

Excel Essentials Course Notes

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XelPlus.com

A handwritten signature in white ink, reading 'Leila Gharani'.

Information

Course Notes for Excel Essentials Course

These course notes are accompanying documentation for my online course **Excel Essentials for the Real World**. Please do not reproduce or transmit in any form without permission.

We (XelPlus e.U.) have taken every effort to ensure the accuracy of this manual. In case you discover any discrepancies, please send us a quick email to: info@XelPlus.com.



How to Use the Notes

Use these course notes alongside the online course to review and revise each section of the course.

You can also print it out. Keep it handy and refer to it anytime the need comes.

About Leila Gharani

Leila Gharani is a Microsoft Excel MVP & a bestselling online course instructor. She runs XelPlus.com an Excel resource site to help people gain the knowledge they need so they can create useful tools, solve problems and get more done. She has a YouTube channel under her name with more than 200k subscribers.

Her background is: Masters in Economics, Economist, Consultant, Oracle HFM Accounting Systems Expert & Project Manager. Find out more [here](#).

Course Road Map

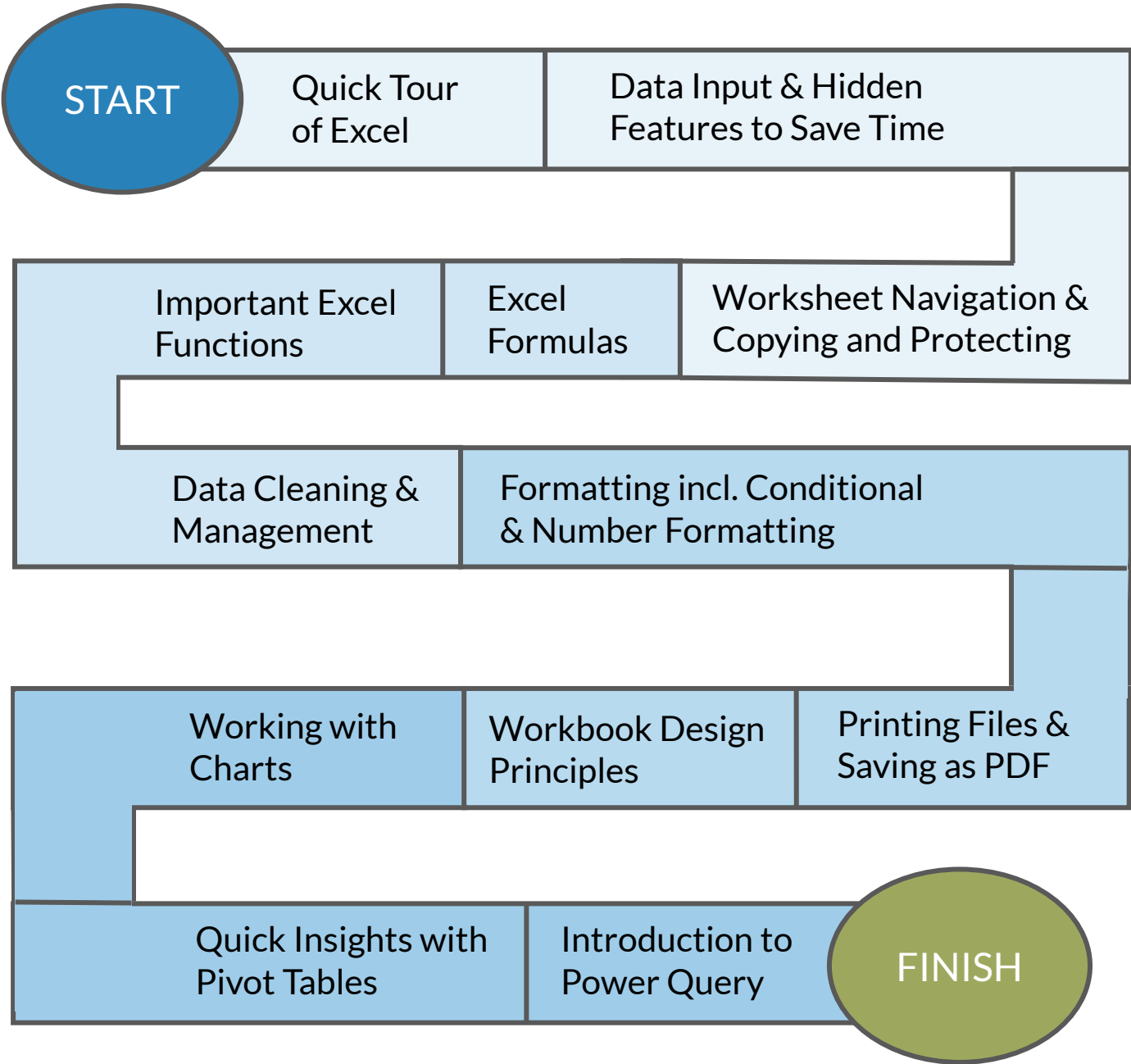


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Excel Vocabulary

Excel Terminology You'll Need:

Workbook: An Excel file which includes one or more worksheets (tabs)

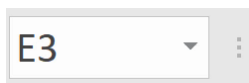
Worksheet: A single page inside a workbook which consists of cells

Cell: The intersection of a column & a row is a cell

Cell Address: Each cell has an address (e.g. C3, column= C, row=3)

Formula Bar: Shows the formula written in the selected cell or the cell value (if no formula is written)

Name Box: Shows the address of the selected cell



TIP

Type a cell address in the name box to quickly jump to the cell

Range: A group of cells

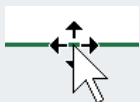
Range Address: Starts from the top left-hand corner to ":" bottom right-hand corner (e.g. C3:D6)

