40 INCREDIBLE EXCEL TIPS

COMPUTERGAGA

Table of Contents

About Me **4**

Shortcuts **6**

1. Double Click for a Quick AutoFill 6
2. Fill Cell Content from Above 6
3. Navigate with the Name Box 6
4. Switch Between Sheets Quickly 7
5. Quickly Enter Today's Date 7
6. Select the Current Region 7
7. Format Cells, Please 8
8. The Magical Ctrl + Enter Shortcut 8
9. Copy Formatting to other Cells EASILY 9

Formatting **10**

10. Wrap Text 10
11. Clear Cells Completely 10
12. Show the Day of the Week 11
13. Check if a Date Occurs This Month 13
14. Tracking Due Dates That Have Passed 15

Formulas **16**

15. TODAY() and NOW() 16
16. Calculate Age 16
17. Combine or Compare Values with XLOOKUP 17
18. Remove Erroneous Spaces from a Cell 19
19. Quick Analysis Totals 20
20. The Awesome IF Function 21
21. Create a Top N Report 22
22. Distinct Count Formula 23

Excel Tools **24**

23. Flash Fill for Fast Data Manipulation 24
24. Stop Excel from Removing Leading Zeroes 26
25. Use Custom Lists 28
26. Copy Column Widths Only 30
27. Convert Unrecognised Dates 31

28. Use Goal Seek to Help Predict Values 33
29. Create a Drop-Down List of Options 35
30. Convert a Range to a Table 36
31. Use Sparklines for In Cell Micro-Charts 38

Printing 39

32. Print your Headers on Every Page 39
33. Print Selection Only 40
34. Print to One Page 41
35. Hide the Gridlines on a Sheet 43

Using Charts 44

36. Build a Chart 44
37. Create Effective Chart Titles 45
38. Apply Data Labels to a Chart 46
39. Add a Secondary Axis 48
40. Save the Chart as a Template 50

About Me

My name is **Alan** and I live in Ipswich, Suffolk in the UK.

I set up Computergaga in 2009 as a resource for Microsoft Excel tips and tutorials.

I am an Excel and Power BI trainer and consultant. I have been helping individuals and companies get the most from Excel for over 20 years.

I love it!

Setting up Computergaga gives me the chance to reach more people than I can physically. I am honoured to have helped millions of people reach their Excel goals.

The **Computergaga YouTube channel** was set up in 2010 to provide **free Excel tips and tutorials**. It has over 650 videos and has had more than 45 million views.

In 2020, I was awarded MVP by Microsoft in the Office Apps & Services category.

Microsoft Most Valued Professionals are “technology experts who passionately share their knowledge with the community” and the award is given by Microsoft in recognition of “exceptional community leadership”.

I am very proud to be part of this amazing community.

Live Meetups

I organise the monthly London Excel Meetups along with the team at **Datel Productions**.

These meetups are FREE and provide a relaxed and enjoyable environment to connect with other Excel users.

Each meetup will have presentations from Excel experts. Come along and boost your Excel skills at one of our events. I would love to see you there.

Why not **check out the next events and join us**.

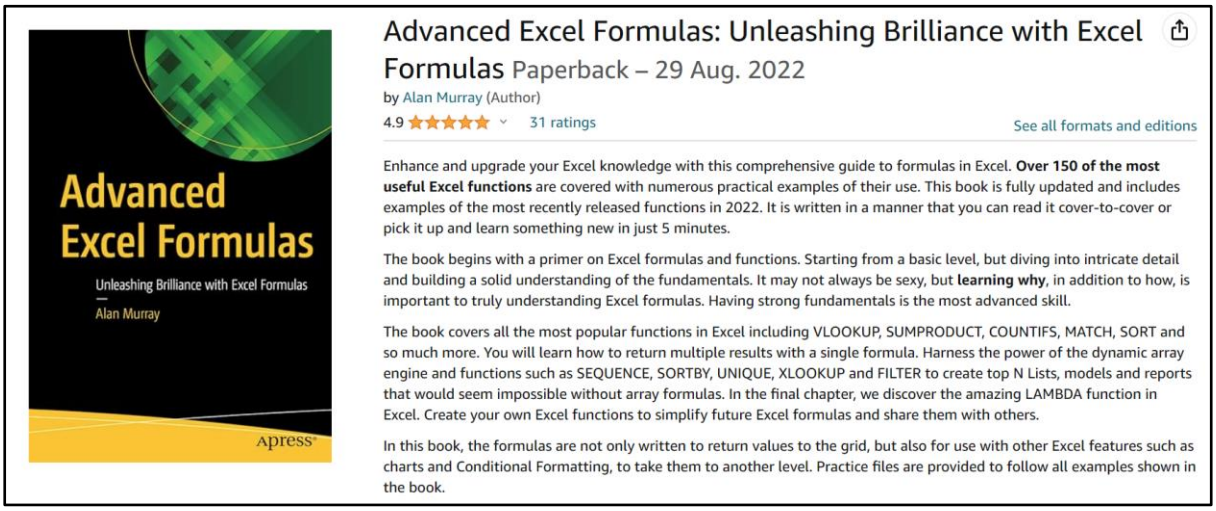
Advanced Excel Formulas

This best-selling Excel book is jammed packed with more than 500 formula examples over 846 pages.

The book is rated 4.9/5 stars and comes with download files to follow along with all examples.

What Will You Learn

- Gain intimate knowledge of Excel formulas.
- Understand efficient and practical use of Defined Names and Tables.
- Master the most popular functions of Excel – VLOOKUP, COUNTIFS, MATCH, SUMPRODUCT, and so much more.
- Learn to return multiple results from a single formula with the magical array formulas.
- Know the best lookup functions for dynamic spreadsheets.
- Know true power of classic Excel functions such as IF, SUM, and INDEX.
- Use new Excel functions including XLOOKUP, VSTACK, LET, and LAMBDA



Pick up your copy

Shortcuts

1. Double Click for a Quick AutoFill

The AutoFill technique is used to copy formulas, date sequences and Custom Lists amongst many others. It's a brilliant tool that greatly improves data entry and the copying of formulas.

A great trick is the ability to fill a formula down a column super-fast by double clicking on the AutoFill handle. This will only work for filling down columns, and if the column to the left has content.

2. Fill Cell Content from Above

When entering data into Excel, the Ctrl + D keyboard shortcut can be used to **fill down**.

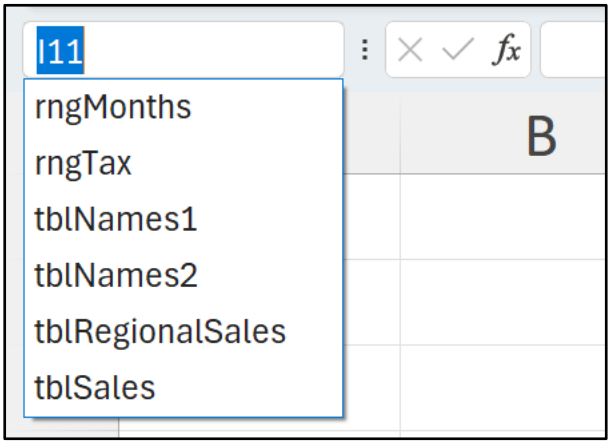
The **Ctrl + D** shortcut will repeat the content and format of the cell above. I heavily rely on this shortcut as often the next row uses the same date, name, or category as the previous row. This saves time and improves accuracy.

The great thing about Ctrl + D is that it copies the cell's formatting as well as its content. There is also the **Ctrl + '** shortcut which only copies the content from the cell above.

3. Navigate with the Name Box

The Name Box to the left of the Formula Bar can be used to navigate an Excel spreadsheet. It is great for quickly jumping to a specific named area or cell address.

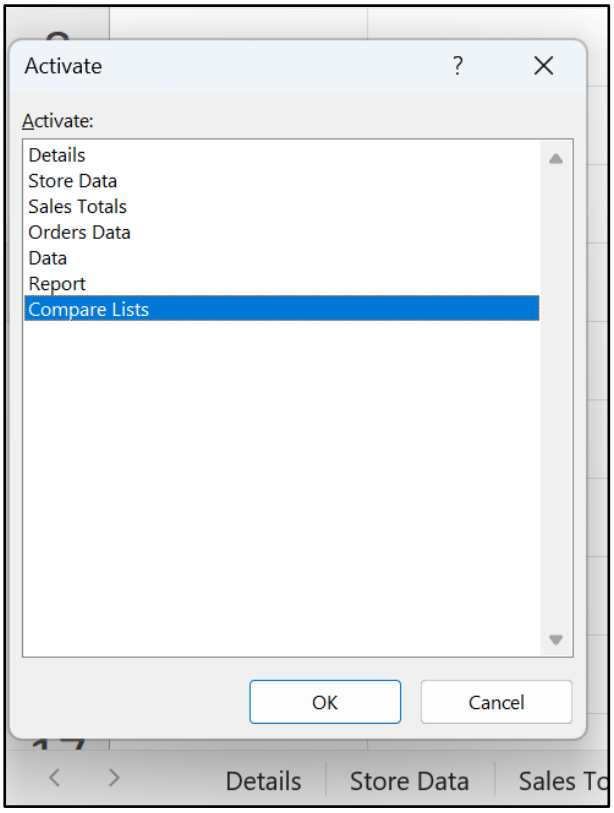
Click inside the Name Box, type the cell address you want to go to, and press Enter. Or use the list arrow and click the defined name you want to go to.



4. Switch Between Sheets Quickly

To quickly switch between the sheets of a workbook use the **Ctrl + Page Up** (move left) and **Ctrl + Page Down** (move right) keyboard shortcuts. Using **these shortcuts** saves having to click on the little tabs at the bottom of the book each time.

Another technique is to right-click in the area where the arrows are to the left of the first sheet. This pops up the Activate window to select a sheet from the list.



Finally, you can also use the Navigation pane which is found on the View tab. This can be used to quickly navigate to the different used ranges, tables, names, charts, and sheets of a workbook.

5. Quickly Enter Today's Date

Never have to check the calendar or type those pesky forward slashes again when entering today's date, as the **Ctrl + ;** shortcut is there to do it for you.

6. Select the Current Region

One of the most beautiful keyboard shortcuts in Excel must be **Ctrl + Shift + 8**. This shortcut will select your current region. This means it selects all the cells in the range that you are currently within.

Selecting hundreds and thousands of cells just became easy.

7. Format Cells, Please

Format Cells is the most important dialog box in Excel. There you go, I said it. It's more commonly used than Page Setup, Conditional Formatting, or Data Validation. And because of this, the keyboard shortcut should be known and used.

Its **Ctrl + 1**.

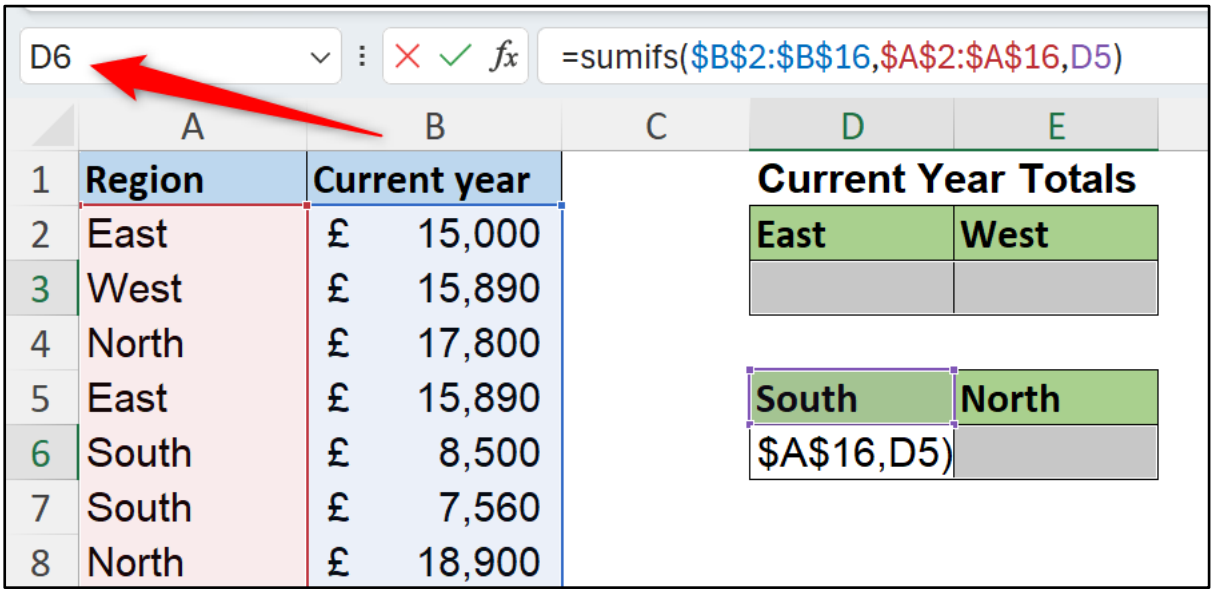
8. The Magical Ctrl + Enter Shortcut

The **Ctrl + Enter shortcut** is very useful for three main reasons.

- Confirm the entry or edit of a cell value while remaining on that cell (pressing Enter moves you to the cell below or next logical cell, by default).
- Write formulas to multiple cells (including non-adjacent cells) at once.
- Fill empty cells in a used range. This is similar to the previous reason, but you can enter values too. Great for replacing blank cells with zero or another value.

In the following image, the **SUMIFS function** is being applied to four cells at once. They are also non-adjacent, and this is not possible to do without Ctrl + Enter.

Notice that the active cell is D6. This is noted by the cell address in the Name Box. It is important to ensure your references are correct (i.e., relative and absolute).



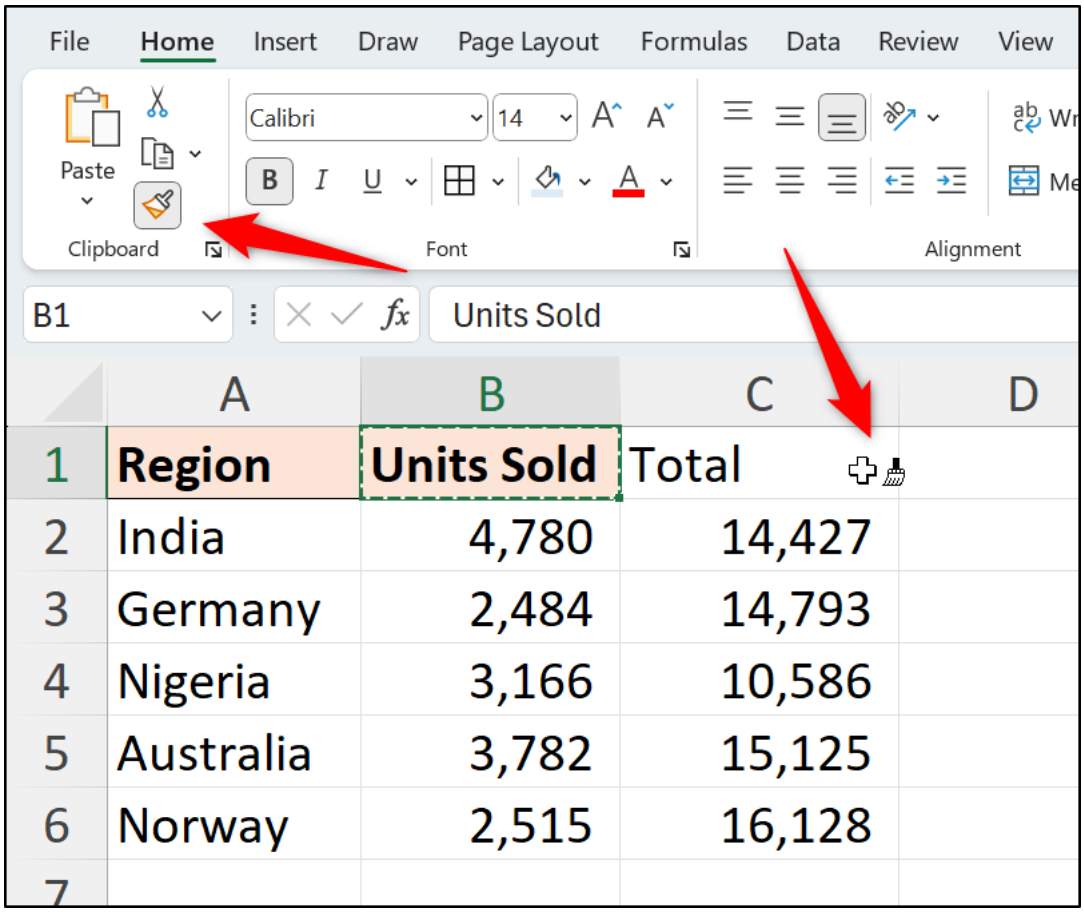
9. Copy Formatting to other Cells EASILY

A common task in Excel is to copy formatting from one cell to another. It could be that you want to copy the specific shade of colour you used to fill another cell, a custom number format or some conditional formatting rules.

