sequence of characters.
- Tilde (~) followed by *, ?, or ~ to filter cells that contain a real question mark, asterisk, or tilde.

Criteria	Description	Example
text		Filter cells that contain "text". *banana* finds all cells containing the word "banana", e.g. "green bananas".
??text		Filter cells whose contents begin with any two characters, followed by "text". ??banana finds cells containing the word "banana" preceded with any 2 characters, like "1#banana" or "//banana".
text*text		Filter cells that begin with "text" AND contain a second occurrence of "text" anywhere in the cell. banana*banana finds cells that begin with the word "banana" and contain another occurrence of "banana" further in the text, e.g. "banana green vs. banana yellow".

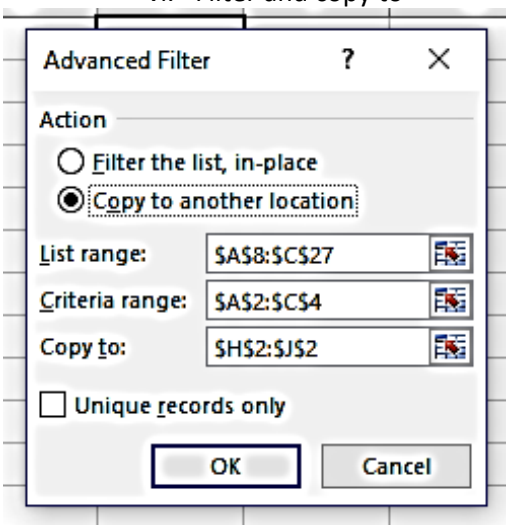
="=text*text"	Filter cells that begin with AND end with "text". ="=banana*banana" finds cells that begin and end with the word "banana", e.g. "banana, tasty banana".
="=text1?text2"	Filter cells that begin with "text1", end with "text2", and contain exactly one character in between. ="=banana?orange" finds cells that begin the word "banana", end with the word "orange" and contain any single character in between, e.g. "banana/orange" or "banana*orange".
text~**	Filter cells that begin with "text", followed by *, followed by any other character(s). banana~** finds cells that begin with "banana" followed by asterisk, followed any other text, like "banana*green" or "banana*yellow".
="=?????"	Filters cells with text values that contain exactly 5 characters. ="=?????" finds cells with any text containing exactly 5 characters, like "apple" or "lemon".

Note:

- Criteria on the same row are joined with an AND operator.
- Criteria on different rows are joined with an OR operator.

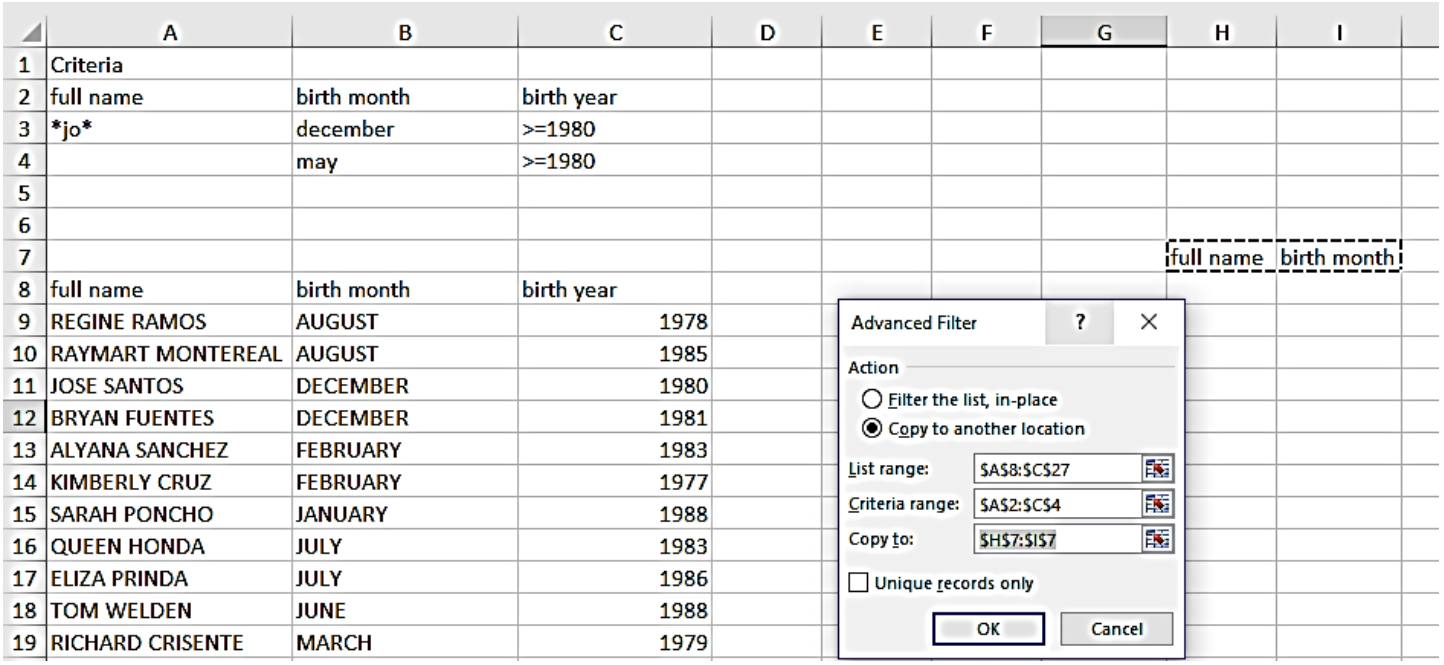
	A	B	C
1	Criteria		
2	full name	birth month	birth year
3	*jo*	december	>=1980
4		may	>=1980
5			
6			
7			
8	full name	birth month	birth year
11	JOSE SANTOS	DECEMBER	1980
22	JOHN REYES	MAY	1982
28			
29			

vi. Filter and copy to



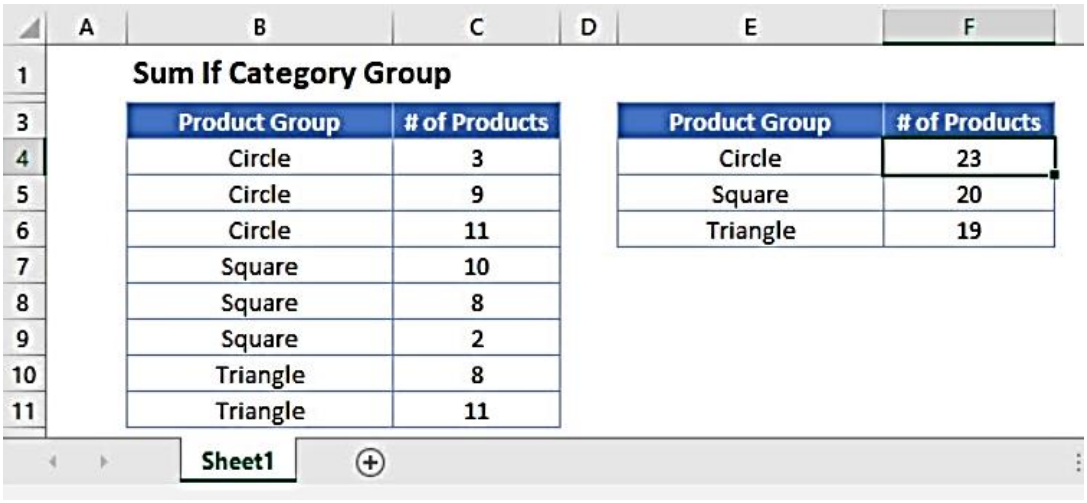
Note:

- To define the specific columns that you plan to copy, type the selected column headings on the destination (for copy to…). Highlight the listed column headings when selecting a destination.