Mouse Icons



Selection Handle

Click to select one cell, drag selection to select a range



Move Handle

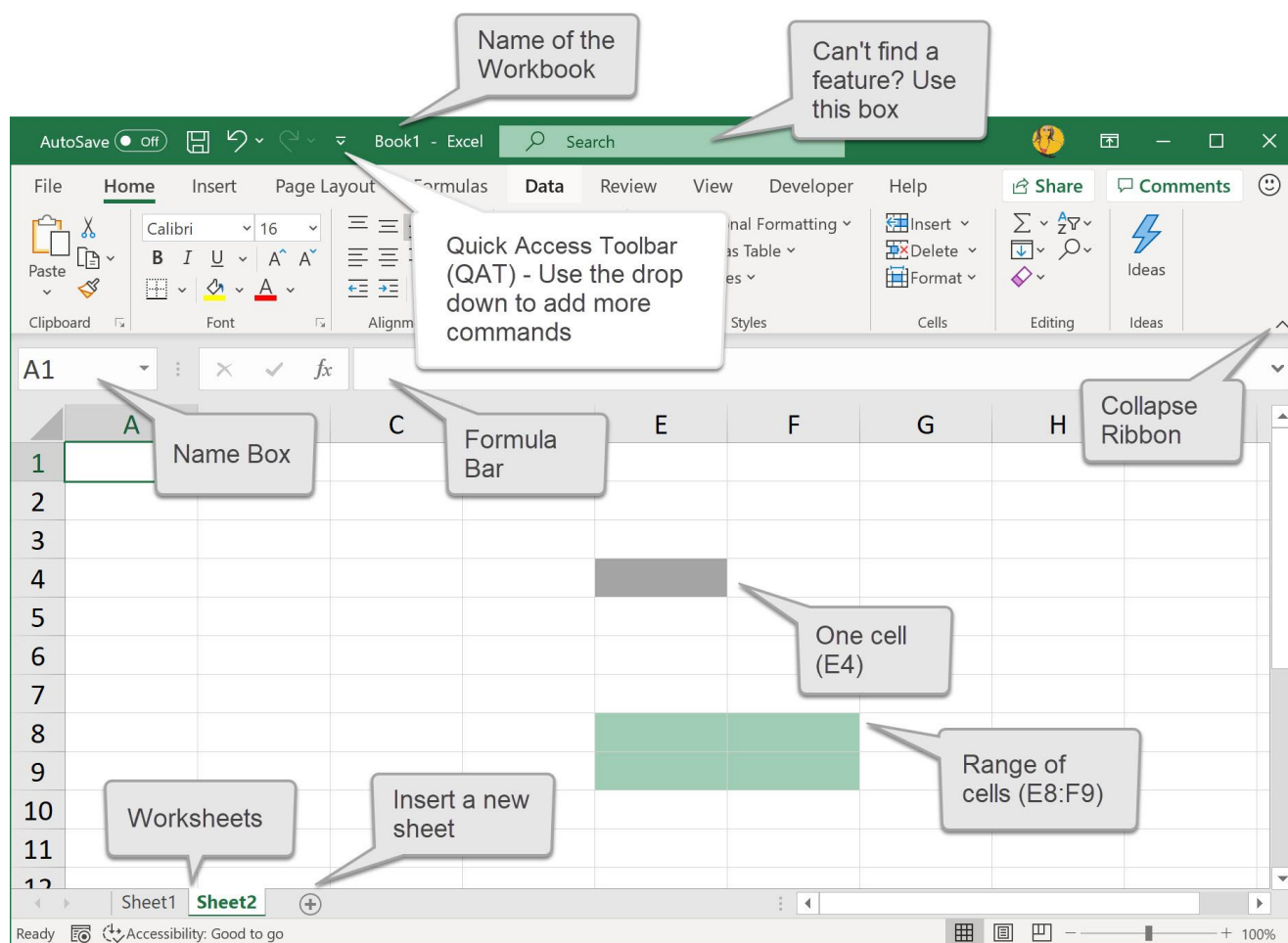
Click and drag to move a cell or range



Fill Handle

Drag to fill the cell value to the other cells

Quick Tour of Excel



Most Common Features For Every Tab

File: Also called Backstage View – Save, Open, Pin documents & Print

Home: Formatting options as well as most common Excel features

Insert: Insert Charts, Tables, PivotTables (Sections 11 & 12)

Page Layout: Prepare for Printing (Sections 9 & 10)

Formulas: Overview of Excel Functions (Section 6)

Data: Get & Transform Data (Section 13)

Review: Spell check, Protect worksheet (Section 4)

View: Remove Gridlines

Developer: For Advanced Excel users who use VBA

Help: Get Help, provide feedback & suggest new features

Data Input Shortcuts

Shortcut Key	Action
[Enter]	Move one cell down
[Ctrl] [Enter]	Stay on the same cell
[Ctrl] C	Copy cell / value
[Ctrl] V	Paste cell / value
[F2]	Edit cell content (same as double clicking on a cell)
[Esc]	Reset cell value (while in edit mode)
[Tab]	Move to the cell on the right
[ALT] [Enter]	Add a line break inside the formula bar
[Ctrl] Z	Undo action
[Ctrl] Y	Redo action
[ALT] =	Auto sum
Select [F2] [Ctrl] [Enter]	Copy formula down without formatting
[Ctrl] ;	Time Stamp current date
[Ctrl] [Shift] ;	Time Stamp current time
[Ctrl] #	Change date formatting to D-MMM-YY
[Ctrl] E	FlashFill
[Ctrl] N	Open Blank Workbook
[Ctrl] G	Go to Special
[Shift] [F2]	Insert a note



Double-click Format Painter to use it multiple times



Format Painter

Input Faster & Validate Data

Auto Fill For Index numbers, Weekdays, Months & more

If you'd like to get a list of months, type in the first month and drag the selection down. Check the auto fill options for more choices.