The Format Painter is a fantastic tool that will enable you to do all the above easily.

1. Select the cell that contains the formatting you want to use.
2. Click the **Format Painter** button on the **Home** tab.
3. Select the cell(s) you want to apply the formatting to.

The following image shows the Format Painter about to be applied to cell C1. The paintbrush icon indicates that I have formatting copied and ready to be applied on-click.



	A	B	C	D
1	**Region**	**Units Sold**	Total	
2	India	4,780	14,427	
3	Germany	2,484	14,793	
4	Nigeria	3,166	10,586	
5	Australia	3,782	15,125	
6	Norway	2,515	16,128	
7				

Pro tip: Double click the Format Painter button to keep it on so that you can paint the formatting to multiple ranges. Just remember to click the Format Painter button again when you are finished to turn it off.

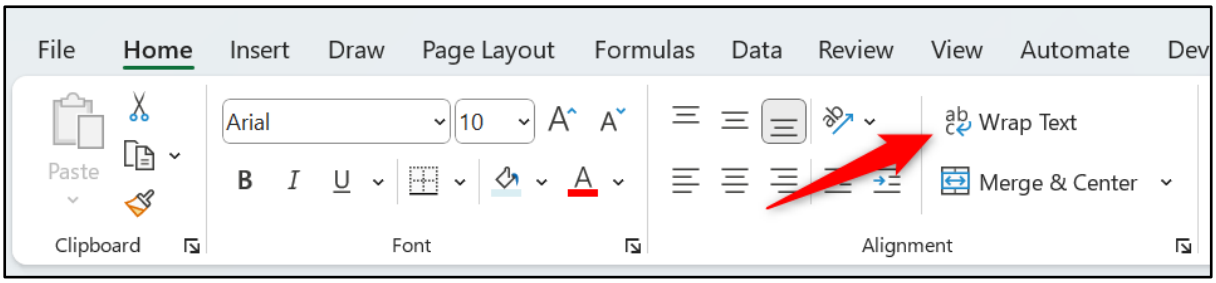
Formatting

10. Wrap Text

If you are using a column in your Excel spreadsheet to store a description, comments, or large header text, you need to know how to wrap text.

Wrap text will display the content on multiple lines within a cell to make it visible no matter how much you type.

1. Select the cell(s) that you want to apply wrap text to.
2. Click the **Home** tab on the Ribbon and then the **Wrap Text** button in the Alignment group.



In the following image, Wrap Text has been used on some of the headers to wrap text on multiple lines within a single cell.

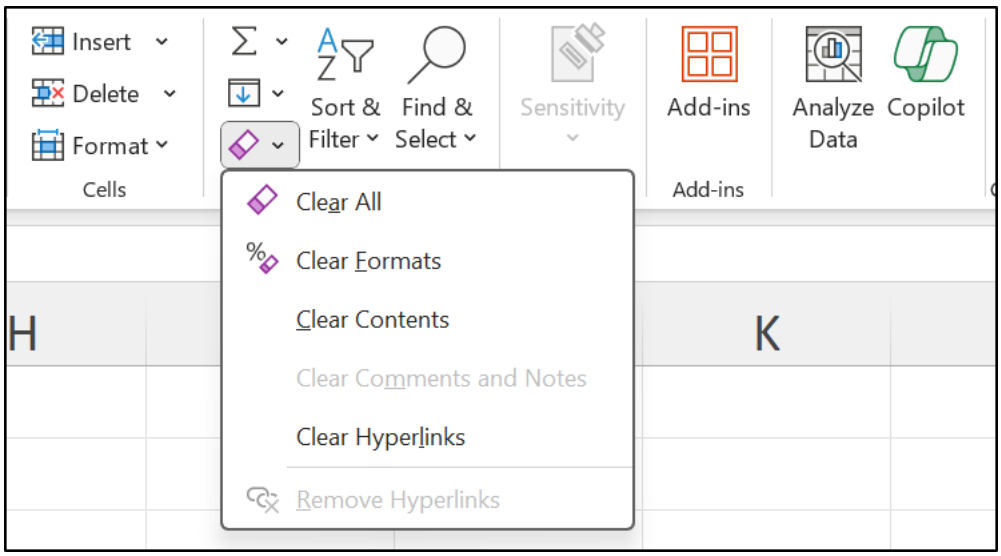
Quantity	Price Per Unit	Discounted Price (10% off)	Order value
25	£ 5.00	£ 4.50	**£ 113**
2	£ 2.25	£ 2.25	**£ 5**
32	£ 4.50	£ 4.05	**£ 130**

11. Clear Cells Completely

Pressing the Delete key in Excel only removes the content of a cell (this includes the value and formula). It will not remove any formatting, Data Validation rules, comments, or hyperlinks.

If a cell is not properly cleared it can cause problems in the future by formatting cells incorrectly or preventing data being entered due to validation rules.

1. Click the **Clear** button in the Editing group of the **Home** tab.

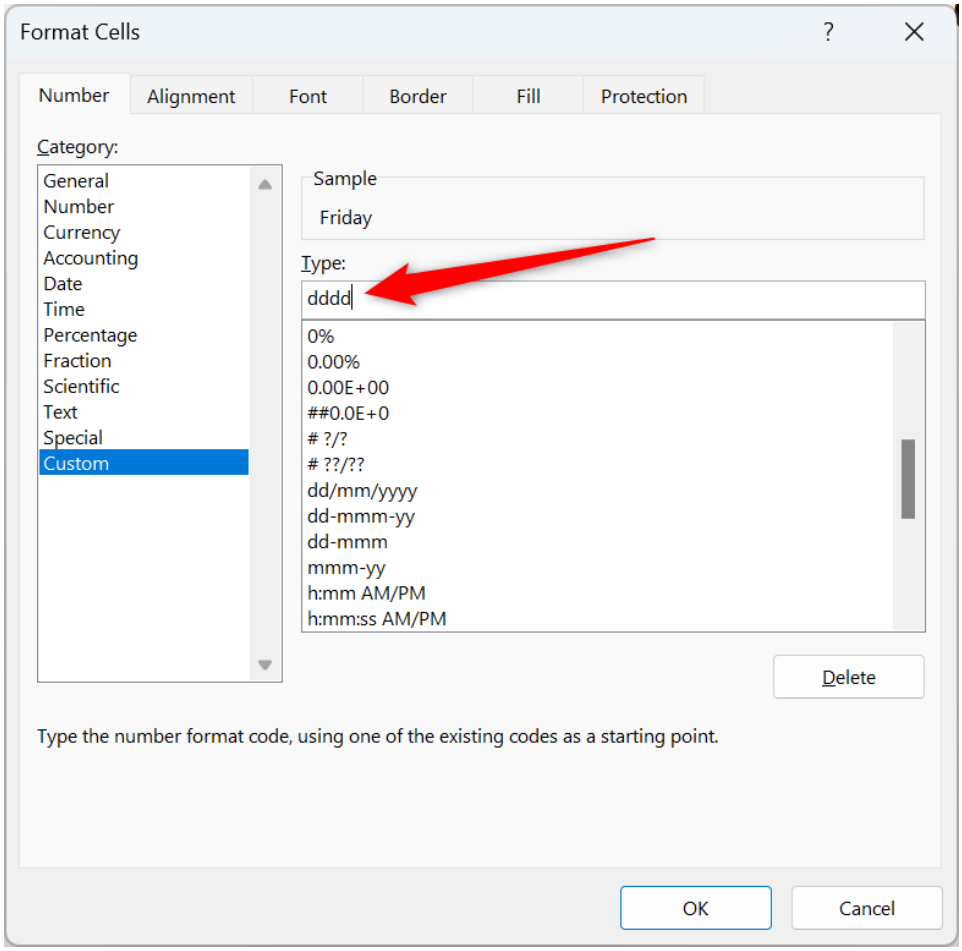


2. Select the option you want from the list.

12. Show the Day of the Week

The date can be formatted to show the day of the week in a cell. This is not one of the date formats provided by Excel, so it must be created as a custom number format.

1. Select the cell(s) you want to format.
2. Click the **Home** tab on the Ribbon.
3. Click the **Number Format** list arrow in the Number group and select **More Number Formats** (or press Ctrl 1.)
4. Select **Custom** from the **Category:** list.
5. Enter **dddd** in the **Type:** box (use ddd for the short name for the day of the week.)
6. Click **OK**.



Many more date formats can be created using this technique, such as a combination of the day of the week and date e.g., Wed, 09 Mar 2023, or a year-month format e.g., 2023-Mar.

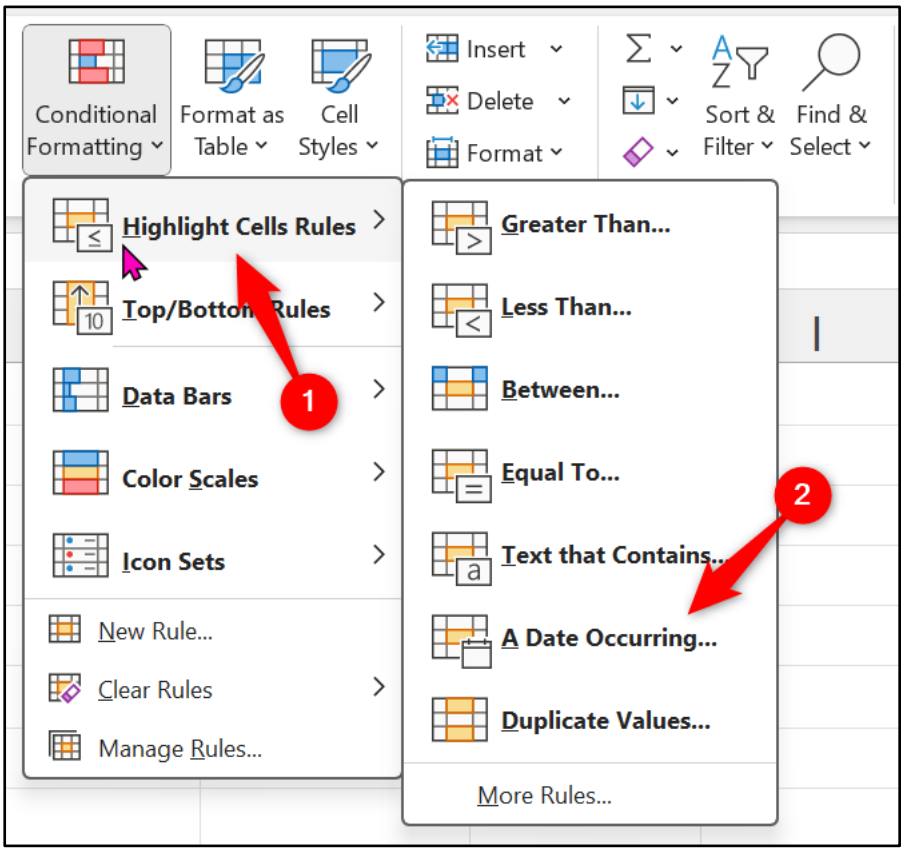
If this is interesting to you, check out the TEXT function in Excel. This formula can be used to apply number formats in a formula. Really great for summary text on reports or chart labels.

13. Check if a Date Occurs This Month

The Conditional Formatting tool can be used to bring your attention to almost anything you want to monitor in an Excel spreadsheet.

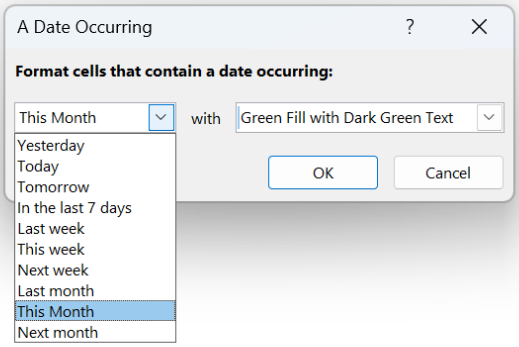
To be notified if a date occurs this month:

1. Select the range of cells containing the dates that you want to monitor.
2. Click the **Home** tab of the Ribbon.
3. Click **Conditional Formatting** > **Highlight Cell Rules** > **A Date Occurring**.



4. Click on the drop list arrow and select **This Month**.
5. Choose a format from the second list or create your own.
6. Click **OK**.

Lastname	Firstname	Birthday
Devonshire	Alan	28/05/2024
Filmer	Mark	25/09/2024
Connell	Sarah	18/04/2024
Daish	Liam	13/01/2025
Burgundy	Rebecca	06/05/2024
Prost	David	27/08/2024
Becker	Steve	11/08/2024
McDonald	Louise	04/03/2025
Patel	Gita	02/11/2024
Smith	Paul	14/05/2024
Frood	Ian	10/07/2024
Smith	Hollie	27/10/2024
Beckford	Darren	03/06/2024



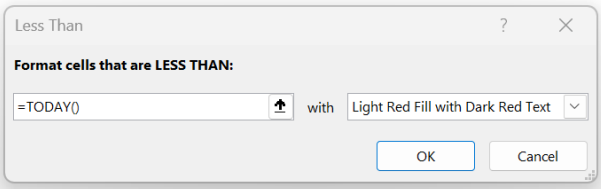
14. Tracking Due Dates That Have Passed

You may need to be made aware of dates that have passed on a spreadsheet such as the expiry date of a contract, or the due date of a payment.

By using the TODAY function within a **Conditional Formatting rule**, it is possible to format the cells that contain dates in the past. This makes it easy to identify them on a spreadsheet.

1. Select the cells that contain the dates you want to format.
2. Click **Conditional Formatting** > **Highlight Cells Rules** > **Less Than**.
3. In the box provided, enter =TODAY().
4. Choose a format, or create your own, from the list provided.
5. Click **OK**.

Lastname	Firstname	Expiry Date
Devonshire	Alan	28/05/2024
Filmer	Mark	25/09/2024
Connell	Sarah	18/04/2024
Daish	Liam	13/01/2025
Burgundy	Rebecca	06/05/2024
Prost	David	27/08/2024
Becker	Steve	11/08/2024
McDonald	Louise	04/03/2025
Patel	Gita	02/11/2024
Smith	Paul	14/05/2024
Frood	Ian	10/07/2024
Smith	Hollie	27/10/2024
Beckford	Darren	03/06/2024



Formulas

15. TODAY() and NOW()

The TODAY and NOW functions are used to calculate the current date. This is extremely useful as by finding the current date you can calculate how long it has been since a specific date, or how long until an important due date.