	A	B	C	D	E	F	G	H	I
1	Criteria								
2	full name	birth month	birth year						
3	*jo*	december	>=1980						
4		may	>=1980						
5									
6									
7								full name	birth month
8	full name	birth month	birth year						
9	REGINE RAMOS	AUGUST	1978						
10	RAYMART MONTEREAL	AUGUST	1985						
11	JOSE SANTOS	DECEMBER	1980						
12	BRYAN FUENTES	DECEMBER	1981						
13	ALYANA SANCHEZ	FEBRUARY	1983						
14	KIMBERLY CRUZ	FEBRUARY	1977						
15	SARAH PONCHO	JANUARY	1988						
16	QUEEN HONDA	JULY	1983						
17	ELIZA PRINDA	JULY	1986						
18	TOM WELDEN	JUNE	1988						
19	RICHARD CRISENTE	MARCH	1979						

Application of Subtotal per Data Category



Sum If Category Group

Product Group	# of Products
Circle	3
Circle	9
Circle	11
Square	10
Square	8
Square	2
Triangle	8
Triangle	11

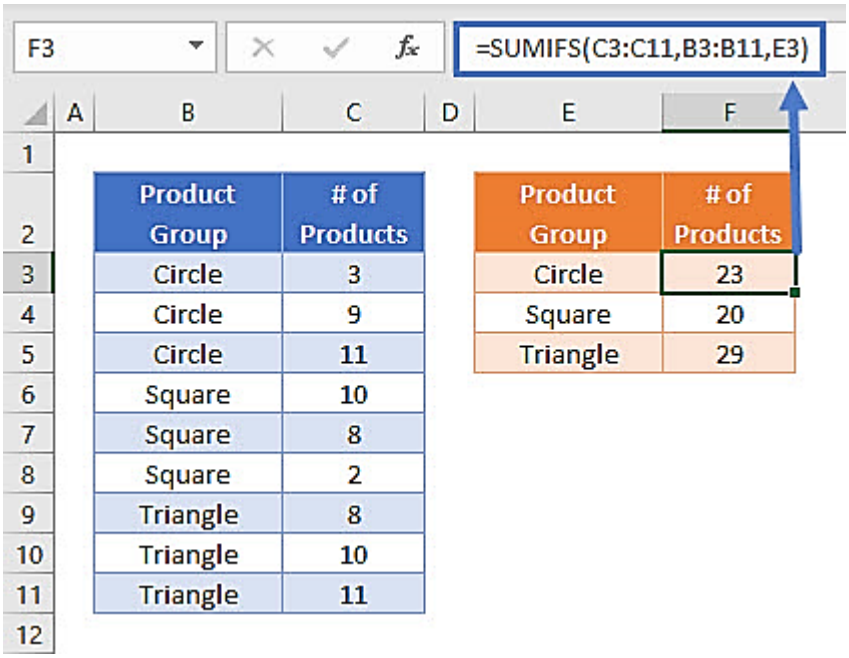
Product Group	# of Products
Circle	23
Square	20
Triangle	19

Subtotal Table by Category or Group

First, we will demonstrate how to create a dynamic subtotal summary table from a data range in either Excel 365 onwards or Google Sheets.

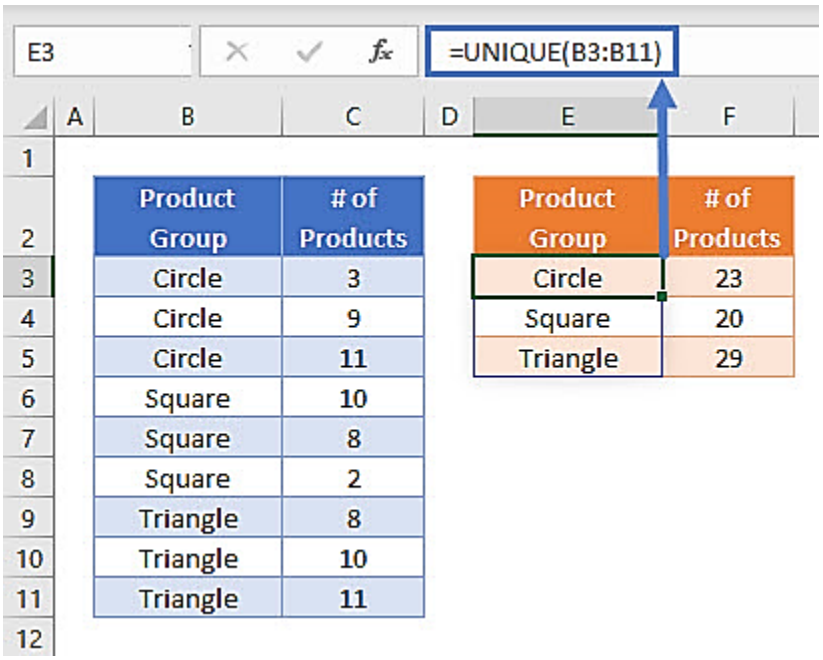
We use the UNIQUE Function and the SUMIFS Function to automatically subtotal the Number of Products by Product Group:

```
=SUMIFS(C3:C11,B3:B11,E3)
```



To create this subtotal table, we use the standard application of the SUMIFS Function to sum the Number of Products that match each Product Group. However, before this is possible, we need to create a list of unique Product Groups. Microsoft Excel 365 and Google Sheets users have access to the UNIQUE Function to create a dynamic list of unique values from a cell range. In this example, we add the following formula to cell E3:

```
=UNIQUE(B3:B11)
```