Flash Fill to Modify & Speed up Data Entry

Use Flash Fill to get a list of email address, split names to two columns or combine names from two columns into one. Just start typing or use the shortcut key **Ctrl + E** or go to **Home / Fill / Flash Fill**.

Go to Special to Find Special Cells

Use the shortcut key **Ctrl + G** then **Alt + S** to bring up Go to Special. Alternatively go to **Home / Find & Select**. Use this feature to quickly find formula cells, constants, comments and data validation.

Data Validation

Add information about the input requirement

TIP

Use Input Message as a screen tip tool.

Ensure dates are input correctly

Provide guidance by adding an error alert

The screenshot shows the 'Data Validation' dialog box with the 'Settings' tab selected. The 'Allow:' dropdown is open, showing options: 'Any value', 'Any value', 'Whole number', 'Decimal', 'List' (highlighted), 'Date', 'Time', 'Text length', and 'Custom'. Callouts point to various parts of the dialog: 'Add information about the input requirement' points to the 'Input Message' tab; 'Provide guidance by adding an error alert' points to the 'Error Alert' tab; 'Select this to ensure text is not input if a number is required' points to the 'List' option in the 'Allow:' dropdown; 'Add a drop-down list to the cell' points to the 'List' option; and 'Ensure dates are input correctly' points to the 'Date' option. At the bottom, there is a checkbox 'Apply these changes to all other cells with the same settings' and buttons for 'Clear All', 'OK', and 'Cancel'.

More Excel Shortcuts

Shortcut Key	Action
[Ctrl] [Page ▼]	Move to the next worksheet
[Ctrl] [Page ▲]	Move to the previous worksheet
[Ctrl] [Tab]	Switch between Excel Workbooks
[Ctrl] [▼]	Move to the bottom of the data region Other arrow keys - move to the edge of the data region
[Ctrl] [Shift] [▼]	Move to the bottom of the data region and highlight the range in between Other arrow key to move & highlight in different direction
[Ctrl] A	Select data in current region
[Home]	Move to the first cell in the same row
[Ctrl] [Home]	Move to cell A1
[Ctrl] [End]	Move to the last used cell on the worksheet
[Ctrl] [Backspace]	Show active cell
[Ctrl] O	Open a workbook (Open menu)
[Ctrl] S	Save a workbook
[Ctrl] W	Close a workbook
[Shift] [F11]	Insert a new worksheet
[Ctrl] [+]	Insert a new cell/row/column
[Ctrl] [-]	Delete a cell/row/column
[Shift] [Space]	Select the row
[Ctrl] [Space]	Select the column
[Ctrl] B	Bold
[Ctrl] 1	Format cells dialog box
[F4]	Repeat last edit

Protect Your File & Sheets

Protect File with a Password

To protect your workbook with a password, go to **Save As** and from the **Tools** options, select **General Options**. Type in your password.

Tools ▾

Map Network Drive...

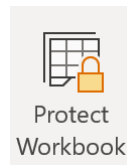
Web Options...

General Options...

Compress Pictures...

Protect the Structure of Your File

Protect the structure of your file from **Review / Protect Workbook**. This ensures the sheets are not moved, deleted or added.

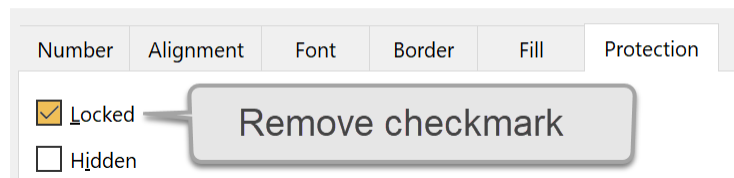


Protect the Sheet

Protect the sheet to ensure users cannot change formulas or input in cells they shouldn't be inputting.

To lock some areas but leave others open, go to **Format Cells (Ctrl + 1) / Protection** & remove the checkmark for locked.

Format Cells



What happens after you protect the sheet from the review tab:

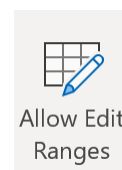
The cells which didn't have a checkmark will remain open. All other cells will be locked.

TIP

To be able to edit ranges with different passwords use **Allow Edit Ranges** from the **Review Tab**.

Select a range and provide a different password for it.

Once done, protect the sheet.



Order of Calculations in Excel

1 Parenthesis () & Reference Operators

Values in brackets and cell reference operators such as : and ,
=SUM(A2:A4,B2:B4)

2 Negation -

For example $-1*2 = -2$

3 Percentage %

For example $-1*2\% = -1*0.02 = -0.02$

4 Exponentiation ^

For example $=2^2*2 = 8$

5 Multiplication * & Division /

If both are present in the formula, Excel evaluates from left to right.

6 Addition + & Subtraction

If both are present in the formula, Excel evaluates from left to right.

For example $2+1*(3+1) = 2+1*4 = 2+4 = 6$



MBA = Multiplication Before Addition

7 Ampersand &

For example $1+2+3\&3 = 63$

8 Comparison = < > <= >= <>

For example $1+2=1+2 = \text{True}$

Excel's Essential Formula Rules

1 No Constants Inside Formulas

...Keep constants in separate cells with proper labeling so they can easily be adjusted if needed.

Exceptions are universal constants such as 24 hours in a day, 7 days a week, 12 months a year etc.

	A	B	C	D	E	F	G
3							
4	Service	1500					
5	Total Charges	1800	=B4*(1+20%)				
6							
7	Service	1500					
8	VAT	20%					
9	Total Charges	1800	=B7*(1+B8)				
10							
11							
12							
13							

Don't use constants inside formulas.

Keep them in cells with labels. Unless they are universal (12 months in a year, 24 hours in a day....)

2 Formulas in a range should be consistent

Don't adjust formulas in the middle of a range or remove them entirely if they result in an error.