The TODAY function returns today's date, and the NOW function returns today's date and the current time.

These functions require no arguments and can be entered into a cell as below.

```
=TODAY()
```

```
=NOW()
```

The following example can be used to return the number of days until a due date (cell A2).

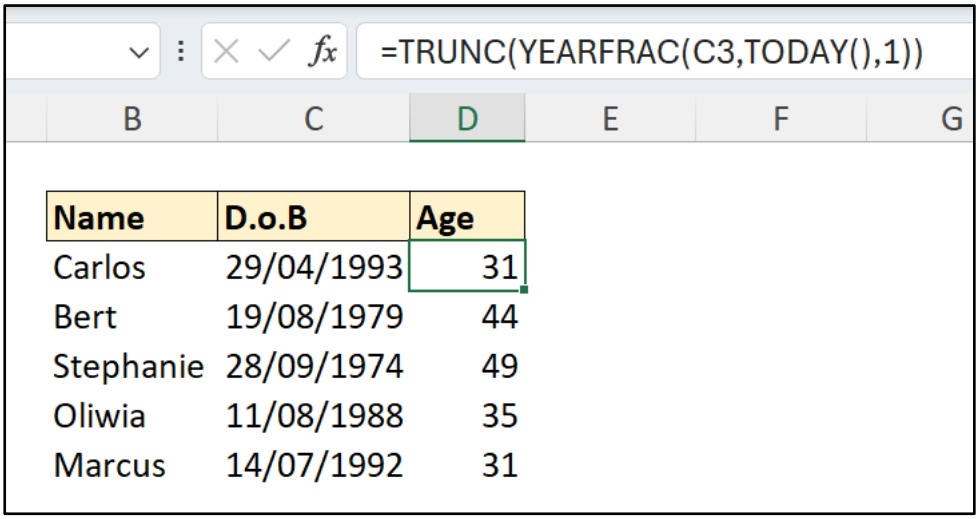
```
=A2-TODAY()
```

16. Calculate Age

There are a **few methods to calculate age in Excel**, either from a date of birth or between two other given dates.

The following formula can be used to calculate age from a date of birth.

```
=TRUNC(YEARFRAC(C3,TODAY(),1))
```



17. Combine or Compare Values with XLOOKUP

XLOOKUP is the primary lookup function in Excel. It is used to match values in two different tables and return a corresponding value.

For example, XLOOKUP can be used to reconcile invoice payments. It can match an 'Invoice ID' in a 'payments received' table to the same 'Invoice ID' in an 'invoices sent' table and return the corresponding payments received value (if there is one). This can then be compared to the payment value requested in the invoice.

The **XLOOKUP function** is also used to combine values from multiple tables to a single table. Normally with the goal of producing a PivotTable for data analysis and reporting.

XLOOKUP requires 3 pieces of information (arguments), which are detailed below, and also 3 optional arguments.

=XLOOKUP(lookup_value, lookup_array, return_array, [if_not_found], [match_mode], [search_mode])

- **Lookup value:** The value you are looking for.
- **Lookup array:** The range or array in that you are looking for the *lookup value*. This can be a column or a row.
- **Return array:** The range or array that contains the value or range to return.

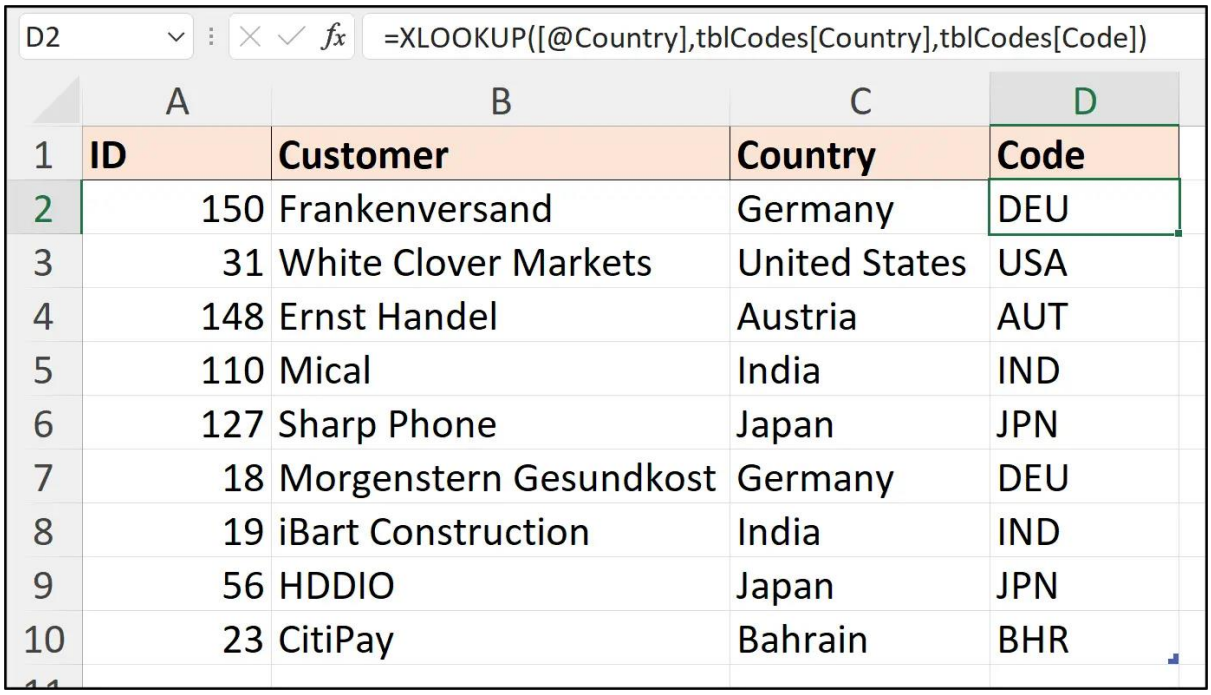
Let's see an example of XLOOKUP retrieving matching values from another table.

In the following image we have a table named *tblCodes* that lists country names and their three-digit country code.

Country	Code
Algeria	DZA
Austria	AUT
Bahrain	BHR
Germany	DEU
India	IND
Iran	IRN
Japan	JPN
Philippines	PHL
United States	USA

The following XLOOKUP function is used to look up and return the corresponding country code from *tblCodes* to a customers table.

```
=XLOOKUP([@Country],tblCodes[Country],tblCodes[Code])
```



	A	B	C	D
1	**ID**	**Customer**	**Country**	**Code**
2	150	Frankenversand	Germany	DEU
3	31	White Clover Markets	United States	USA
4	148	Ernst Handel	Austria	AUT
5	110	Mical	India	IND
6	127	Sharp Phone	Japan	JPN
7	18	Morgenstern Gesundkost	Germany	DEU
8	19	iBart Construction	India	IND
9	56	HDDIO	Japan	JPN
10	23	CitiPay	Bahrain	BHR

The XLOOKUP function is one of the most used and powerful functions in Excel.

See **more examples of the XLOOKUP function**.

18. Remove Erroneous Spaces from a Cell

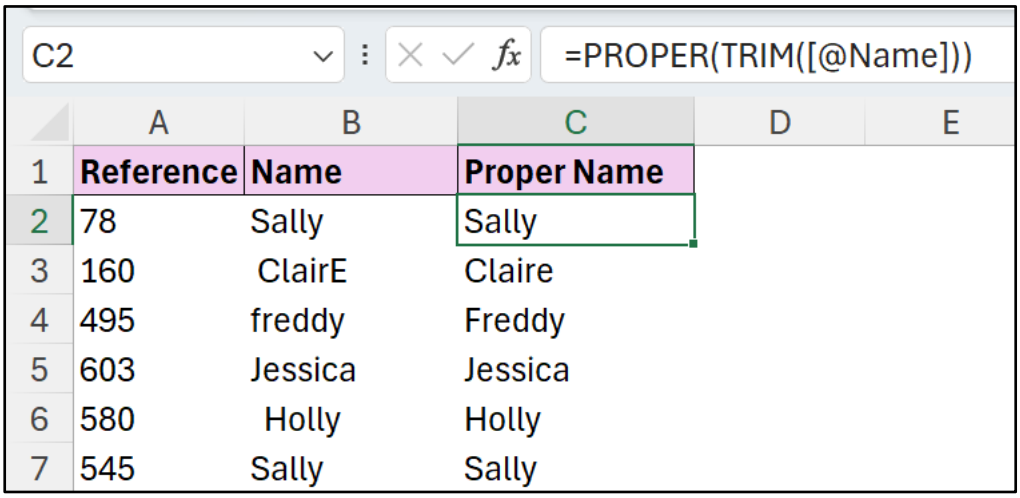
If a cell contains excess spaces at the beginning or end of the cell value it can produce wrong results in your formulas, PivotTables, and charts.

Spaces are recognised as a text character by Excel, so “John” without a space and “John “ with a space on the end are not the same value.

To remove unnecessary spaces from a cell, you can use the TRIM function. This will not only remove unnecessary leading and trailing spaces, but also any extra spaces between words.

The following formula is used to remove any spaces that occur before or after the values in the ‘Name’ column. They are then converted to proper case with the **PROPER function**.

```
=PROPER(TRIM([@Name]))
```



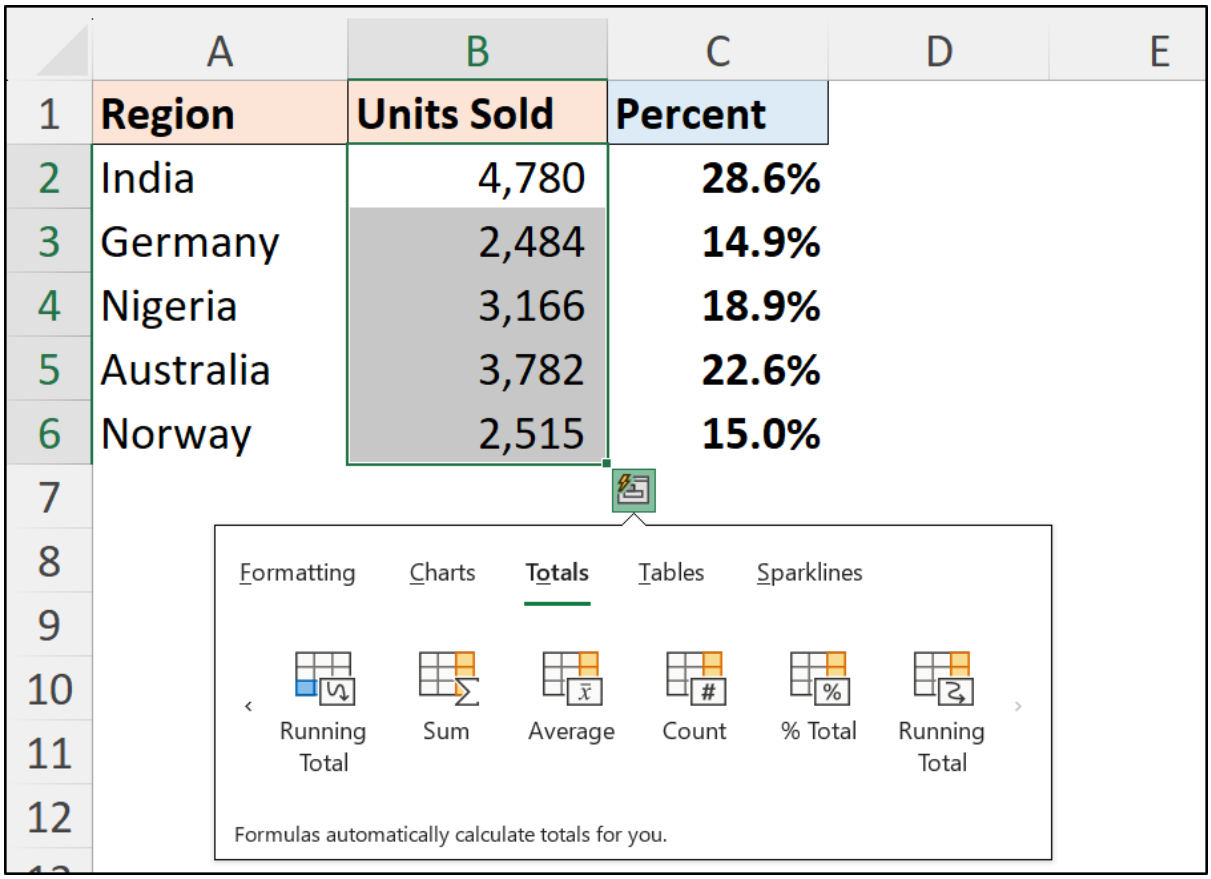
	A	B	C	D	E
1	**Reference**	**Name**	**Proper Name**		
2	78	Sally	Sally		
3	160	ClairE	Claire		
4	495	freddy	Freddy		
5	603	Jessica	Jessica		
6	580	Holly	Holly		
7	545	Sally	Sally		

19. Quick Analysis Totals

The Quick Analysis button in Excel can be used to produce total rows and columns quickly, and without needing to know the formulas yourself.

To see an example, let's create an often-requested formula – the percentage of total formula.

1. Select the range of cells from which to calculate the total.
2. Click the **Quick Analysis** button in the bottom corner of the selected range.
3. Click the **Totals** menu item.
4. Scroll to the right to find the column totals (yellow ones) and click **% Total**.



20. The Awesome IF Function

The IF function is a logical function that tests a condition and takes a different course of action depending on the result of the test. For example, it may test if a salesperson has met their sales target and calculate a bonus if they have but display 0 if they have not.

The IF function is a key function behind many powerful automated spreadsheets. It enables Excel to make decisions on your behalf and perform calculations or change cell values automatically.

The IF function requires three items of information:

```
=IF(logical_test, [value_if_true], [value_if_false])
```

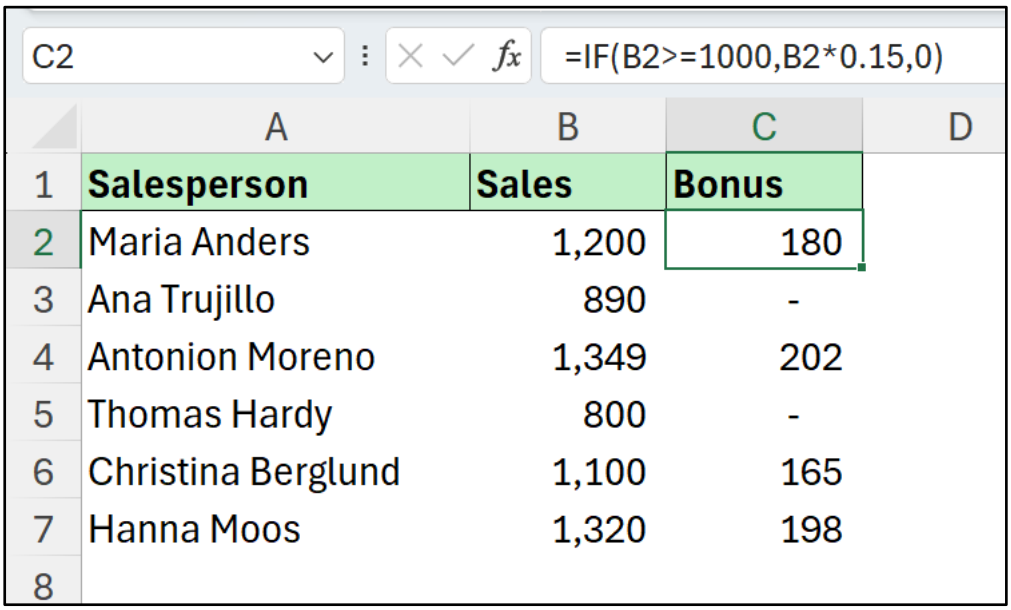
Logical test: is the condition that you want to test.