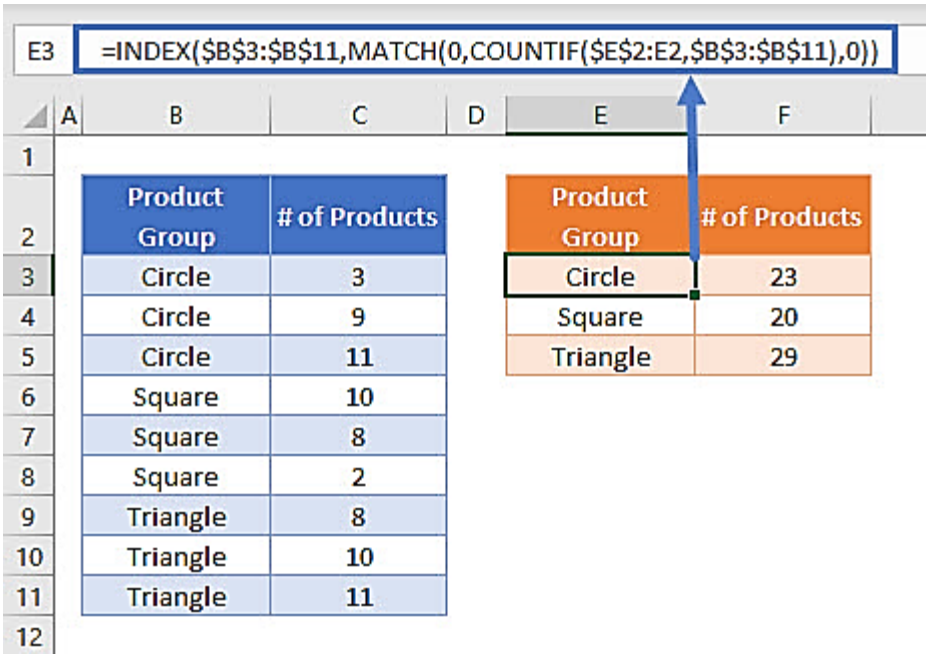
When this formula is entered, a list is automatically created below the cell to show all unique values found within the Product Group data range. In this example, the list extended itself to cover E3:E5 to show all 3 unique Product Group values.

This is a dynamic array function where the size of the results list does not need to be defined, and it will automatically shrink and grow as the input data values change.

Subtotal Table by Category or Group – Pre Excel 365

If you are using a version of Excel before Excel 365, the UNIQUE Function is not available for use. To replicate the same behavior, you can combine the INDEX Function and MATCH Function with a COUNTIF Function to create an array formula to produce a list of unique values from a range of cells:

```
{=INDEX($B$3:$B$11,MATCH(0,COUNTIF($E$2:E2,$B$3:$B$11),0))}
```

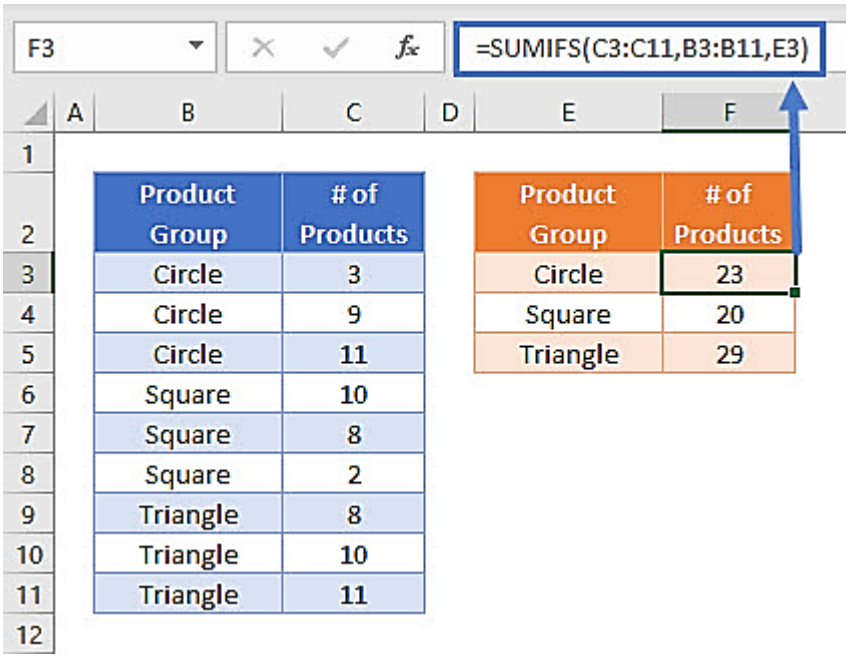


In order for this formula to function, the fixed cell references need to be written carefully, with the COUNTIF Function referencing the range $E$2:E2, which is the range starting from E2 until the cell above the cell containing the formula.

The formula also needs to be entered as an array formula by pressing CTRL + SHIFT + ENTER after it has been written. This formula is a 1-cell array formula, which can then be copy-pasted into the cells E4, E5 etc. Do not enter this as an array formula for the whole range E3:E5 in one action.

In the same way as in the previous example, a SUMIFS Function is then used to subtotal the Number of Products by Product Group:

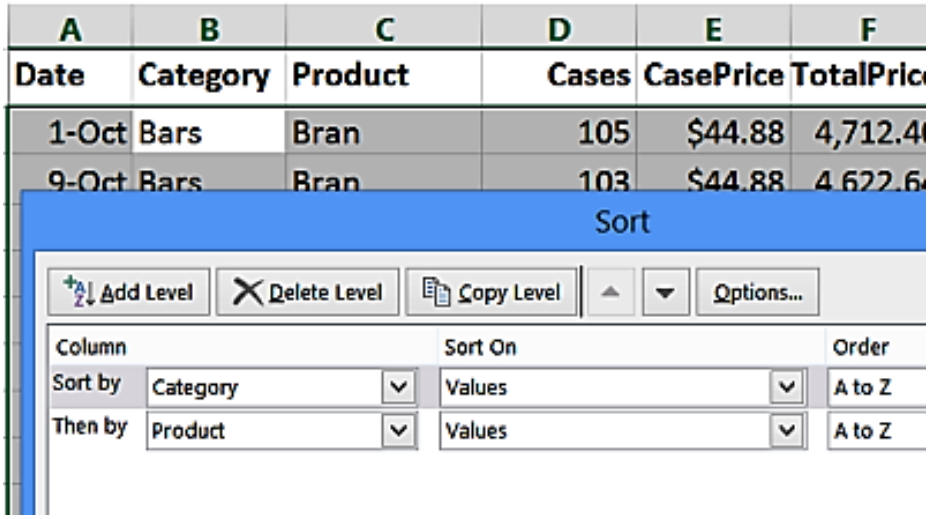
```
=SUMIFS(C3:C11,B3:B11,E3)
```



Using the Subtotal Command

Sort the Data

Before applying subtotals, the data must be sorted by the columns on which you want to base the subtotals. In this example, Category and Product will be subtotaled, so the data is sorted by those two columns.