D19							
	A	B	C	D	E	F	G
14	Item	Jan	Feb	% Change			
15	Scarf-M	100	100	0%			
16	Scarf-W	150	120	-20%			
17	Shirt-W	250	320	28%			
18	Shirt-M	160	180	13%			
19	Belt-M	New	20				
20	Belt-W	40	50	25%			
21							
22							
23							

Make sure a formula is consistent for a range of cells. Do not remove formulas if they result in an error. Instead use error handling (covered in next section).

Update the first formula in the range to handle different scenarios (IF Function – covered in the next section) & include error handling (IFERROR or IF Function in case the result might be an error).

Excel's Essential Referencing Rules

1 Absolute, Relative or Mixed Referencing

Use F4 to toggle the cell reference between the different types.

= \$A\$1 → Reference to A1 will remain fixed.

= A\$1 → Row 1 will remain fixed, but column will change.

= \$A1 → Column A will remain fixed, but row will change.

= A1 → Both column and row will change.

Mixed Referencing Example

= \$B3*(1-E\$1)

	A	B	C	D	E	F
1		Monthly Discount			50%	10%
2	Item	Price		Item	Jan Price	Feb Price
3	Scarf-M	60		Scarf-M	30	54
4	Scarf-W	80		Scarf-W	40	72
5	Shirt-W	50		Shirt-W	25	45
6	Shirt-M	40		Shirt-M	20	36

2 Connect Cell References

Use & to connect one cell reference with another.

For example: =A1&B1

	A	B	C	D
1	Jan	Price	JanPrice	=A1&B1

3 Properly Use Text In Formulas

Use quotation marks to insert text in formulas. E.g. ="Hello"

If you combine a cell reference with text you need to use ampersand.

For example: =A1&" - "&B1

	A	B	C	D	
1	Jan	Price	Jan - Price	=A1&" - "&B1	

Important! Working with Functions

What is a Function?

An Excel function is an in-built formula that runs specific calculations.

For the Excel function to work, you need to provide it with values in the order it understands. This means following the right syntax.

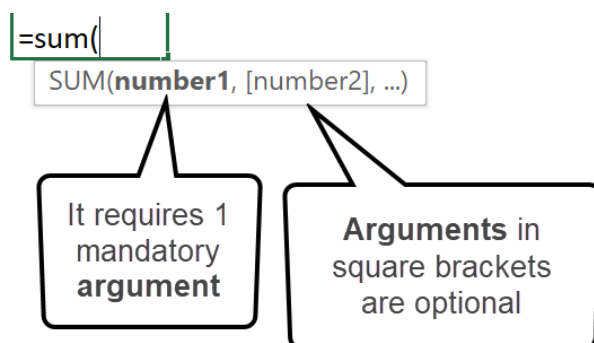
Sum Function Example

The SUM function is programmed to add values from cells & ranges.

The suggestions you see inside the brackets when you type in a function is to help you understand what the function needs so it can process correctly.

These are called arguments and they are separated by either the **comma** (,) or the **semi-colon** (;).

Which one applies to you depends on your regional windows setting.



Excel Automatically Translates Functions & Regional Settings

Assume you have an English version of Excel. Your Excel argument separator is a comma. You create a spreadsheet with many formulas.

You then send this to your colleague located in Germany. When they open the file, they will see the German version of the formulas and the argument separator is automatically adjusted to a semi-colon.

In English the formula looks like this:

= **SUM**(A1:A2,B1:B2)

In German it will look like this:

=**SUMME**(A1:A2;B1:B2)

Working with Date & Time

Inputting Dates Correctly

How dates are input depends on your locale / regional settings.

- In US dates are input as MM/DD/YYYY
- In Europe they are generally input as DD/MM/YYYY

To ensure the date was input correctly look at the number formatting. If you see “Date” as format, Excel has correctly recognized the input.

How Excel Remembers Dates

In Excel, dates are stored as a serial number starting from January 1st, 1900.

Jan 1, 1900 = 1

Jan 2, 1900 = 2

Feb 25, 2019 = 43521



The fact that Excel stores dates as numbers helps us make calculations on dates – for example:

$2/25/2019 + 10 = 3/7/2019$

How Excel Processes Time

Time is input as hour : minute : second followed by space then AM or PM. You can also input time as a 24-hour clock.

7:00 PM or 19:00

In Excel, time is stored as a serial number which represents the proportion of 24 hours. For example:

- 12:00 AM = 24:00 = $24/24 = 1$
- 6:00 PM = 18:00 = $18/24 = 0.75$

Important Excel Functions

Here is a list of some of the most used functions in Excel.

Function	Description
COUNT	Counts the number of cells that contain <u>numbers</u>
COUNTA	Counts the number of cells that are <u>not empty</u>
COUNTBLANK	Counts the number of <u>empty</u> cells in a range of cells
COUNTIFS	This function <u>applies criteria</u> to cells across multiple ranges and counts the number of times all criteria are met.
SUM	Adds individual values, cell references or ranges or a mix of all three.
AVERAGE	Returns the average (arithmetic mean) of the arguments.
SUMIFS	Adds all its arguments that meet multiple criteria.
AVERAGEIFS	Returns the average (arithmetic mean) of all cells that meet multiple criteria.
MIN	Returns the <u>smallest</u> number in a set of values.
MAX	Returns the <u>largest</u> value in a set of values.
MINIFS	Returns the minimum value among cells specified by a given set of conditions or criteria.
MAXIFS	Returns the maximum value among cells specified by a given set of conditions or criteria.
ROUND	Rounds a number to a specified number of digits.
ROUNDUP	Rounds a number up, <u>away</u> from zero.
ROUNDDOWN	Rounds a number down, <u>toward</u> zero.
IF	Allows you to make logical comparisons between a value and what you expect. It can have two results. The first result is if your comparison is True, the second if your comparison is False.
VLOOKUP	Looks up a specified value in one column of data and returns the corresponding value from another column.