Value if true: is the action you want to take if the condition is met.

Value if false: is the action you want to take if the condition is not met.

In this example, the **IF function** is used to test if the value in cell B2 is greater than or equal to 1,000. If it is, then it will calculate 15% of the value in cell B2, and if not, it will display 0.

```
=IF(B2>=1000,B2*0.15,0)
```



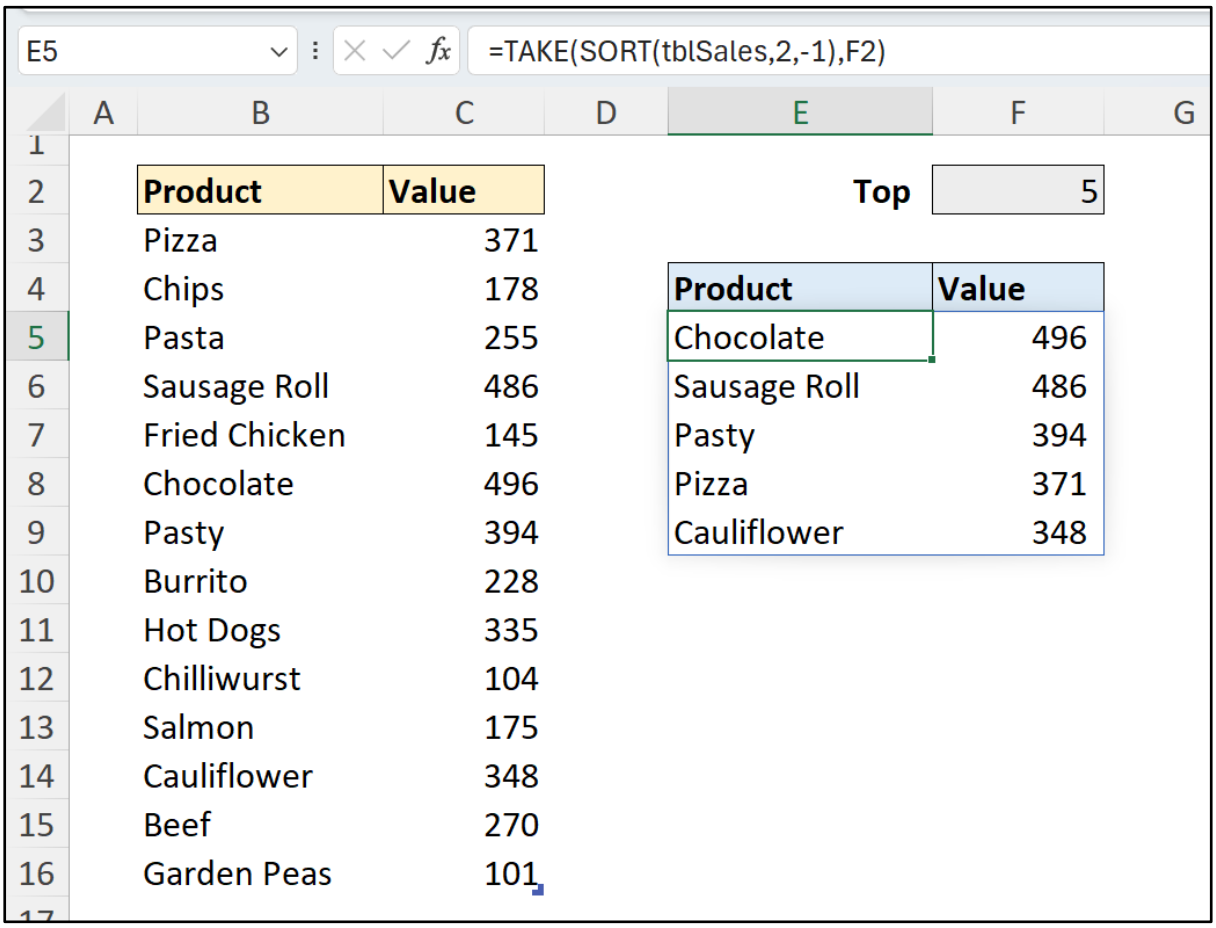
	A	B	C	D
1	**Salesperson**	**Sales**	**Bonus**	
2	Maria Anders	1,200	180	
3	Ana Trujillo	890	-	
4	Antonion Moreno	1,349	202	
5	Thomas Hardy	800	-	
6	Christina Berglund	1,100	165	
7	Hanna Moos	1,320	198	
8				

21. Create a Top N Report

With **dynamic array formulas** and the TAKE function, creating a simple dynamic top N list is very easy.

In this example, a top 5 report has been created from the data in the *tblSales* table. The N value (5 in this instance) is specified in cell F2. If this value is changed (to 10 for instance), the report will dynamic adjust.

```
=TAKE(SORT(tblSales,2,-1),F2)
```



For this report, the **SORT function** orders the data in tblSales in descending order using the second column (Value). The TAKE function then extracts the first N rows (amount specified in cell F2) only.

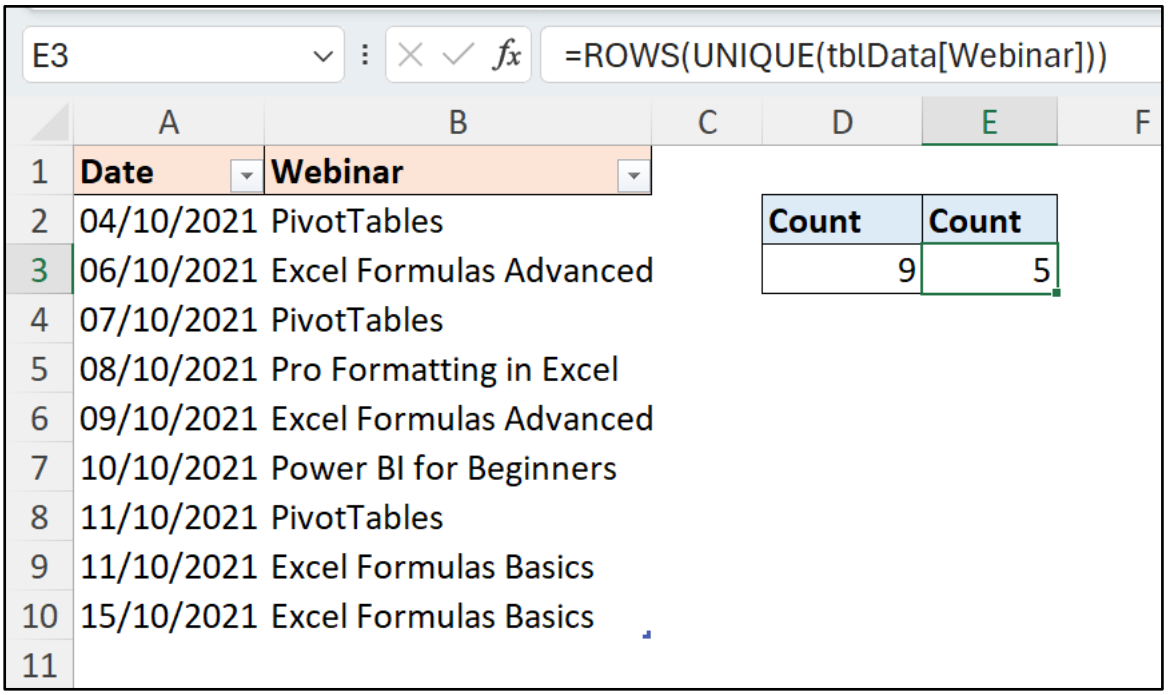
22. Distinct Count Formula

There are numerous count functions in Excel, including COUNT, COUNTA, COUNTIFS, and COUNTBLANK to name a few. However, there is not one to count the distinct values only.

Fortunately, there is a UNIQUE function which can be used to return a distinct or unique list of values. And from these returned values we can count how many there are.

The following formula uses the ROWS function along with UNIQUE to return how many distinct rows (webinar titles) there are in the Webinar column of the *tblData* table.

```
=ROWS(UNIQUE(tblData[Webinar]))
```



You can see that there is a count of 9 webinar titles, and 5 distinct titles (how many there are when duplicates are removed).

Excel Tools

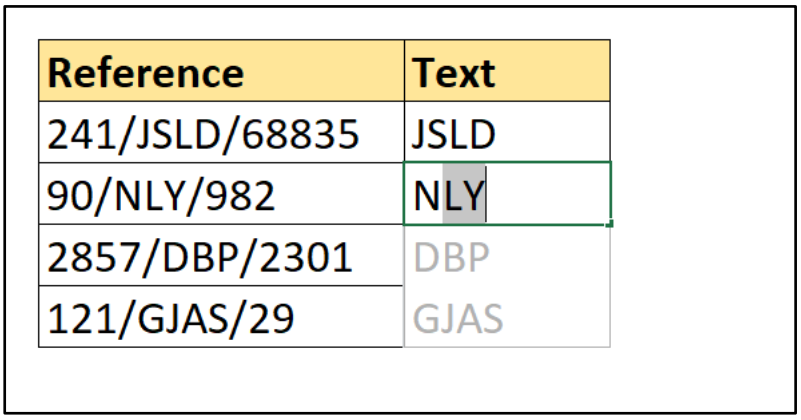
23. Flash Fill for Fast Data Manipulation

One of the most impressive tools in Excel is Flash Fill. This feature always gets a ‘wow’ from attendees of my Excel training when they’re seeing it for the first time.

Flash Fill is a tool that predicts a pattern in our data and fills the results down a column. So, we provide the results to what we want to achieve, and if a pattern is detected, Flash Fill completes the rest.

Take this example, we have references that are made up of three parts and delimited by the slash “/”. We want to extract the characters between the two slashes (the second part).

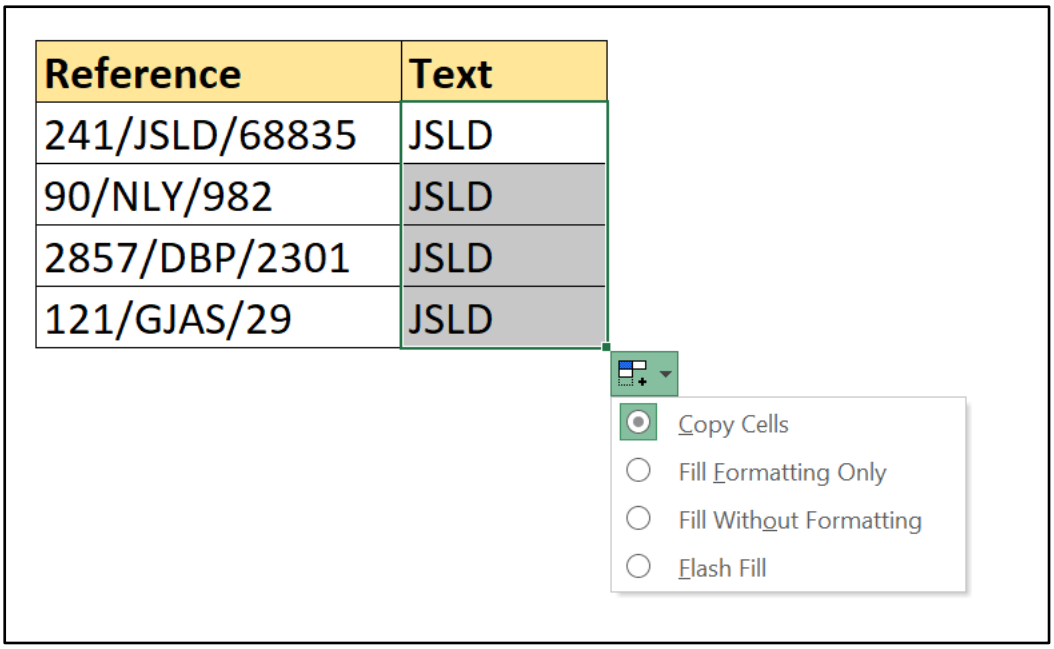
By entering the first result and then beginning to enter the second result, Flash Fill automatically appears offering to finish the data entry for us. It has successfully picked up the pattern of characters between the two slashes.



Press **Enter** to let Flash Fill complete the process.

There are other methods to run a Flash Fill in Excel. These include clicking the **Flash Fill** button on the **Data** tab of the Ribbon, and pressing **Ctrl + E**.

Another way though, is to drag the fill handle down (as indicated in the first tip in the book) from the first result cell, click the Auto Fill options tag, and click **Flash Fill**.



How awesome is that?

There are many great data manipulations and transformations that Flash Fill can assist with, including joining cell values together, changing case, converting values.

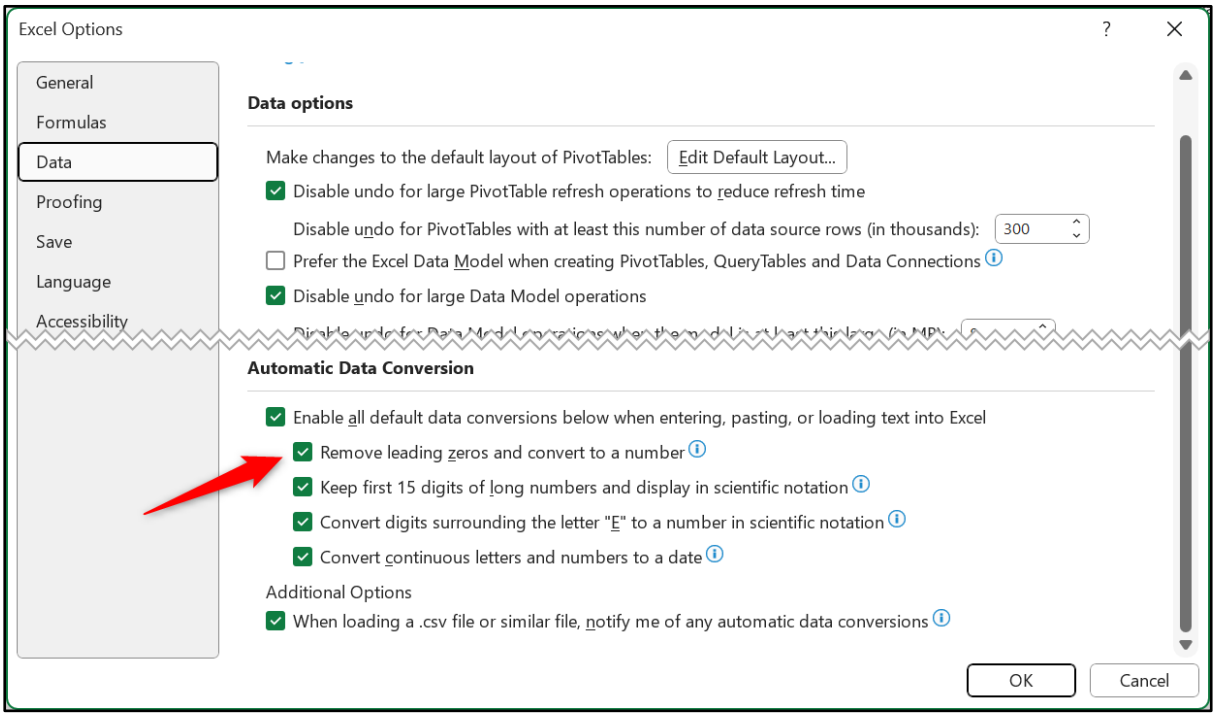
24. Stop Excel from Removing Leading Zeroes

You have probably entered a number into Excel before that begins with a zero, such as a phone number, zip code, or an ID number. And then the frustration when Excel automatically removes it.

There are few solutions to stopping this from happening, the main one is to format the range as text before you type the number.