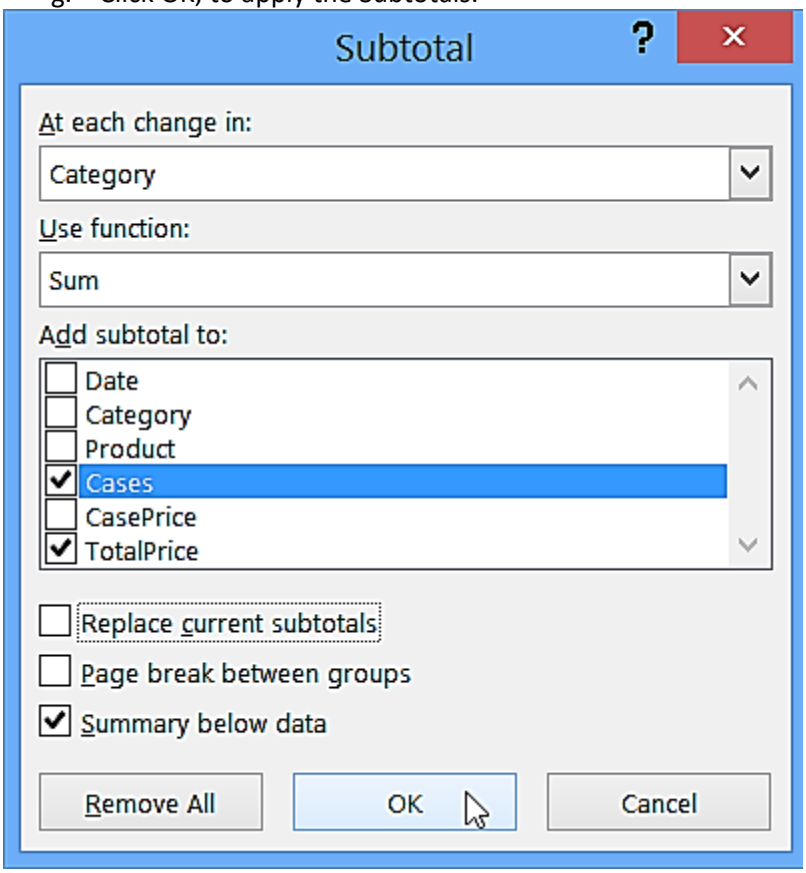


Apply the First Subtotal

After the data is sorted, follow these steps to apply the first subtotal. In this example, the Category column will be subtotalled first.

a. Select a cell in the list, and on the Excel Ribbon, click the Data tab, then click Subtotals.
b. In the "At each change in" box, select the first column that you want to base the subtotals on -- Category in this example.
c. Select the function that you want to use when totaling the columns.
d. Select all the columns in which you want a subtotal.
e. Remove the check mark from "Replace current subtotals" (unless there are existing subtotals that you want to remove).
f. Check or uncheck the page break and summary below data options, based on your preferences.

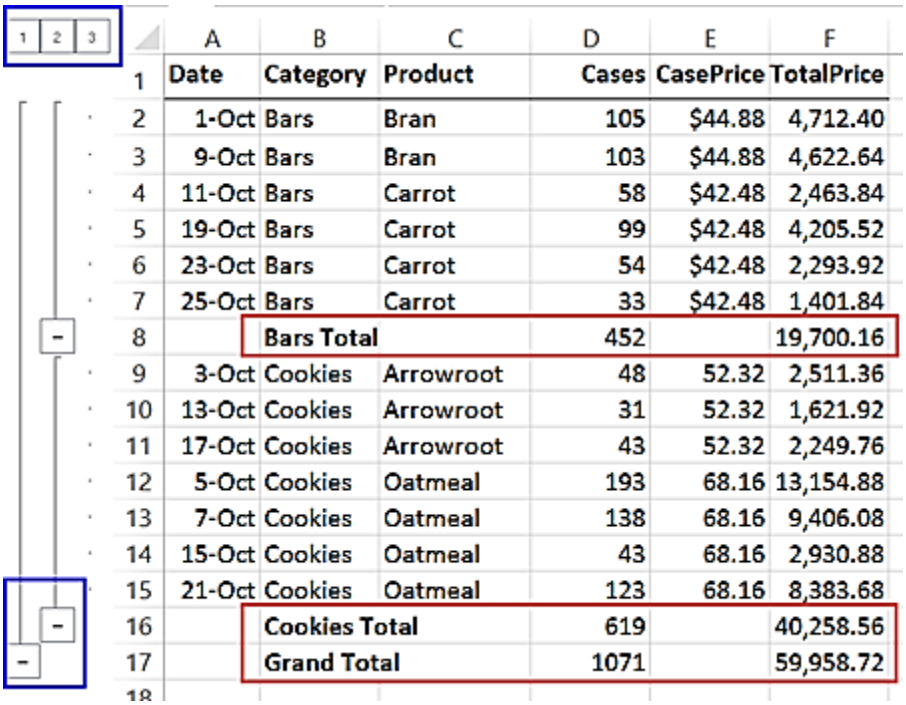
g. Click OK, to apply the Subtotals.



The data will show a subtotal after each change in the Category column, and there will be a Grand Total at the bottom of the data.

At the top left, grouping buttons are added, so you can view specific parts of the data:
1 - Grand Total only
2 - Grand Total and Subtotals
3 - All data and totals

You can also click the + and - buttons in the grouping bar, to show or hide sections of the data.



	A	B	C	D	E	F
1	Date	Category	Product	Cases	CasePrice	TotalPrice
2	1-Oct	Bars	Bran	105	$44.88	4,712.40
3	9-Oct	Bars	Bran	103	$44.88	4,622.64
4	11-Oct	Bars	Carrot	58	$42.48	2,463.84
5	19-Oct	Bars	Carrot	99	$42.48	4,205.52
6	23-Oct	Bars	Carrot	54	$42.48	2,293.92
7	25-Oct	Bars	Carrot	33	$42.48	1,401.84
8		**Bars Total**		452		19,700.16
9	3-Oct	Cookies	Arrowroot	48	52.32	2,511.36
10	13-Oct	Cookies	Arrowroot	31	52.32	1,621.92
11	17-Oct	Cookies	Arrowroot	43	52.32	2,249.76
12	5-Oct	Cookies	Oatmeal	193	68.16	13,154.88
13	7-Oct	Cookies	Oatmeal	138	68.16	9,406.08
14	15-Oct	Cookies	Oatmeal	43	68.16	2,930.88
15	21-Oct	Cookies	Oatmeal	123	68.16	8,383.68
16		**Cookies Total**		619		40,258.56
17		**Grand Total**		1071		59,958.72

Apply the Second Subtotal

Next, repeat the previous steps to apply the second subtotal. In this example, the Product column will be subtotalled second.

Be sure to remove the check mark from "Replace current subtotals", so the Category subtotals are not removed.

After the second subtotals are applied, the data will show a subtotal after each change in the Category column, and each change in the Product column, and there will be a single Grand Total at the bottom of the data.

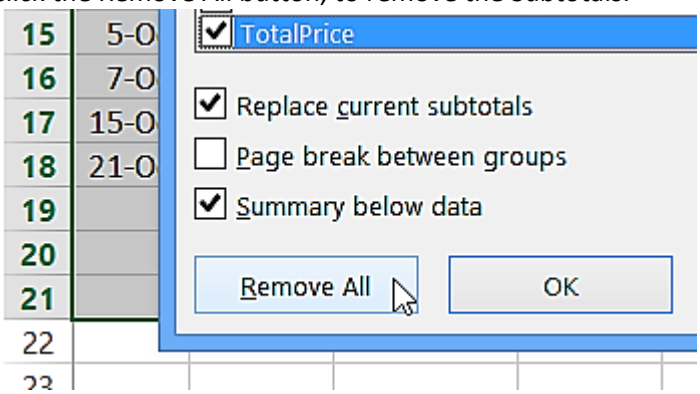
Another grouping button is added at the top left of the worksheet.

t	Cookies	Arrowroot	31	52.32	1,621.92
t	Cookies	Arrowroot	43	52.32	2,249.76
		Arrowroot T	122		6,383.04
t	Cookies	Oatmeal	193	68.16	13,154.88
t	Cookies	Oatmeal	138	68.16	9,406.08
t	Cookies	Oatmeal	43	68.16	2,930.88
t	Cookies	Oatmeal	123	68.16	8,383.68
		Oatmeal Tot	497		33,875.52
Cookies Total			619		40,258.56
Grand Total			1071		59,958.72

Remove Subtotals

If you no longer need the subtotals, follow these steps to remove them.