NEW Excel Functions in Microsoft 365

Here is a list of some of the Essential NEW Functions available in Microsoft for Excel 365

Function	Description
UNIQUE	Returns a distinct list of values. You can also return a list of values that only occur once in the data.
SORT & SORTBY	The Sort function sorts your values (text or numbers) in ascending or descending order. SORTBY, can sort your results based on a range that's not in your end result.
FILTER	FILTER can return multiple results based on a condition. If you'd like to do a lookup and return ALL matches instead of the first match, you can now use the FILTER function.
XLOOKUP	XLOOKUP is the more flexible version of VLOOKUP. It can look up values to the left or the right of your lookup range. It can also return the last match instead of the first one. It can lookup values based on wildcards and approximate matches.

Formula Errors

If your formula results in an error and you're not sure why, the list below might help.

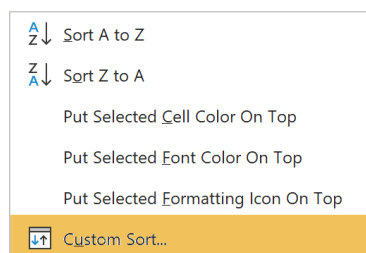
Error	Description
#DIV/0!	This is probably the most common error and easiest to pinpoint. When you divide a number by zero you will get this error.
#VALUE!	This error is returned when the wrong type of argument is used. For example if you try to multiply a value by a cell that has text in it.
#REF!	This error results when you move your formula, and haven't correctly specified which cell references should be fixed and which should move with your formula. Also if you delete some cells that were a part of your formula.
#NAME?	The most common reason for this error is because the formula has been mistyped and Excel doesn't recognize what function you are referring to.
#N/A!	This is a frequent error if you are using Lookup formulas (especially in VLOOKUP) and the matching cannot be done.
#NULL!	This is an uncommon error and occurs if you haven't specified your ranges correctly, e.g. typing SUM(B4 B6) instead of SUM(B4:B6) or SUM(B4,B6).
#NUM!	This is another uncommon error and occurs when you supply an invalid number to your formula e.g. if you are using negatives where a positive number is required by your function.
#SPILL	New Error only in Office 365 with Dynamic Arrays. If a spilled range is blocked by text or values in the cells below, then you get this error. The error can be corrected by removing the contents of the cells below.
#CALC	New Error only in Office 365 with Dynamic Arrays - common for the FILTER function when it can't find a match.

Data Cleaning & Management Tools

SORT DATA

Use the sort options to give order to your data.

To sort more than one category use **Custom Sort**.



FILTER DATA

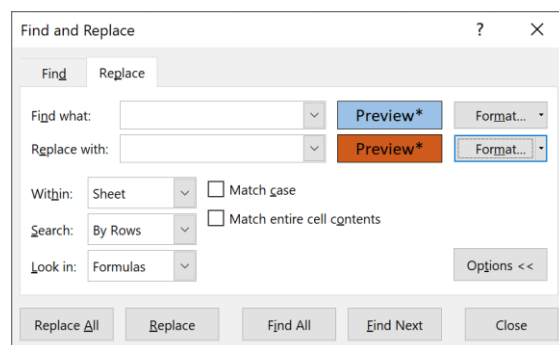
Use shortcut key **Ctrl+Shift+L** to toggle the filter buttons on and off. You can copy, change and delete filter results.

FIND & REPLACE

Ctrl+F brings up the Find dialog box.

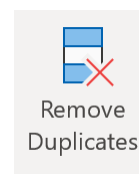
Ctrl+H brings up the Replace dialog box.

TIP You can also search for a specific formatting and replace it with another one.



REMOVE DUPLICATES

Use **Remove Duplicates** from the **Data** tab to get a list of unique values. Performing this on more than one column ensures you get a unique list based on the combination of values from the different columns.

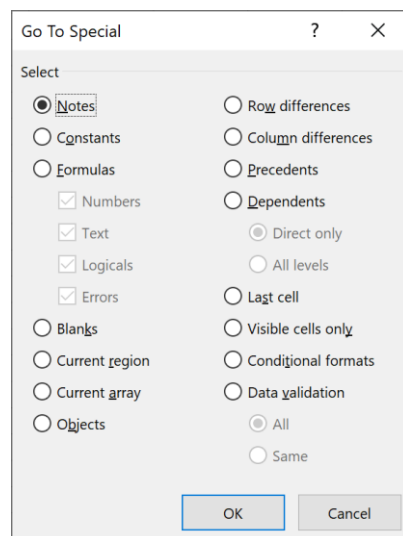


GO TO SPECIAL

Go To Special from the **Home** tab (Shortcut key **Ctrl+G** or **F5**) can select specific cell types on a range or sheet.

Once selected you can perform the necessary action on all the cells in one go.

TIP To copy a formula to more than one cell in one go, type the formula and then press **Ctrl+Enter** (instead of just Enter)



Useful Formatting Tools

Center Across Selection Instead of Merge

To center text or values on your report, use Center Across Selection from Format Cells Alignment Options instead of Merging. This makes it easier to write formulas, copy specific columns & maintain the report.



Fill → Justify

To fit long text or set of instructions to a specific number of cells in a column, select the range, go to Home / Fill / Justify

Instructions	
Please input phone numbers without any brackets or dashes. Those will automatically become visible after pressing enter (magic!). Keep this list updated. The moment you are informed of a change please update the list accordingly.	