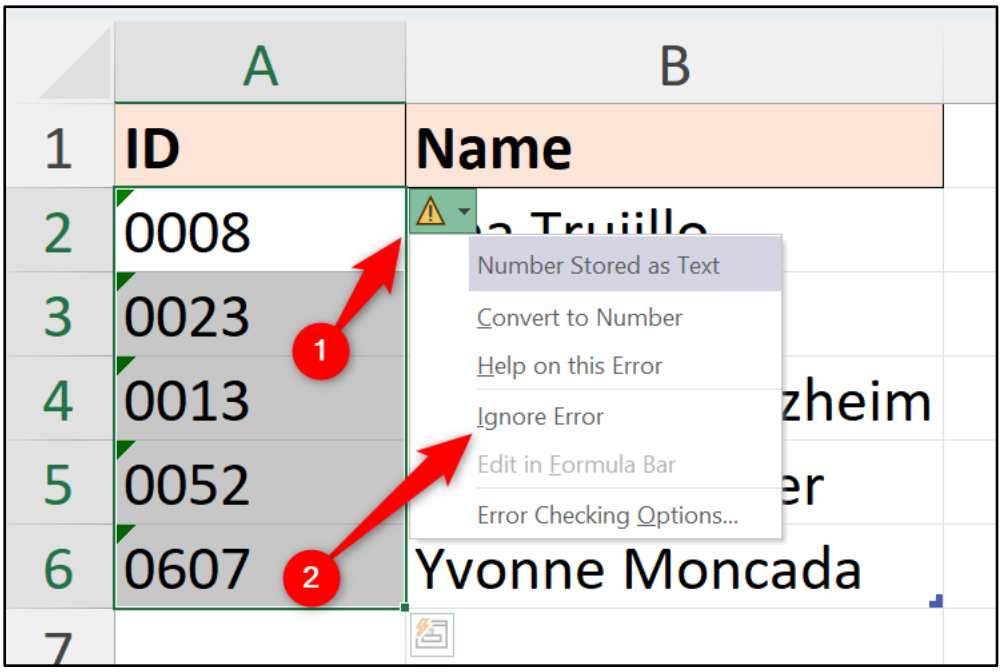
However, there is also an option to disable this behaviour.

1. Click **File** > **Options** > **Data**.
2. Uncheck the first checkbox in the Automatic Data Conversion section for **Remove leading zeros and convert to a number**.



The error checking rule for a number being displayed as text will still be shown by Excel.

This can and should be removed by selecting the range, clicking the green triangle, and clicking **Ignore Error**.



This is an application-level setting so will be applied to all workbooks unless you enable it again.

25. Use Custom Lists

Excel has a feature called Custom Lists to store lists of data to be used for **custom sort orders** and fill sequences. Excel comes with four custom lists already created for your use. These include long and short versions of the months of the year, and long and short versions of the days of the week.

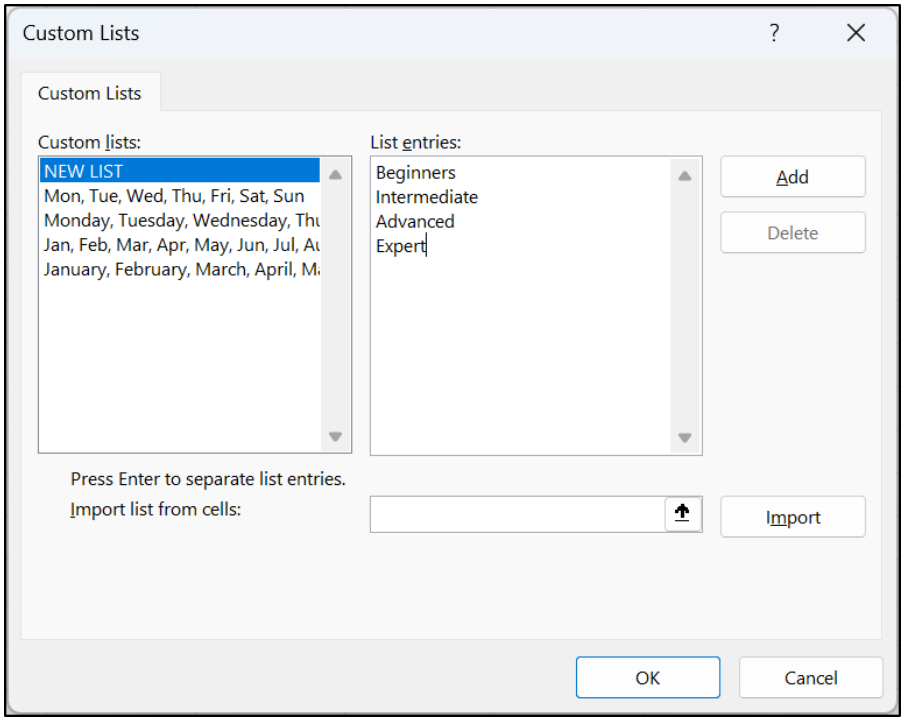
So, if you have ever wondered, how does Excel know which order the names of months should go in?

The answer is because of its Custom Lists.

You can create your own custom lists. For example, you may want to sort month names in an order outside of the Jan-Dec order, such as financial years that may start from April and finish in March, for instance.

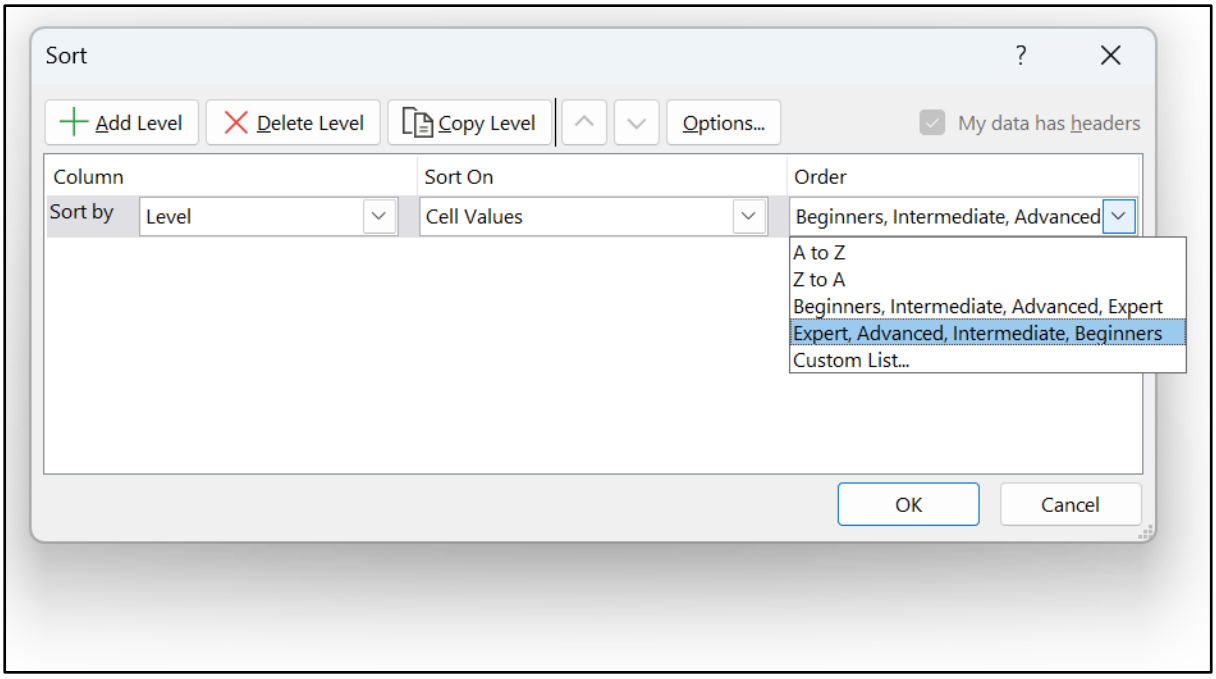
In this example, we will create a custom list for order competency levels for Excel training. These should go in the order of Beginners, Intermediate, Advanced, and then Expert. And not in A-Z order as Excel would do unless specified.

1. Click **File** > **Options**.
2. Click the **Advanced** category and scroll all the way to the bottom and click **Edit Custom Lists**.
3. Enter the items to use in the list in the **List entries** box or click in the **Import list from cells** box, select a range of cells on a sheet that includes the list items, and click **Import**.



4. Click **Add** to add the custom list and then click **OK**.

This list can then be used when sorting a table. You will find it in the custom sort settings, as shown below.



26. Copy Column Widths Only

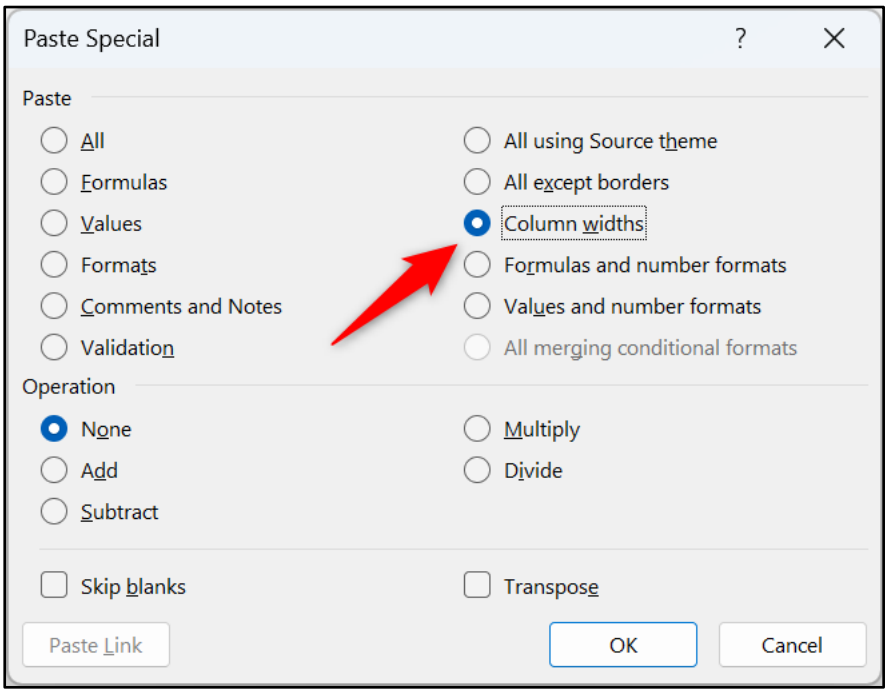
A feature in Excel named Paste Special enables you to paste only specific element of a copied value and/or perform other special operations.

For example, you can use Paste Special to:

- Paste value only.
- Link to the copied cell.
- Perform mathematical operations on paste.
- Paste validation rules only.
- and more.

It is not a rare question for someone to ask me if it is possible to quickly make one column to exact same width as another. And yes of course, we can copy that.

1. Select a cell in the column with the width that you want repeated.
2. Press **Ctrl + C** to copy.
3. Select a cell(s) in the column to change and click **Home** > **Paste** drop-down arrow > **Paste Special**.
4. Click **Column widths** and click **OK**.

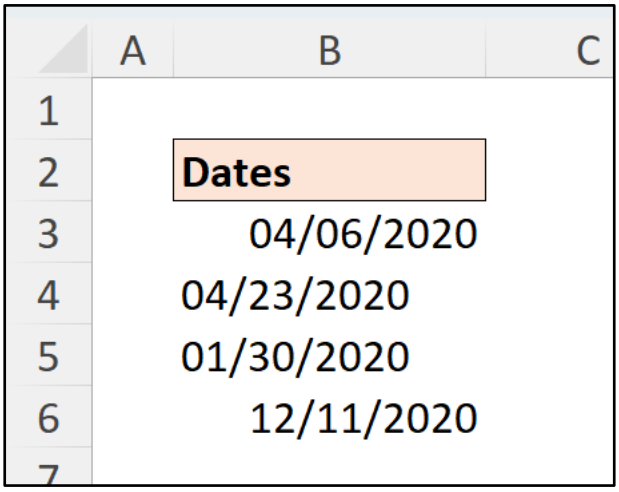


27. Convert Unrecognised Dates

There are regionals settings applied to your Excel application that are taken from Windows (or other operating system) by default. So, for me, my regional settings are for the UK.

These settings control a few aspects of how Excel behaves, one of them is its ability to recognise data on input. For example, the structure of dates and the decimal separator used in numbers.

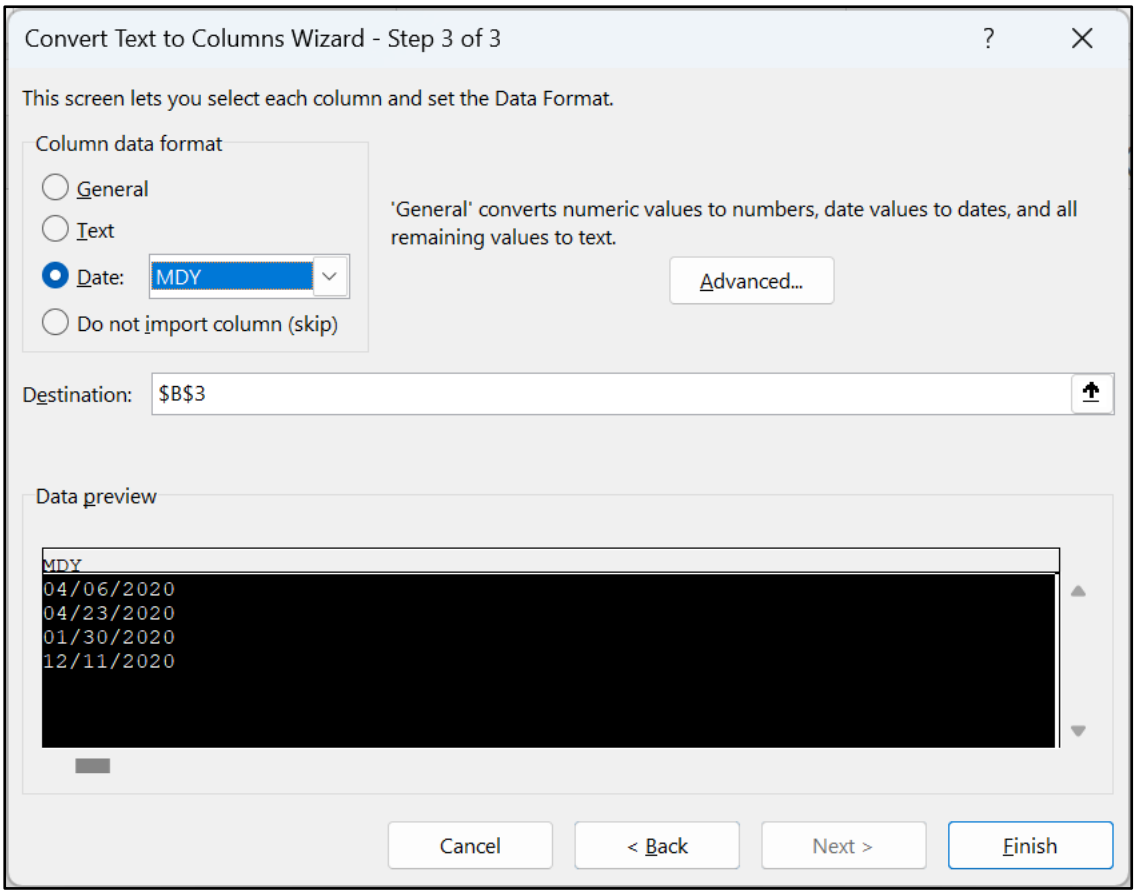
In the image below, I have dates that are in a month/day/year (MDY) format. Due to my UK settings, Excel is expecting a DMY format and is therefore confused by this data and does not store it correctly.