Select a cell in the list, and on the Excel Ribbon, click the Data tab, then click Subtotals.
Click the Remove All button, to remove the Subtotals.



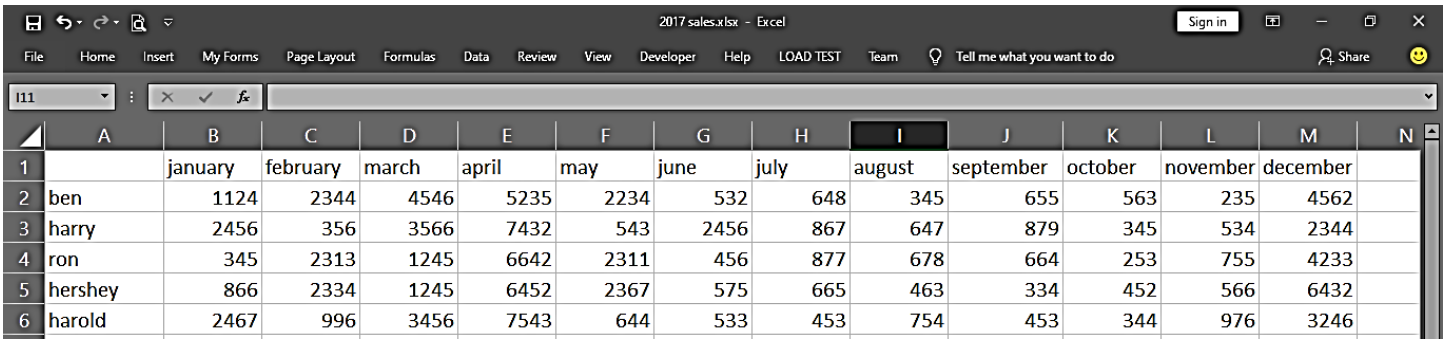
4:30pm-5:30pm

Data Consolidation from different References

Data consolidation in Excel enables a user to consolidate data from a separate worksheet to a master worksheet or, from a different workbook to a master workbook.

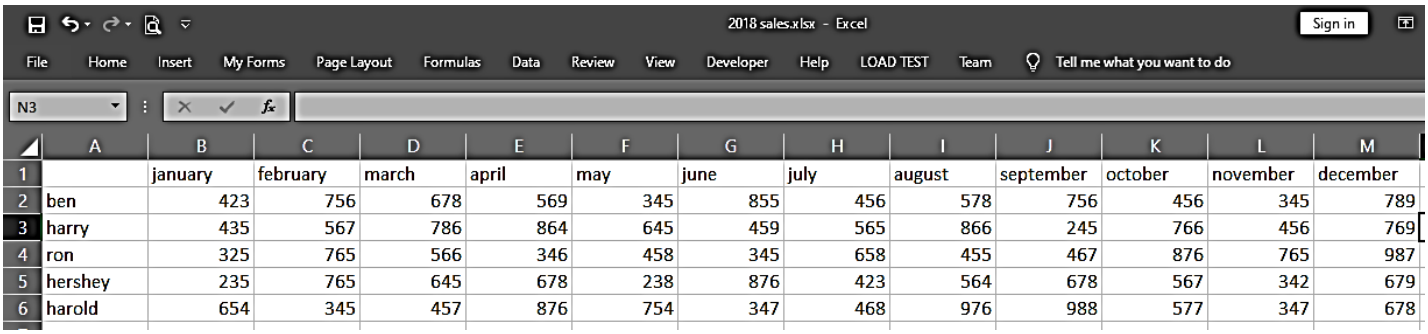
Essentially, it grabs data from a series of sheets or even workbooks and brings it together in a single worksheet in Excel.
1. Consolidate data from one or more sheets
To consolidate data from multiple sheets in Excel, first, we will prepare datasets in three different worksheets in a file like this.

2017 sales



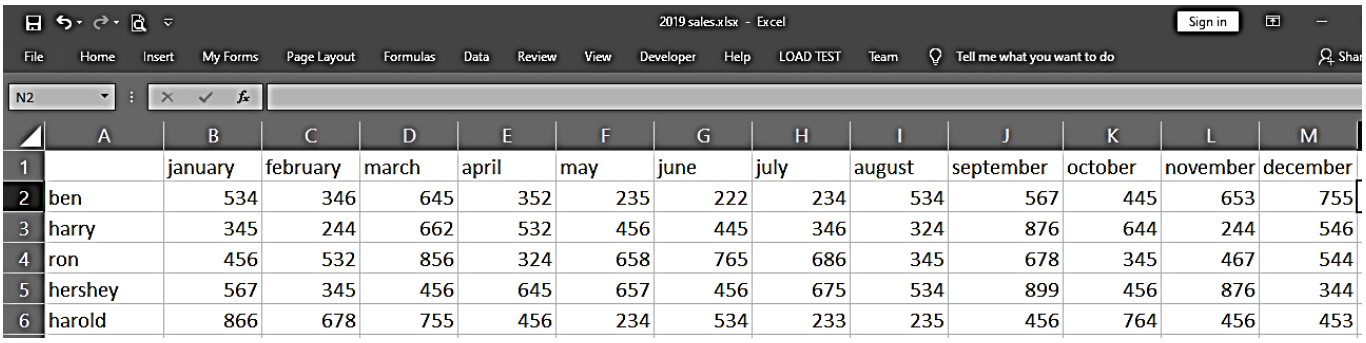
	A	B	C	D	E	F	G	H	I	J	K	L	M
1		january	february	march	april	may	june	july	august	september	october	november	december
2	ben	1124	2344	4546	5235	2234	532	648	345	655	563	235	4562
3	harry	2456	356	3566	7432	543	2456	867	647	879	345	534	2344
4	ron	345	2313	1245	6642	2311	456	877	678	664	253	755	4233
5	hershey	866	2334	1245	6452	2367	575	665	463	334	452	566	6432
6	harold	2467	996	3456	7543	644	533	453	754	453	344	976	3246

2018 sales



	A	B	C	D	E	F	G	H	I	J	K	L	M
1		january	february	march	april	may	june	july	august	september	october	november	december
2	ben	423	756	678	569	345	855	456	578	756	456	345	789
3	harry	435	567	786	864	645	459	565	866	245	766	456	769
4	ron	325	765	566	346	458	345	658	455	467	876	765	987
5	hershey	235	765	645	678	238	876	423	564	678	567	342	679
6	harold	654	345	457	876	754	347	468	976	988	577	347	678