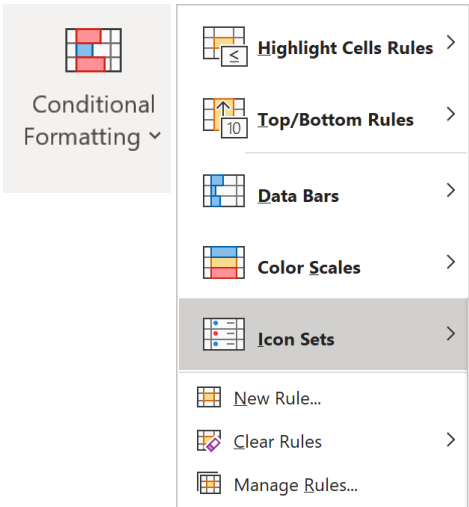
Number Formatting Options

Take advantage of the various number formatting options available under **Format Cells** (Ctrl+1). For example, use **Special Formatting** to format phone numbers properly.

Conditional Formatting

Create conditional formatting rules, including adding dynamic icons and data bars to your reports. Take advantage of available built-in logic.

Yearly Salary	PY Salary	Difference
60,270	57,400	
39,627	0	
18,000	29,906	
93,668	92,658	
134,000	127,000	
34,808	34,433	

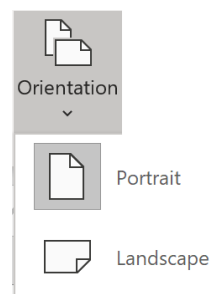


Printing Checklist (Page Layout tab)

❑ CHOOSE THE RIGHT ORIENTATION

Is the report taller than wide? Go with Portrait.

Is it wider than tall? Go with Landscape.



❑ ADJUST THE MARGINS

Make the margins slightly narrower to be able to fit in more content on one page or allow for a higher scaling per page.



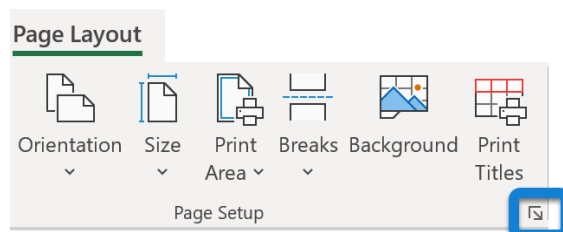
❑ DEFINE PRINT AREA

Set a specific area to be printed by selecting the area first and then from **Page Layout** tab, select **Print Area / Set Print Area**



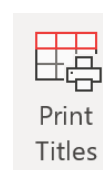
❑ ADD A HEADER & FOOTER

In the **Page Layout** tab, click on the more features arrow. Go to the **Header/Footer** tab and add a custom header/footer.



❑ REPEAT ROWS & COLUMNS (If needed)

Print Titles lets you select one or more rows & columns that you'd like repeated on each printed sheet.



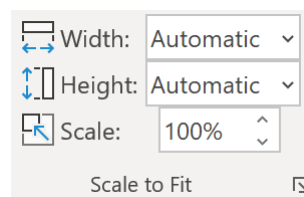
❑ PRINT PREVIEW BEFORE PRINTING

Add **Print Preview & Print** to your **Quick Access Toolbar** (QAT). If it's missing from there, click on the arrow on the QAT and select **Print Preview & Print**. This will add it to your QAT.



TIP

Keep an eye on the scale to make sure resolution is high enough for the reader



Spreadsheet Design Principles

❑ INPUT SEPARATE FROM OUTPUT

Keep raw data on a separate tab to your final report.

❑ DEFINE A PURPOSE FOR EACH SHEET

Each sheet should have a purpose. For example, the “report” tab is for final findings, the “calculation” tab organizes and prepares the data for the report tab.

❑ HAVE CONTROL (SHEET)

Add a “control” sheet to record any changes you make to the structure of your file. Make sure you include time stamps.

❑ ADD INSTRUCTIONS

Who will be using the file? Your colleagues? The client? Another department? Add a short explanation to describe how the file is organized.

❑ KEEP FILE BACKUPS

Make sure you take copies of your file from time to time. Specially if you’re revising formulas & values, keep a hard-coded version of your file (You can copy and paste special as values the data in the tabs).

❑ PREPARE FOR PRINT

Who are you sending or sharing the file with? Is there a chance they would print the file or save it as PDF? If yes, prepare it for print.

❑ CONSISTENT COLOR CODING

Keep colors consistent throughout the report. If you have input fields that are a specific color in one tab, keep it the same across your sheets and workbooks.

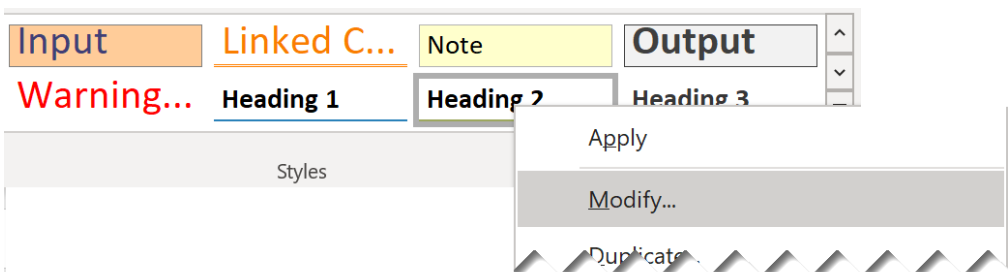
❑ FORMAT FOR APPRECIATION

A little bit of formatting goes a long way. Keep your report organized with minimum formatting. This gives it a more professional look.

Save Time Formatting Reports

Define Cell Styles

Take some time to define the cell styles you use most when you create reports. Do you use a specific header? A special format for input cells? Adjust the existing cell styles or create your own.



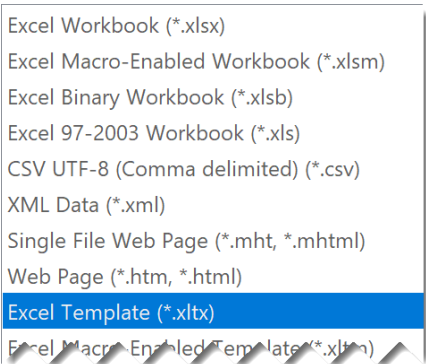
TIP

You can also define a default style for Excel Tables.