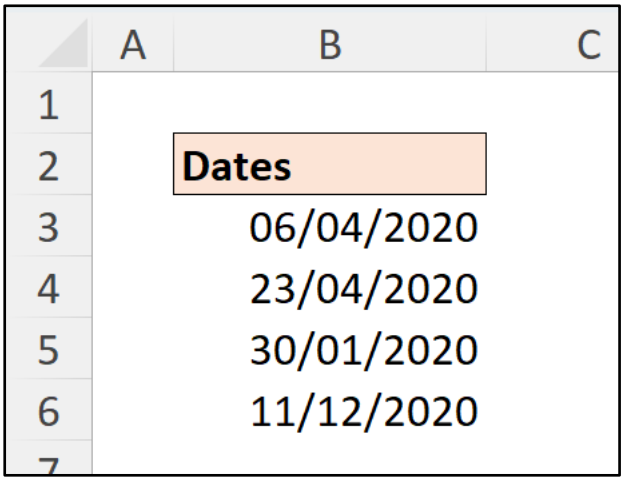
This can cause trouble, as I cannot analyse this data effectively or perform calculations using those dates if they are not recognised.

In Excel, there are a few methods for converting data types, such as these dates. The quickest method is **using Text to Columns**.

1. Select the range of cells containing the dates.
2. Click the **Data** > **Text to Columns**.
3. Click **Next** to skip the first two steps of the wizard.
4. At step 3, click the **Date** option and choose the date format to convert from the list. In this instance, the data is in the MDY format.
5. Click **Finish**.



The dates are now converted into the local DMY format and can be used for all your favourite Excel formulas or commands.



28. Use Goal Seek to Help Predict Values

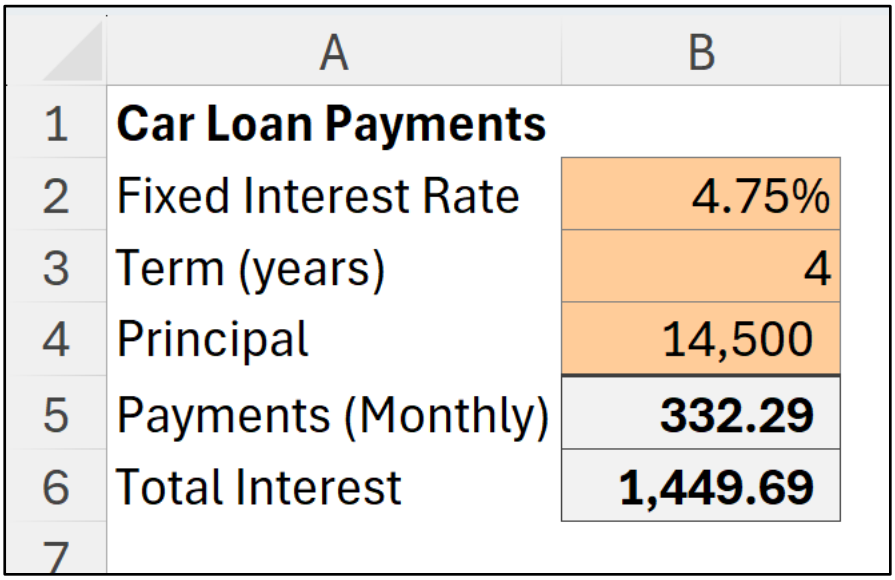
Goal Seek is one of the what-if analysis features in Excel that enable you to determine the impact of a change in a value.

What Goal Seek does is it finds the input value needed to achieve a specific target value in a formula.

In this example, we have the following data that calculates the payments on a loan. We know the fixed interest rate (cell B2), the term (cell B3), and the payments we can make (cell B5).

In cell B5, the following formula is used to calculate the monthly payments based on the information from range B2:B4.

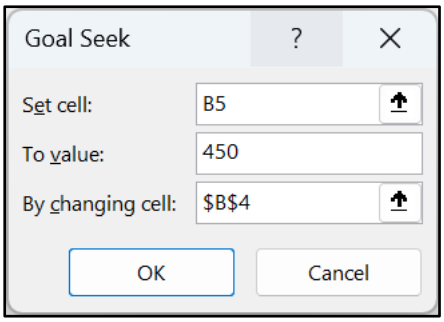
```
=-PMT(B2/12,B3*12,B4)
```



	A	B
1	**Car Loan Payments**	
2	Fixed Interest Rate	4.75%
3	Term (years)	4
4	Principal	14,500
5	Payments (Monthly)	**332.29**
6	Total Interest	**1,449.69**
7		

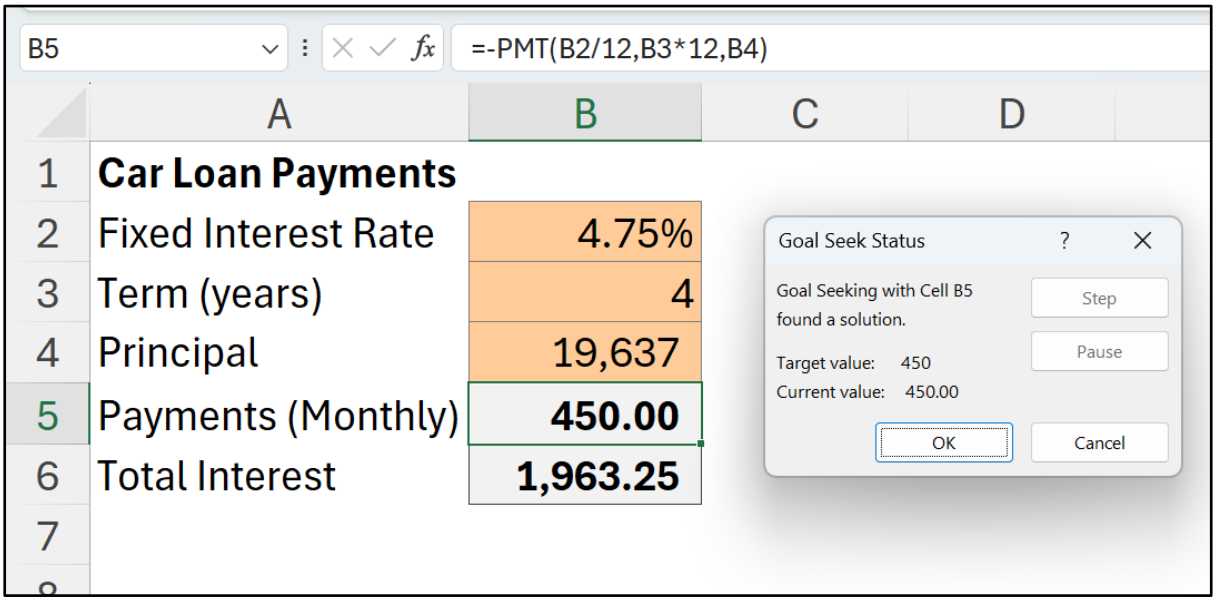
The goal is to find out the loan amount that we can borrow based on the amount that we know we can afford to pay each month (let's make this 450).

1. Click on the cell that contains the value you want to change (this must contain a formula). This is cell B5 in this instance.
2. Click **Data**> **What-If Analysis** > **Goal Seek**.
3. The **Set cell** is already established. Enter 450 for the **To value** and use cell B4 for **By changing cell**.
4. Click **OK**.



Goal Seek has found a solution. The loan amount we can afford based on those monthly payments, and the other fixed term and interest rate parameters, is 19,637.

Click **OK** to keep the solution or click **Cancel** to return to the previous values.

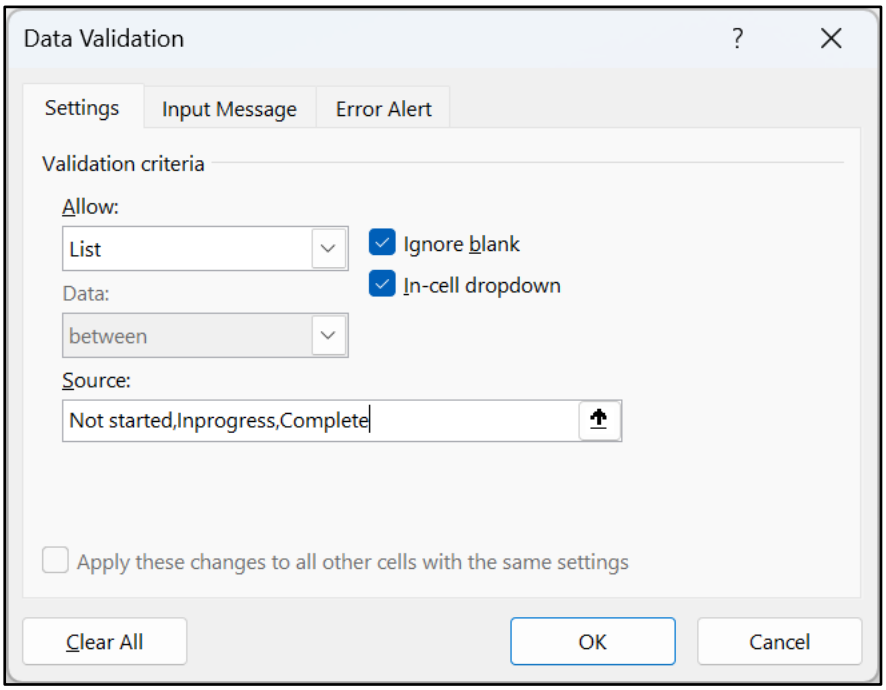


29. Create a Drop-Down List of Options

Validate and speed up data entry with a drop-down list. It works brilliantly when the user has a selection of options to choose from such as male or female, or a list of 5 colours.

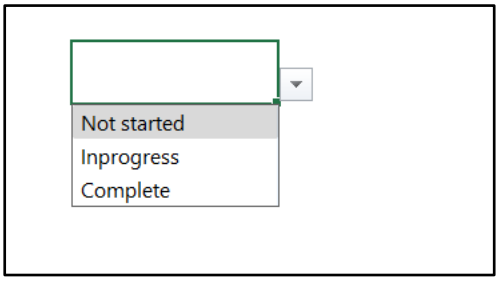
The easiest way to create a drop-down list is to use the Data Validation tool.

1. Select the cells you want to apply the drop-down list to.
2. Click **Data** > **Data Validation**.
3. Click the **Allow:** list arrow and select **List**.



4. Click in the **Source:** box and type the items you want to use in the list separated by a comma or select a range of cells on a sheet that contains the items.
5. Click **OK**.

The list will appear as you click the cell containing it and will only accept items from this list.



30. Convert a Range to a Table

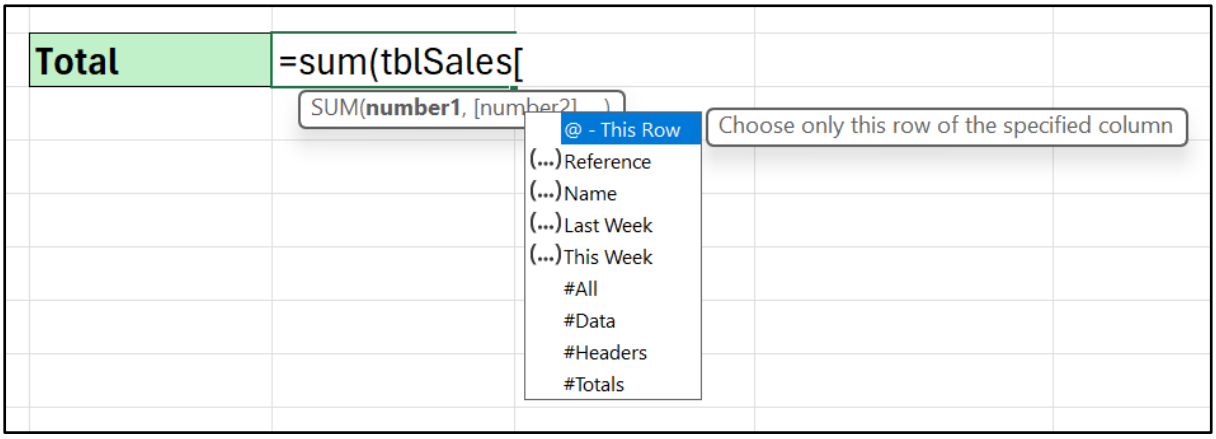
When working with lists of data in Excel, converting them to a Table will provide increased functionality, and is highly recommended.

Now, not everything in Excel is, or should be, a Table. But any list resembling a Table, should be so.

Why use Tables?

Tables in Excel provide many benefits. These include:

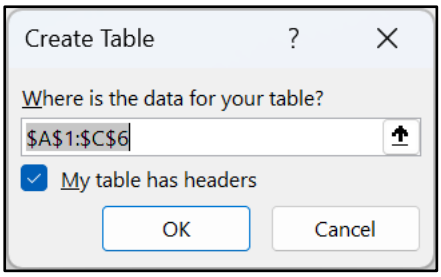
- They provide a dynamic data set that will expand and collapse as rows and column are added or removed. This ensures a dynamic source for your charts, formulas, PivotTables, formatting, etc.
- They provide a meaningful reference for use anywhere in the workbook. Check out the nice drop-down list of Table elements offered by a Table when writing the SUM function below. No selecting sheet columns or large ranges needed.



- You can use Slicers for a modern filtering option. These are brilliant for creating gorgeous interactive dashboards.
- Tables can be used in BI tools such as Power Query and Power Pivot.
- And much more beyond the scope of this tips book.

So how do you create one?

1. Click any cell in the range that you wish to convert.
2. Click **Insert** > **Table** or press **Ctrl + T**.
3. Check the data range offered in the dialog (as shown below) and if your range currently has headers. And click **OK**.



4. You must then give your Table a name. Do this by entering a name in the Table Name box on the **Table Design** tab of the Ribbon.

Tables have been used for a few of the examples in the previous formulas section of this book. So, if you were wondering what references such as [@Customer] and tblData[Webinar] were, they are table references.

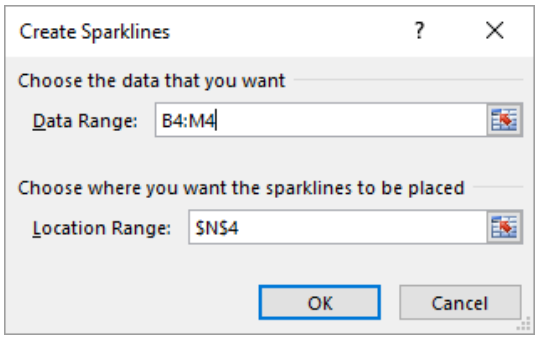
When referencing cells and column within Tables, you still must bear in mind the concept of relative and absolute references. This video will explain **how to make table references in formulas absolute**.

31. Use Sparklines for In Cell Micro-Charts

Sparklines are a feature introduced in Excel that enable you to create simple in cell micro-charts. They do not provide much detail due to their size, but they do offer a fantastic visual representation of data for at-a-glance comparisons and progress checks.

To insert a Sparkline;

1. Select the cell(s) where you want the Sparkline(s) to appear.
2. Click the **Insert** tab on the Ribbon.
3. Click the button for the type of Sparkline you want to use from the Sparkline's group e.g., Line
4. Select the range of cells containing the data you want to chart.