2019 sales



	A	B	C	D	E	F	G	H	I	J	K	L	M
1		january	february	march	april	may	june	july	august	september	october	november	december
2	ben	534	346	645	352	235	222	234	534	567	445	653	755
3	harry	345	244	662	532	456	445	346	324	876	644	244	546
4	ron	456	532	856	324	658	765	686	345	678	345	467	544
5	hershey	567	345	456	645	657	456	675	534	899	456	876	344
6	harold	866	678	755	456	234	534	233	235	456	764	456	453

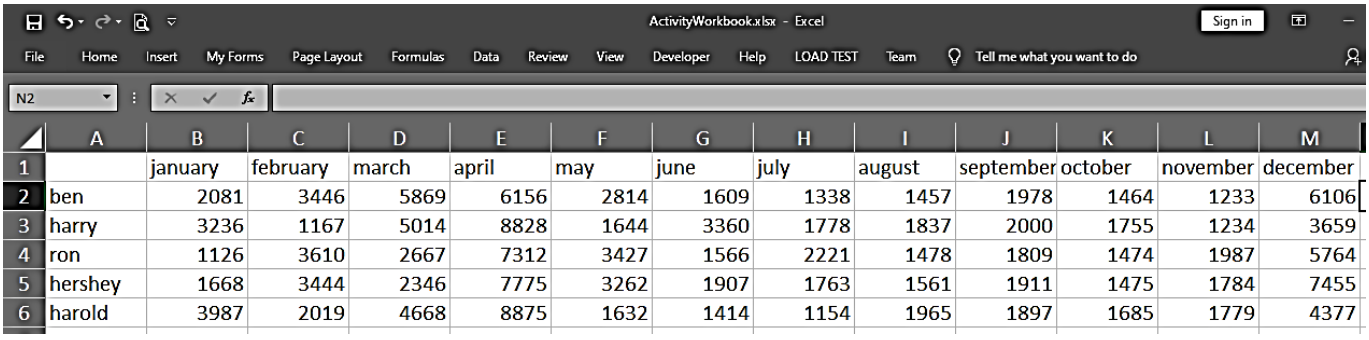
a. Create a new sheet in the same workbook in which you want to consolidate the data from the three worksheets (ex. “consolidate”).
b. Go to the Data tab on the ribbon.
c. Under the Data Tools section, select Consolidate.
d. A window named Consolidate opens.
e. Choose a function you wish to apply to the consolidated data. For instance, choosing Sum would sum all values in the three datasets in the new sheet.
f. Once you have chosen a function, click in the Reference dialogue box.
g. Navigate to the first sheet from where you want to start consolidating data. Here 2017.
h. Select the data range in that sheet, and do not forget to select the headers too (top and/or left).
i. Select the entire table like this.
j. Click Add after each selection, and it gets added to All references.
k. Repeat the steps for the remaining two tables in separate sheets.
l. Click Delete if you want to delete a selection from being consolidated.
m. In the Use Labels in section, you have a few options to add or not add your headers.
n. Check Top Row if you want to add the top row of each table in the consolidated data.
o. Check Left Column if you wish to add the left columns of each table in the consolidated data.

Pro Tip: To name your selections or references before going ahead with the consolidation process, place your cursor on the Reference field in the consolidation window, press F3 or Fn+F3 and select a reference under All References.

Let us move on to consolidating the selected datasets.

a. Now that we created source or reference data in three different sheets, we will consolidate data in a whole new sheet.
b. To go about it, create a new sheet in the workbook.
c. Select a cell anywhere in the sheet and the Consolidate window, hit OK.
d. You will now see the consolidated data showing up in the sheet. Here, we have opted to sum all the values. If you opt to count or multiply the values, you will see different results.

Here’s how the consolidated data.



	A	B	C	D	E	F	G	H	I	J	K	L	M
1		january	february	march	april	may	june	july	august	september	october	november	december
2	ben	2081	3446	5869	6156	2814	1609	1338	1457	1978	1464	1233	6106
3	harry	3236	1167	5014	8828	1644	3360	1778	1837	2000	1755	1234	3659
4	ron	1126	3610	2667	7312	3427	1566	2221	1478	1809	1474	1987	5764
5	hershey	1668	3444	2346	7775	3262	1907	1763	1561	1911	1475	1784	7455
6	harold	3987	2019	4668	8875	1632	1414	1154	1965	1897	1685	1779	4377

Transpose (rotate) data from rows to columns or vice versa

If you have a worksheet with data in columns that you need to rotate to rearrange it in rows, use the Transpose feature. With it, you can quickly switch data from columns to rows, or vice versa.

For example, if your data looks like this, with Sales Regions in the column headings and and Quarters along the left side:

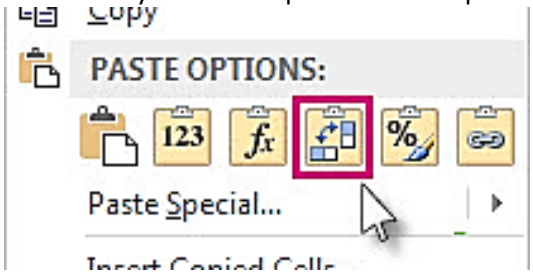
Sales by Region	Europe	Asia	North America
Qtr 1	21,704,714	8,774,099	12,094,215
Qtr 2	17,987,034	12,214,447	10,873,099
Qtr 3	19,485,029	14,356,879	15,689,543
Qtr 4	22,567,894	15,763,492	17,456,723

The Transpose feature will rearrange the table such that the Quarters are showing in the column headings and the Sales Regions can be seen on the left, like this:

Sales by Region	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Europe	21,704,714	17,987,034	19,485,029	22,567,894
Asia	8,774,099	12,214,447	14,356,879	15,763,492
North America	12,094,215	10,873,099	15,689,543	17,456,723

Here's how to do it:

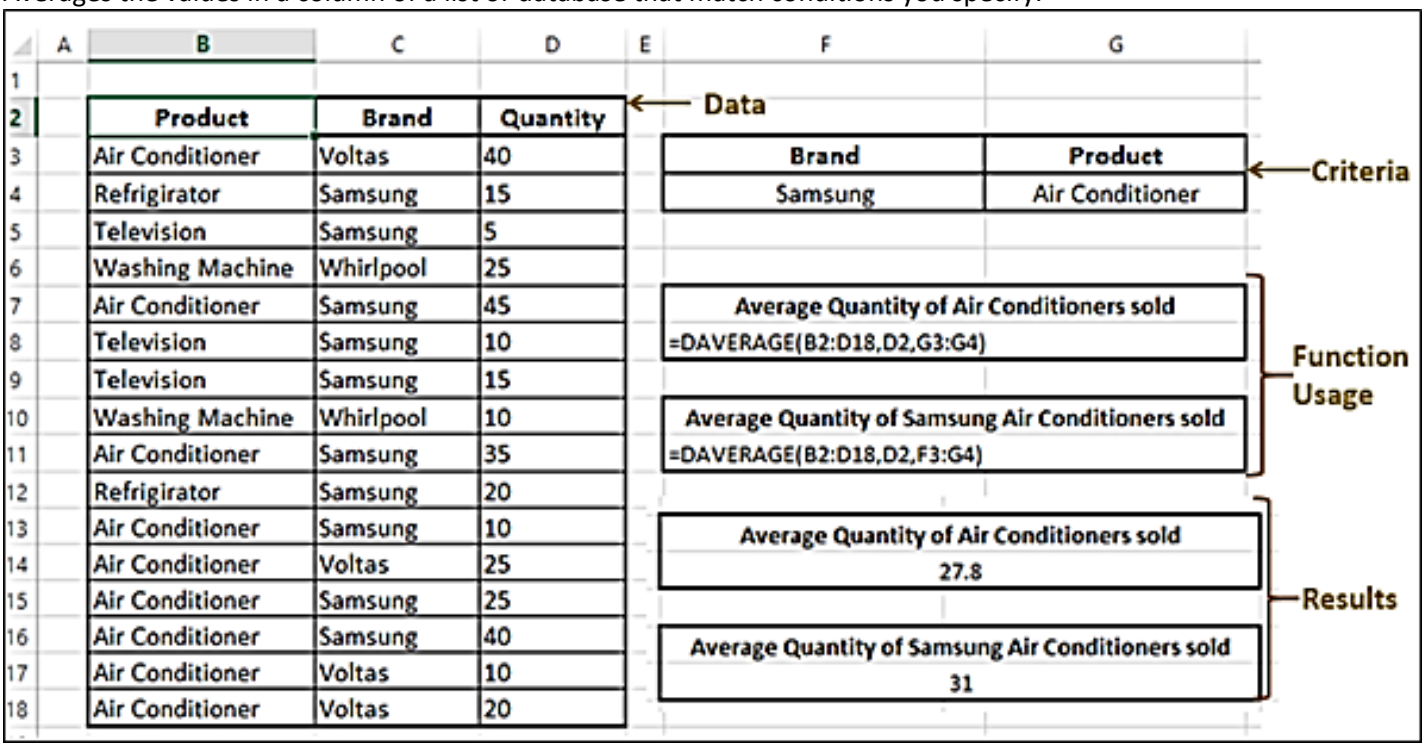
1. Select the range of data you want to rearrange, including any row or column labels, and press Ctrl+C.
2. Choose a new location in the worksheet where you want to paste the transposed table, ensuring that there is plenty of room to paste your data. The new table that you paste there will entirely overwrite any data / formatting that's already there.
3. Right-click over the top-left cell of where you want to paste the transposed table, then choose Transpose



Using Database Functions

DAVERAGE

Averages the values in a column of a list or database that match conditions you specify.



Product	Brand	Quantity
Air Conditioner	Voltas	40
Refrigirator	Samsung	15
Television	Samsung	5
Washing Machine	Whirlpool	25
Air Conditioner	Samsung	45
Television	Samsung	10
Television	Samsung	15
Washing Machine	Whirlpool	10
Air Conditioner	Samsung	35
Refrigirator	Samsung	20
Air Conditioner	Samsung	10
Air Conditioner	Voltas	25
Air Conditioner	Samsung	25
Air Conditioner	Samsung	40
Air Conditioner	Voltas	10
Air Conditioner	Voltas	20

Brand	Product
Samsung	Air Conditioner

DCOUNT

Counts the cells that contain numbers in a column of a list or database that match conditions you specify.

Product	Brand	Quantity
Air Conditioner	Voltas	40
Refrigirator	Samsung	15
Television	Samsung	5
Washing Machine	Whirlpool	25
Air Conditioner	Samsung	45
Television	Samsung	10
Television	Samsung	15
Washing Machine	Whirlpool	10
Air Conditioner	Samsung	35
Refrigirator	Samsung	20
Air Conditioner	Samsung	10
Air Conditioner	Voltas	25
Air Conditioner	Samsung	25
Air Conditioner	Samsung	40
Air Conditioner	Voltas	10
Air Conditioner	Voltas	20

Criteria

Brand	Product
Samsung	Air Conditioner

Number of Times Air Conditioners sold

=DCOUNT(B2:D18,D2,G3:G4)

mber of Times Samsung Air Conditioners s

=DCOUNT(B2:D18,D2,F3:G4)

Number of Times Samsung Products sold

=DCOUNT(B2:D18,D2,F3:F4)

Number of Times Samsung Products sold

=DCOUNT(B2:D18,"Quantity",F3:F4)

Function Usage

DCOUNTA

Counts the nonblank cells in a column of a list or database that match conditions you specify.

Product	Brand	Status
Air Conditioner	Voltas	Sold
Refrigirator	Samsung	
Television	Samsung	
Washing Machine	Whirlpool	Sold
Air Conditioner	Samsung	
Television	Samsung	Sold
Television	Samsung	
Washing Machine	Whirlpool	Sold
Air Conditioner	Samsung	
Refrigirator	Samsung	Sold
Air Conditioner	Samsung	Sold
Air Conditioner	Voltas	
Air Conditioner	Samsung	
Air Conditioner	Samsung	Sold
Air Conditioner	Voltas	
Air Conditioner	Voltas	Sold

Criteria

Brand	Product
Samsung	Air Conditioner

Number of Air Conditioners sold

=DCOUNTA(B2:D18,D2,G3:G4)

Number of Samsung Air Conditioners sold

=DCOUNTA(B2:D18,D2,F3:G4)

Number of Samsung Products sold

=DCOUNTA(B2:D18,D2,F3:F4)

Number of Samsung Products sold

=DCOUNTA(B2:D18,"Status",F3:F4)

Function Usage

DGET

Returns a single value from a column of a list or database that matches conditions you specify.

Product	Brand	Month	Quantity
Air Conditioner	Voltas	March	40
Refrigirator	Samsung	March	15
Television	Samsung	April	5
Washing Machine	Whirlpool	March	25
Air Conditioner	Samsung	March	45
Television	Samsung	April	10
Television	Samsung	May	15
Washing Machine	Whirlpool	April	10
Air Conditioner	Samsung	April	55
Air Conditioner	Samsung	May	10
Air Conditioner	Voltas	April	25
Air Conditioner	Samsung	June	25
Air Conditioner	Samsung	July	10
Air Conditioner	Voltas	June	20
Air Conditioner	Voltas	July	10