Create a Template

Once you've adjusted the cell styles, updated the workbook theme and any other adjustments you like to have as starting point when you open a new workbook, save the file as a template.

Before you do that make sure your workbook is empty (unless you require a specific setup or instructions you'd like to keep for every workbook)



Go to **Save As** – Save the workbook as **.xltx**

You can open the template by going to **File / NEW**.

Once you start working in the file and you want to save it, Excel will save it as a normal Excel workbook, i.e. **xlsx** file.

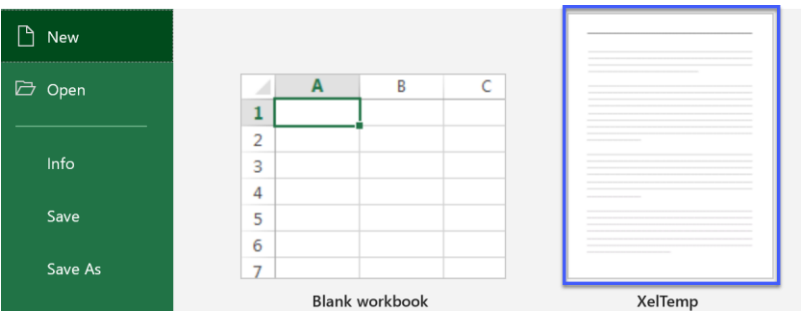
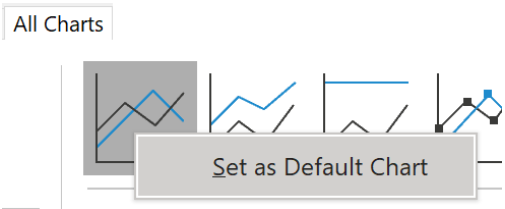


Chart Productivity Tips

Shortcut to Insert your Default Chart

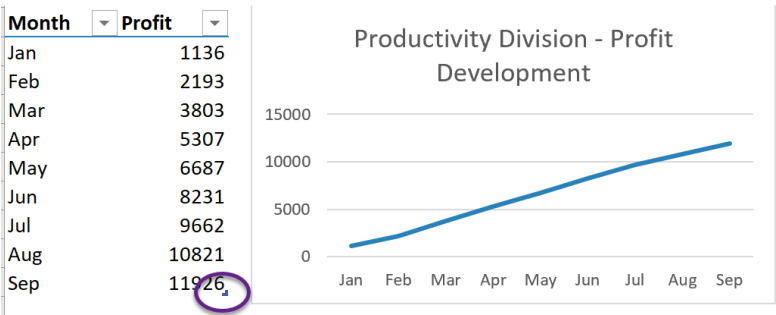
- #1 – Select the data, then Alt + F1 to insert the chart on the same sheet.
- #2 – Select the data, then F11 to create a new chart sheet.

If you'd like to change your default chart from column to another type, e.g., Line chart: Go to **Insert Chart** dialog box, right-mouse click on the chart type you want and select **Set as Default Chart**.

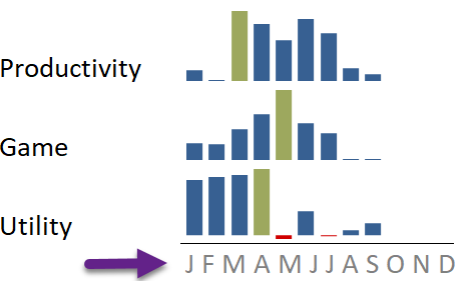


Turn your Source Data to an Excel Table

If you'd like your chart to automatically include new values, turn your source data into an **Excel table**.



Add Your Own Axis to Sparklines



To make it easier to spot which data point belongs to which category, create a manual axis directly under the sparklines.

This works for fixed data points otherwise you'll have to think of ways to make it dynamic with formulas.

TIP

If you create a set of charts that need to stay together, make sure you group them. Select the charts by holding down **Ctrl**, right-mouse click & **Group**.

Working with Pivot Tables

Get Quick Insights from Data

Pivot Tables Enable you to analyze your data (such as filter, sort, group, drill-down) without writing complex calculations.

Company		Sales		Customer		Article					
Company	Name	Region	Docume	Document Date	Code	Name	code	Article Description	Reject	Quantity	Sales USD
1010US	Urban Right	America	66030	10/4/2019	8010	Dellicia	103	Women type T simple white		120	1440
1010US	Urban Right	America	66030	10/4/2019	8010	Dellicia	104	Women type T simple black		150	1800
1010US	Urban Right	America	66032	10/7/2019	8010	Dellicia	103	Women type T simple white		170	2040
1010US	Urban Right	America	66032	10/7/2019	8010	Dellicia	104	Women type T simple black		140	1680
1010US	Urban Right	America	66031	10/8/2019	8020	Erma	103	Women type T simple white	1	140	1680
1010US	Urban Right	America	66031	10/8/2019	8020	Erma	104	Women type T simple black		150	1800
1010US	Urban Right	America	66031	10/8/2019	8020	Erma	105	Women crop top black		100	1000
1010US	Urban Right	America	68112	10/11/2019	8010	Dellicia	104	Women type T simple black	4	180	2160
1010US	Urban Right	America	68112	10/11/2019	8010	Dellicia	105	Women crop top black		120	1200
1010US	Urban Right	America	68116	10/11/2019	8020	Erma	104	Women type T simple black		150	1800
1010US	Urban Right	America	68116	10/11/2019	8020	Erma	105	Women crop top black		190	1900
1010US	Urban Right	America	68116	10/11/2019	8020	Erma	107	Women basics	2	160	800
1010US	Urban Right	America	68116	10/11/2019	8010	Dellicia	104	Women type T simple black		160	1920
1010US	Urban Right	America	68116	10/11/2019	8010	Dellicia	105	Women crop top black		190	1900
1010US	Urban Right	America	65662	10/15/2019	8020	Erma	103	Women type T simple white		120	1440
1010US	Urban Right	America	65662	10/15/2019	8020	Erma	104	Women type T simple black		110	1320