5. Click **Ok**.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
ABERDEEN, SD	0.48	0.48	1.34	1.83	2.69	3.49	2.92	2.42	1.81	1.63	0.75	0.38	
ABILENE, TX	0.97	1.13	1.41	1.67	2.83	3.06	1.69	2.63	2.91	2.90	1.30	1.27	
AKRON, OH	2.49	2.28	3.15	3.39	3.96	3.55	4.02	3.65	3.43	2.53	3.04	2.98	
ALAMOSA, CO	0.25	0.21	0.46	0.54	0.70	0.59	0.94	1.19	0.89	0.67	0.48	0.33	
ALBANY, NY	2.71	2.27	3.17	3.25	3.67	3.74	3.50	3.68	3.31	3.23	3.31	2.76	
ALBUQUERQUE, N	0.49	0.44	0.61	0.50	0.60	0.65	1.27	1.73	1.07	1.00	0.62	0.49	
ALLENTOWN, PA	3.50	2.75	3.56	3.49	4.47	3.99	4.27	4.35	4.37	3.33	3.70	3.39	
ALPENA, MI	1.76	1.35	2.13	2.31	2.61	2.53	3.17	3.50	2.80	2.33	2.08	1.83	
AMARILLO, TX	0.63	0.55	1.13	1.33	2.50	3.28	2.68	2.94	1.88	1.50	0.68	0.61	
ANCHORAGE, AK	0.68	0.74	0.65	0.52	0.69	1.06	1.70	2.93	2.87	2.08	1.09	1.05	

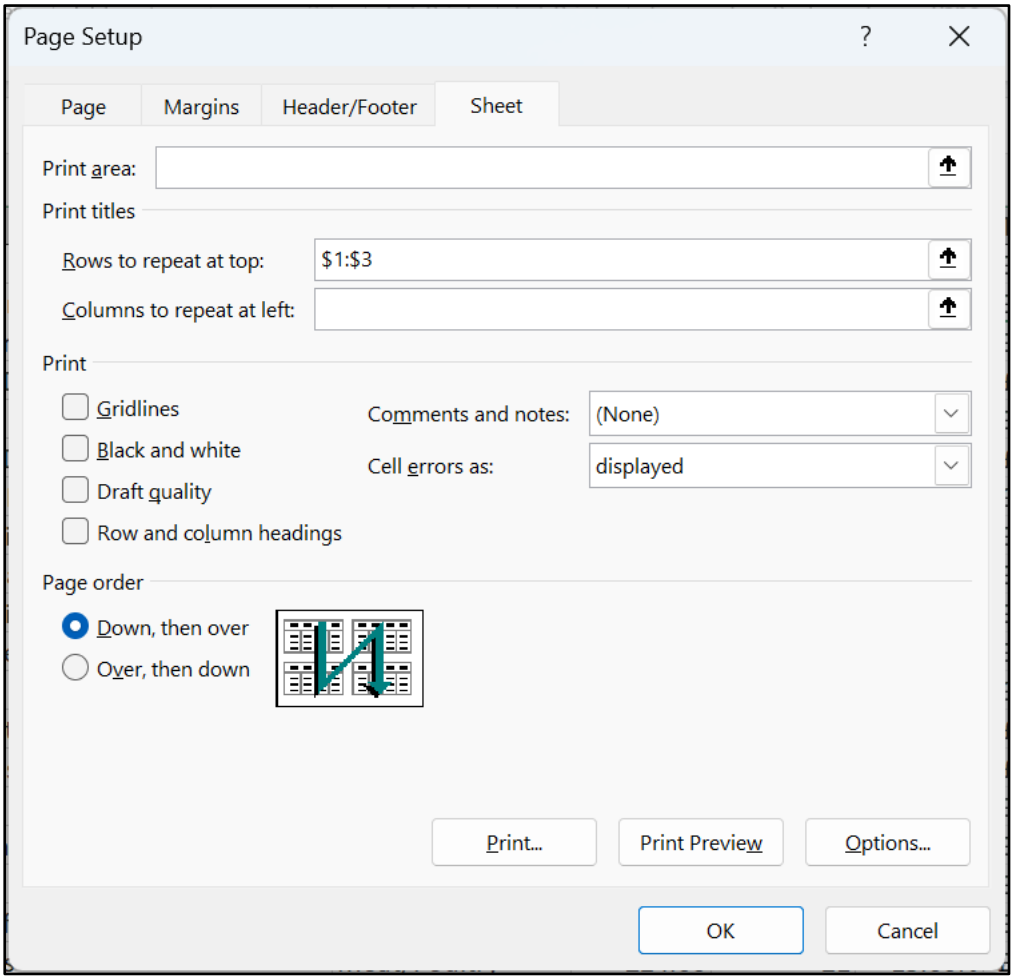
Printing

32. Print your Headers on Every Page

When you print an Excel Table that spans multiple pages, your headers will only print on page 1. To repeat your headers on every page you need to use a feature called Print Titles.

1. Click the **Page Layout** tab on the Ribbon.
2. Click the **Print Titles** button in the Page Setup group.
3. Click in the **Rows to repeat at top:** box and select the row headers for the rows you want to print on every page.

The image below shows the first three rows on a spreadsheet to be repeated.



4. Click **OK**.

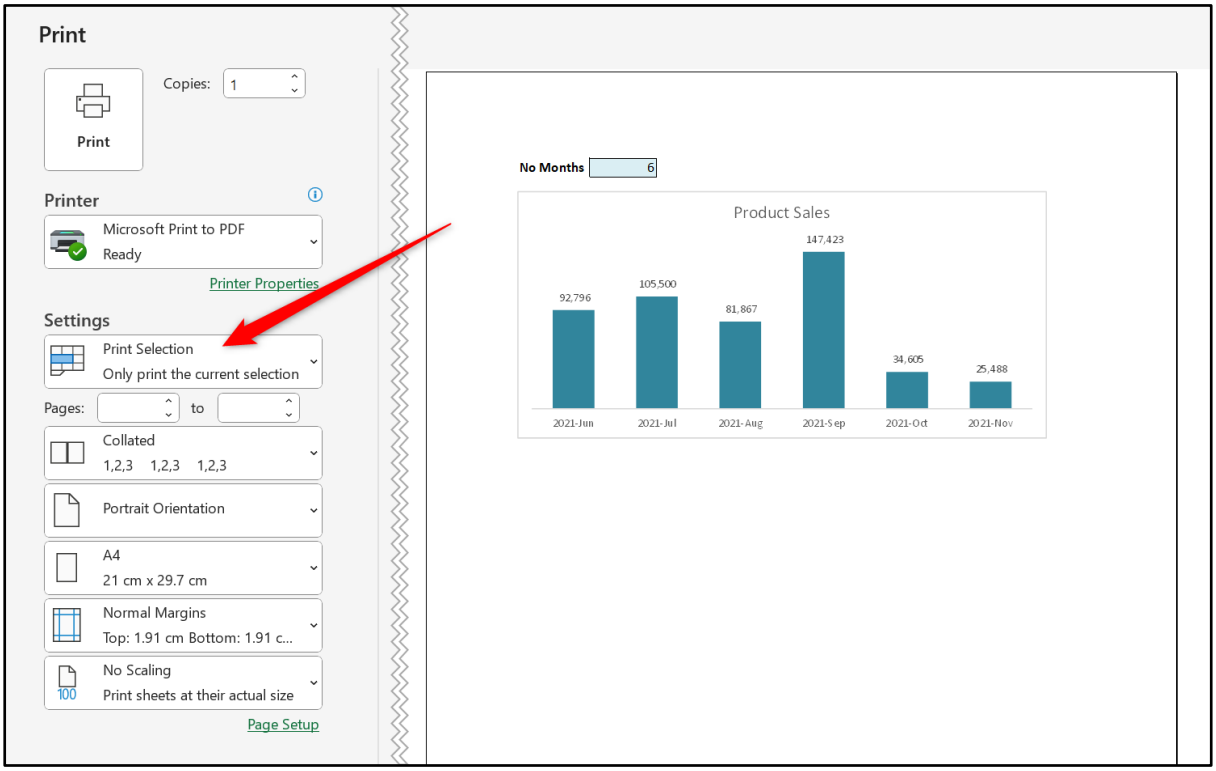
33. Print Selection Only

By default, Excel will print the current worksheet when the print button is clicked.

However, at times you may wish to print only a specific range on the sheet. This can be specified for future use by setting a Print Area.

However, you can print a selection of a sheet quickly without the need to set up the print area. This works great for ad hoc print requirements.

1. Select the range on the sheet that you want to print.
2. Click **File** > **Print**.
3. Select **Print Selection** from the appropriate option in the Settings list.
4. Click **Print**.

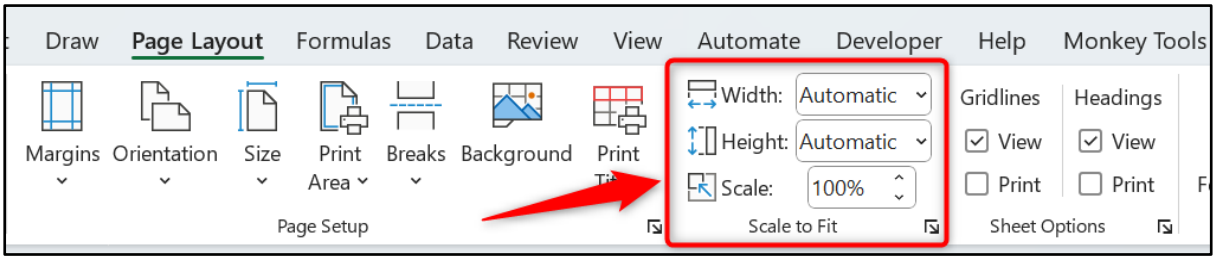


34. Print to One Page

When printing a large spreadsheet, trying to fit it onto as few pages as possible and making it look professional can be an exhausting task. One of the key features to aid you with this work is Excel's scaling tool.

You can scale a print to a specific percentage such as 80% of its normal size or fit it to a certain number of pages. Scaling only affects the print of the spreadsheet and not how it looks on screen.

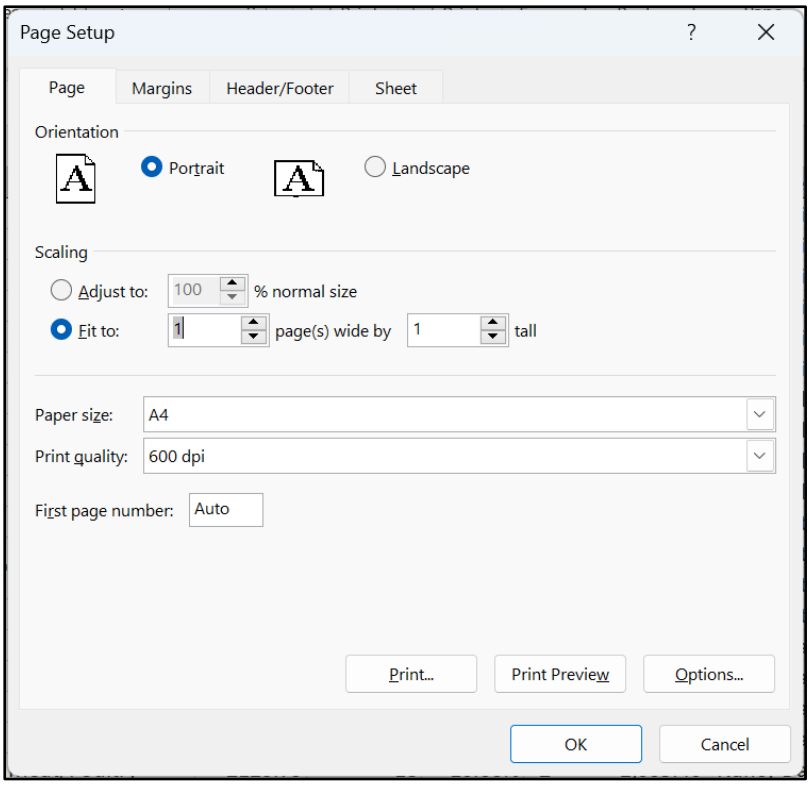
The scaling options can be found on the **Page Layout** tab of the Ribbon.



Because these options only affect the print of a spreadsheet, I tend to use the settings in the Page Setup dialog box, which is accessible by clicking the Dialog Box Launcher arrow button in the corner of the group.

Using this dialog box allows easy switching from Page Setup to Print Preview and vice versa to see how it looks.

The 'Fit to' option is great for specifying exactly how many pages wide and tall the print should be. This makes it fast and easy to specify a print to one page only.

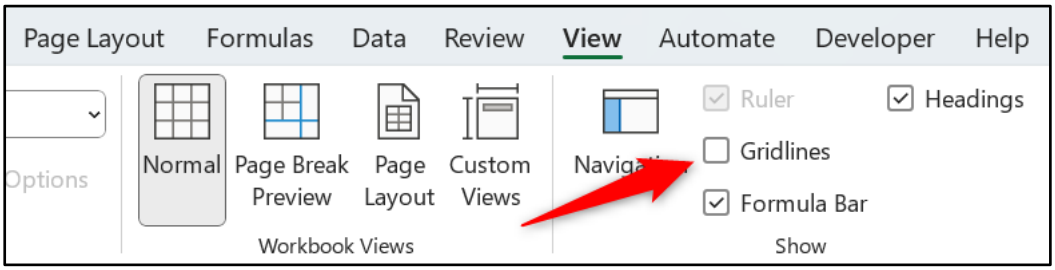

Page Setup
Page
Margins
Header/Footer
Sheet
Orientation
Portrait
Landscape
Scaling
Adjust to:
100
% normal size
Fit to:
1
page(s) wide by
1
tall
Paper size:
A4
Print quality:
600 dpi
First page number:
Auto
Print...
Print Preview
Options...
OK
Cancel

35. Hide the Gridlines on a Sheet

Although gridlines are important for you to identify the location and boundaries of the cells on a sheet, it is popular to remove them for a cleaner look on reports and dashboards.

Hiding gridlines in not really a print setting, but it is closely related enough for me to include in this section.

1. Click the **View** tab on the Ribbon.
2. Uncheck the **Gridlines** box in the Show group.



The following image shows a range with the gridlines removed. Borders and fill colour are applied to the headers to identify them clearly.

Region	Total
East	8,042
South	6,045
West	5,742
Central	4,500

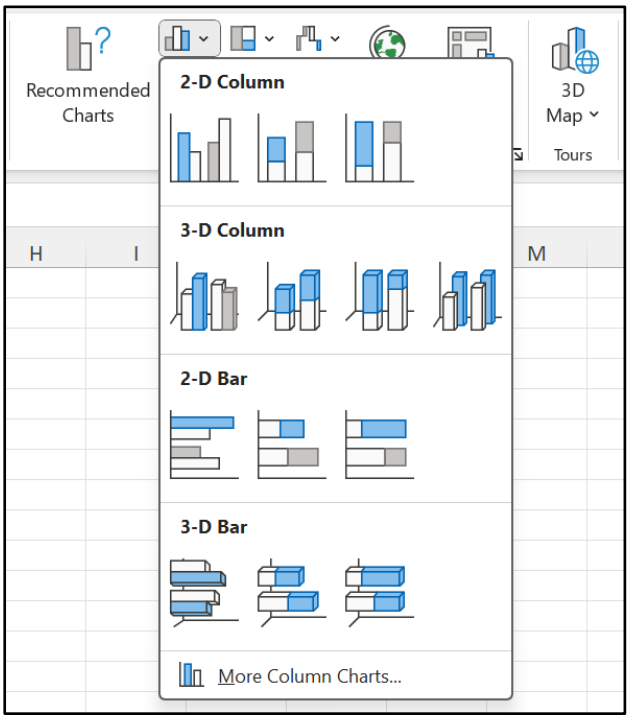
Using Charts

36. Build a Chart

Learn to create charts in Excel to visually present your data. Remember a ‘picture tells a thousand words’. It is much easier to see comparisons, progress, trends, and relationships in data when displayed using a chart.

Excel provides many charts which can be created at the click of a button.