Criteria

Brand	Product	Month
Samsung	Air Conditioner	April

Brand	Product	Month
Samsung	Refrigirator	April

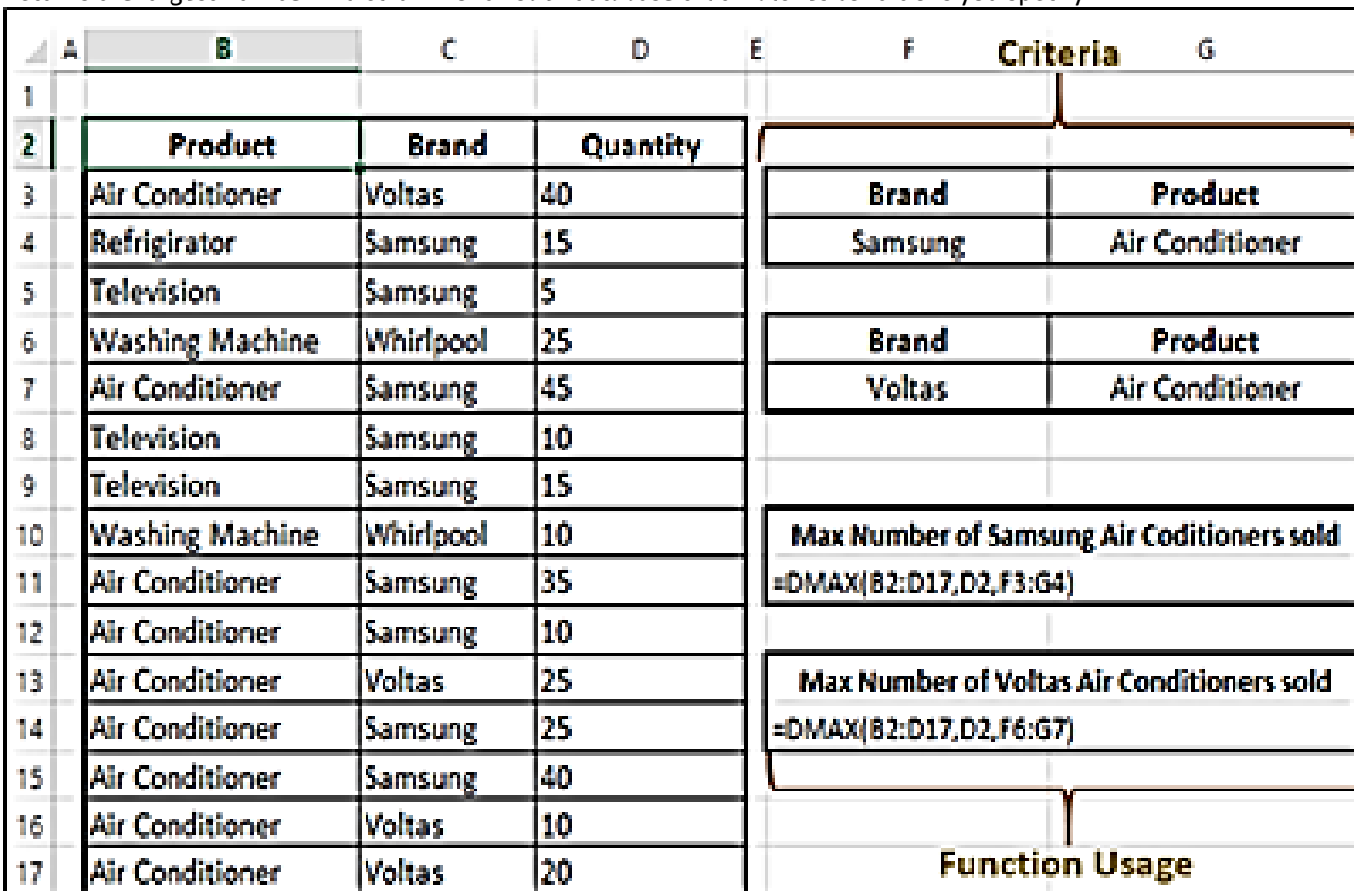
Number of Samsung Refrigirators sold in April
=DGET(B2:E17,E2,G6:I7)

Number of Samsung Air Conditioners sold in April
=DGET(B2:E17,E2,G3:I4)

Function Usage

DMAX

Returns the largest number in a column of a list or database that matches conditions you specify.



Product	Brand	Quantity
Air Conditioner	Voltas	40
Refrigirator	Samsung	15
Television	Samsung	5
Washing Machine	Whirlpool	25
Air Conditioner	Samsung	45
Television	Samsung	10
Television	Samsung	15
Washing Machine	Whirlpool	10
Air Conditioner	Samsung	35
Air Conditioner	Samsung	10
Air Conditioner	Voltas	25
Air Conditioner	Samsung	25
Air Conditioner	Samsung	40
Air Conditioner	Voltas	10
Air Conditioner	Voltas	20

DMIN

Returns the smallest number in a column of a list or database that matches conditions you specify.

Product	Brand	Quantity
Air Conditioner	Voltas	40
Refrigirator	Samsung	15
Television	Samsung	5
Washing Machine	Whirlpool	25
Air Conditioner	Samsung	45
Television	Samsung	10
Television	Samsung	15
Washing Machine	Whirlpool	10
Air Conditioner	Samsung	35
Air Conditioner	Samsung	10
Air Conditioner	Voltas	25
Air Conditioner	Samsung	25
Air Conditioner	Samsung	40
Air Conditioner	Voltas	10
Air Conditioner	Voltas	20

Criteria

Brand	Product
Samsung	Air Conditioner

Brand	Product
Voltas	Air Conditioner

Min Number of Samsung Air Conditioners sold
=DMIN(B2:D17,D2,F3:G4)

Min Number of Voltas Air Conditioners sold
=DMIN(B2:D17,D2,F6:G7)

Function Usage

DPRODUCT

Multiplies the values in a column of a list or database that match conditions you specify.

Product	Brand	Quantity
Air Conditioner	Voltas	40
Refrigirator	Samsung	15
Television	Samsung	5
Washing Machine	Whirlpool	25
Air Conditioner	Samsung	45
Television	Samsung	10
Television	Samsung	15
Washing Machine	Whirlpool	10
Air Conditioner	Samsung	35
Air Conditioner	Samsung	10
Air Conditioner	Voltas	25
Air Conditioner	Samsung	25
Air Conditioner	Samsung	40
Air Conditioner	Voltas	10

Criteria

Brand	Product
Samsung	Air Conditioner

Brand	Product
Voltas	Air Conditioner

Product of the Number of Samsung Air Conditioners sold
=DPRODUCT(B2:D17,D2,F3:G4)

Product of the Number of Voltas Air Conditioners sold
=DPRODUCT(B2:D17,D2,F6:G7)

Function Usage

DSUM

Adds the numbers in a column of a list or database that match conditions you specify.

Product	Brand	Quantity
Air Conditioner	Voltas	40
Refrigirator	Samsung	15
Television	Samsung	5
Washing Machine	Whirlpool	25
Air Conditioner	Samsung	45
Television	Samsung	10
Television	Samsung	15
Washing Machine	Whirlpool	10
Air Conditioner	Samsung	35
Air Conditioner	Samsung	10
Air Conditioner	Voltas	25
Air Conditioner	Samsung	25
Air Conditioner	Samsung	40
Air Conditioner	Voltas	10
Air Conditioner	Voltas	20

Criteria

Brand	Product
Samsung	Air Conditioner

Brand	Product
Voltas	Air Conditioner

Total Number of Samsung Air Coditioners sold

=DSUM(B2:D17,D2,F3:G4)

Total Number of Voltas Air Conditioners sold

=DSUM(B2:D17,D2,F6:G7)

Function Usage