1010US
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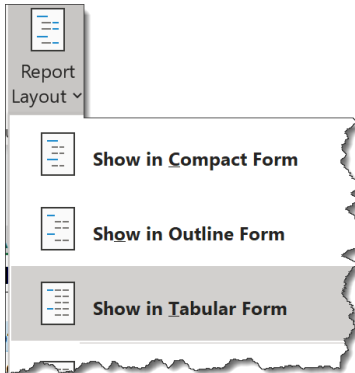
- Which company sells the most?
- Which product generates the most sales?
- Which customer accounts for the highest % of total sales?

Checklist Before Creating a Pivot Table

- ✓ Make sure your data is in a Data List format
 - Each column has a header (no blanks)
 - No empty columns in your data table
 - No summations embedded in your data table
- ✓ BEST method is to transform data to an Excel Table
 - Ensures Pivot Table is updated when new data is added
 - Ensures data is properly organized and each column has a header

Tips for Pivot Tables

Use Tabular Design For Pivot Table Layout



To get the header for the category field on your Pivot Table report, use **Tabular Design**.

Go to **Design Tab, Report Layout** and select **Show in Tabular Form**.

Rename Pivot Headers

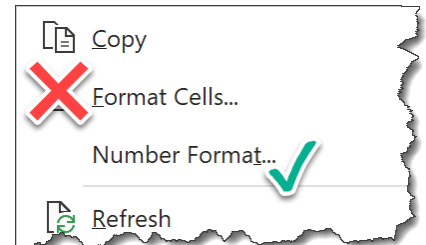
Sum of Quantity

Instead of **Sum of Quantity** in the Pivot field header, change this to **Quantity** and add a space character either before or after.

Use Number Format Instead of Format Cells

To change the number format for the values in a Pivot Table, use Number Format instead of Format Cells.

This ensures the field keeps the formatting as the Pivot Table expands.



Double-click on Values to Get the Full List

To get a list of each line of data making up the value shown on the Pivot Table, you can double-click the cell value. This creates a new sheet with all the rows of data that make up the aggregated value.

Remove the Check-mark for Autofit

☒ Autofit column widths on update

One Pivot Table default setting that can get annoying is to automatically autofit the Pivot Table columns.

In case you want this turned off, go to Pivot Table options: **PivotTable Analyze > Options** and **un-check Autofit column widths on update**.

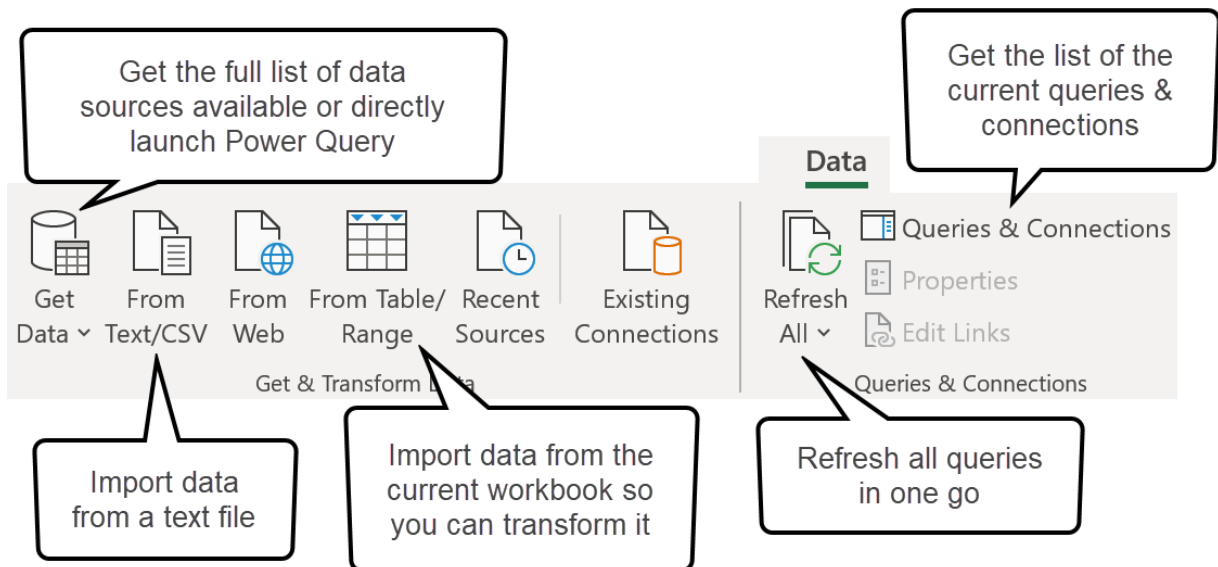
Why Use Power Query

Availability of Power Query

Since Excel 2016 Power Query is a part of Excel.

It's called **Get & Transform** in the **Data** tab.

If you have Excel 2010 or Excel 2013 – you can use Power Query by installing the add-in from [HERE](#) (if you Google “Power Query add-in” download, you will find the official Microsoft site for downloading).



Why Power Query?

If your raw data set is in another place, for example: another file, text file, the web etc. you can use Power Query to import and transform the data.

You can also use it for data in the same workbook.

If you have a messy data set and you find it difficult to create formulas or a pivot table to analyze the data, Power Query can help you transform the messy data to a clean tabular data set.



THANK YOU!

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