1. Select the data you want to use for the chart (ensure your headings are also selected).
2. Click the **Insert** tab on the Ribbon.
3. Click the button for the chart you would like to use in the Charts group. There is also a **Recommended Charts** button to assist you in choosing the best chart for your goal.
4. Select the sub-type of the chart you want from the list (the image below shows the list of column and bar charts).



5. The chart appears on the sheet. The chart can now be formatted, resized, moved, and have labels added to it.

37. Create Effective Chart Titles

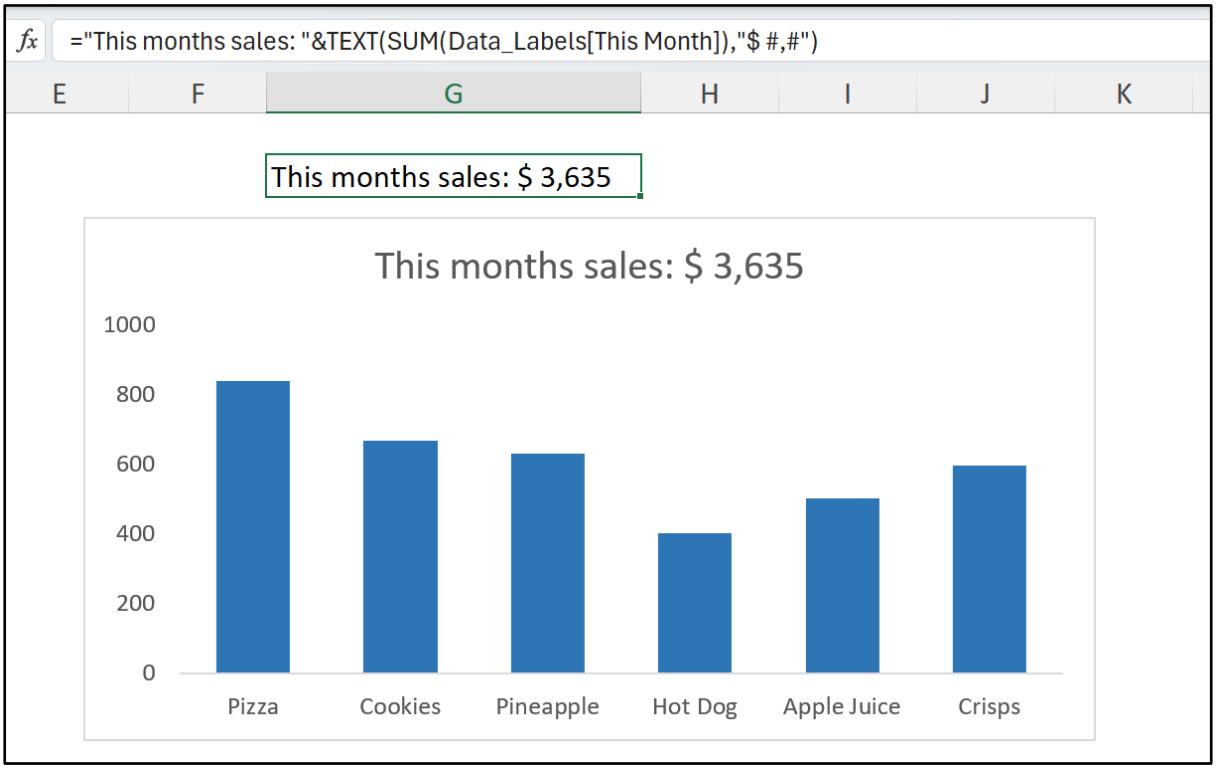
When you first create a chart, the chart title will be automatically generated. This means it will either have a very basic and useless title, or maybe just the words ‘Chart Title’. Either way, please change this.

You can improve a chart title by simply clicking on it and typing something better.

But you can take things further. Why not use a formula to calculate a metric or other useful information. Then use this in your chart title for a dynamic and effective title that truly benefits its readers.

You cannot type functions directly into chart titles, so typically one would write the formula in a cell, then link the chart title to the cell.

In the following example, cell G2 contains a formula that sums the values of a column. The TEXT function formats this result in dollars and some text is concatenated.



To link the chart title to cell G2: Click on the chart title, then click in the Formula bar, type “=”, click cell G2, and then press Enter.

This process is precise. Charts like things in a very specific way. In this instance, you must type the “=” in the Formula bar and not in the chart title directly.

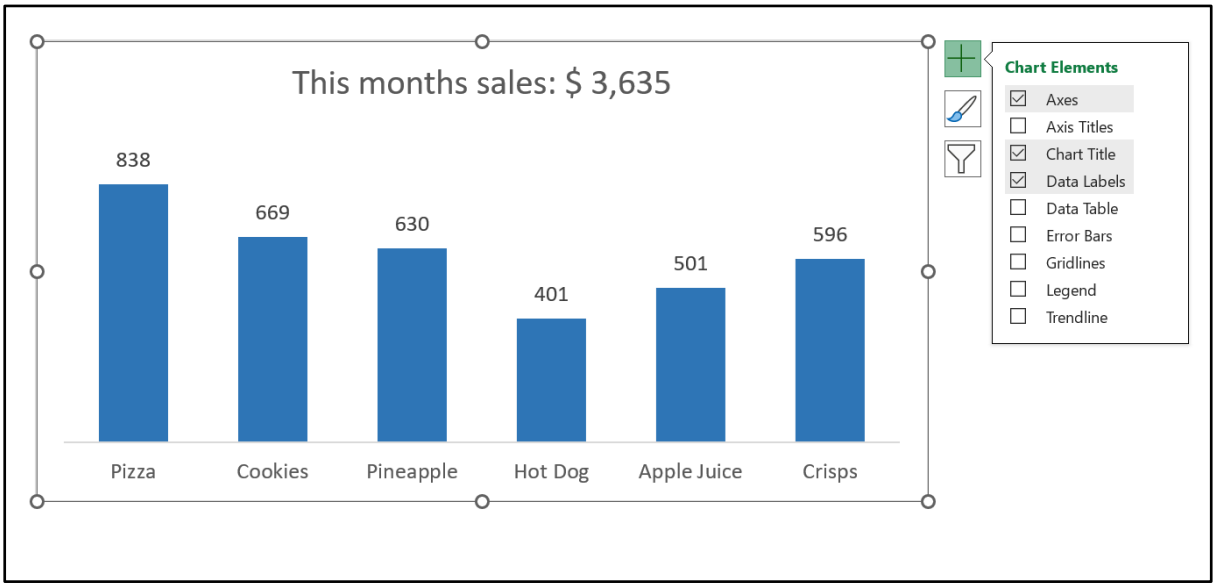
38. Apply Data Labels to a Chart

Data Labels can be added to a chart to add more detail such as to show the values, percentages, or labels of the data series.

Data Labels are often added to supplement or even replace the y-axis.

The image below shows data labels being added above the columns (default position known as Outside End) as an alternative to the y-axis (the vertical axis with values).

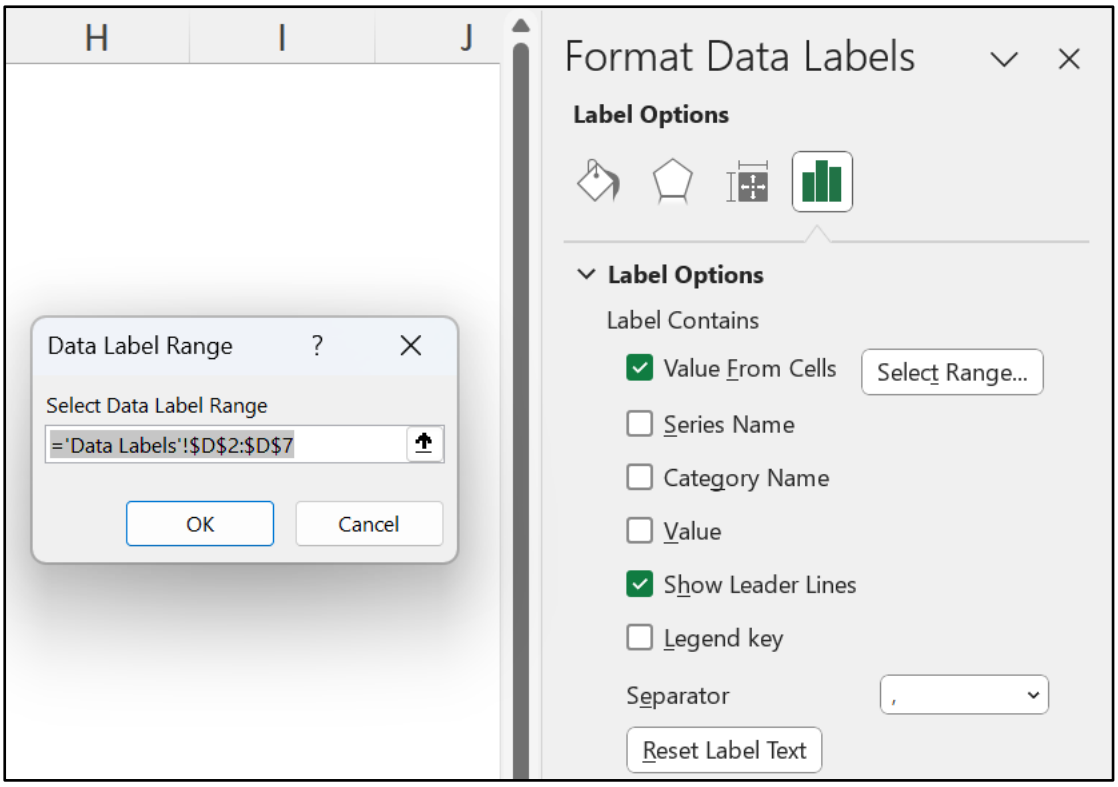
They have been added by checking the **Data Labels** box from the **Chart Elements** button (+ icon).



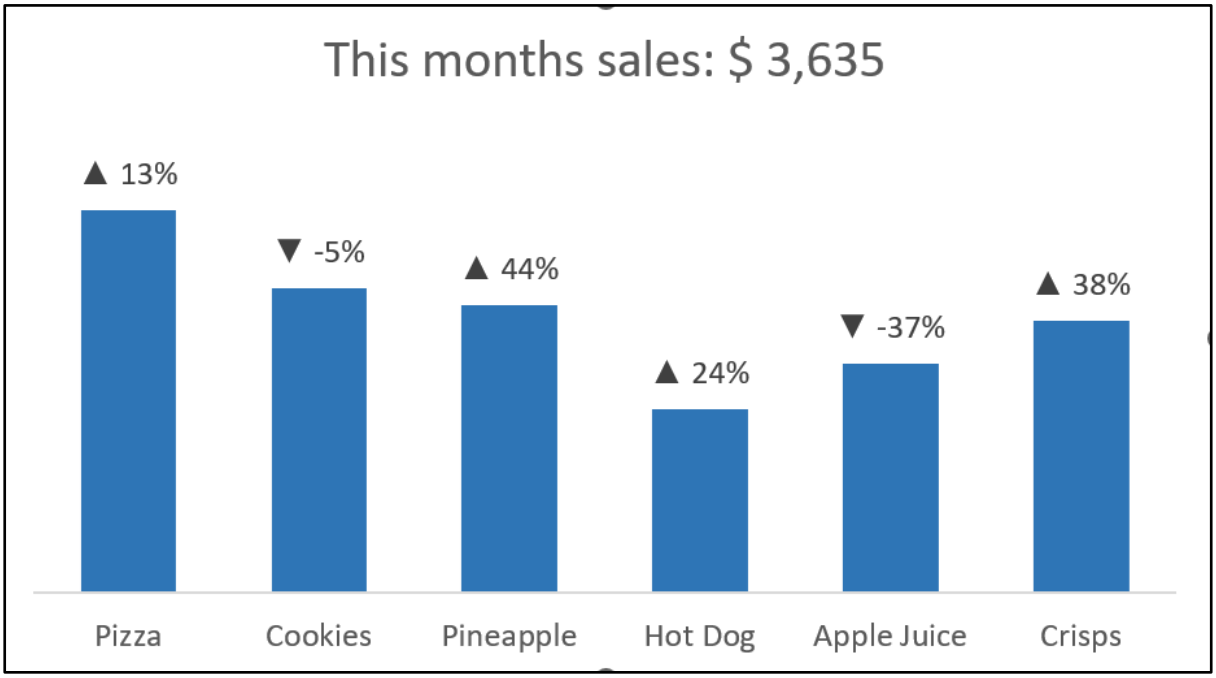
You can use the values from any range for data labels in a chart. You are not restricted to the values being plotted by the data series.

To do this:

1. Click the **Chart Elements** button, the arrow to the right of **Data Labels**, and then **More Options**.
2. Check the **Value From Cells** box and select the range of cells containing the values that you want to use (image below). Click **OK**.
3. Uncheck the **Value** box.



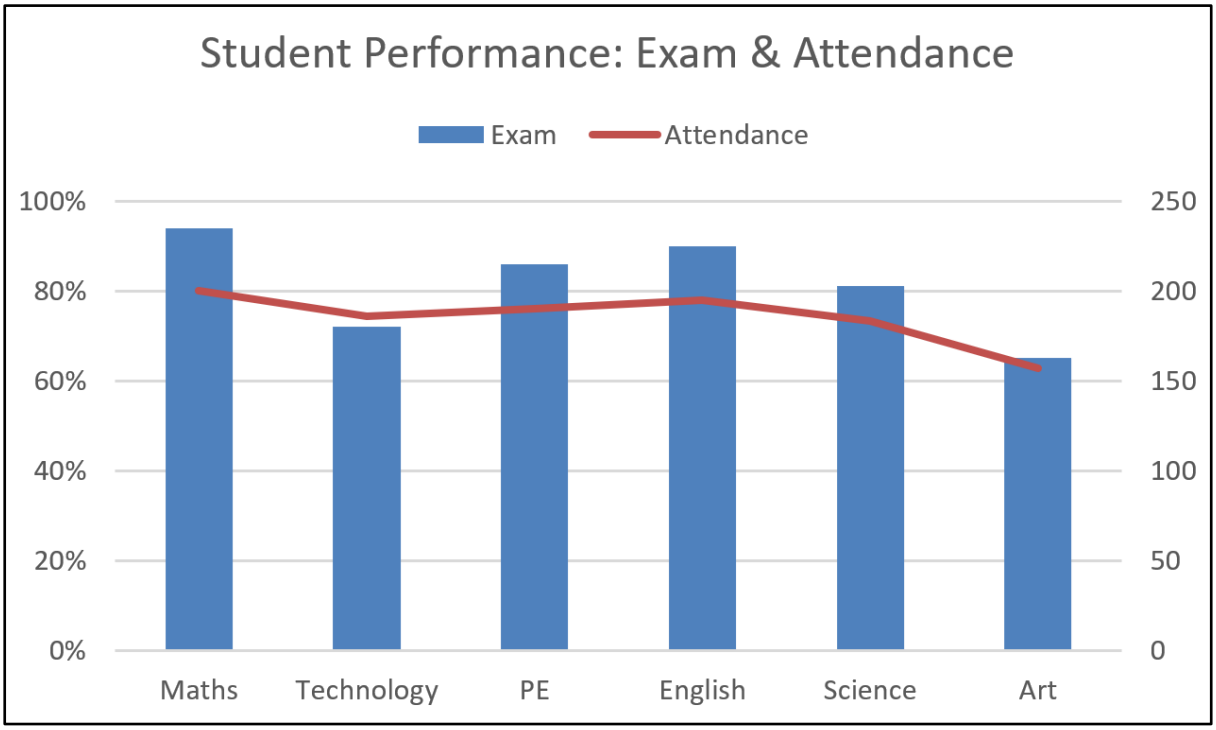
In the following chart, data labels are used to display the percentage variance compared to sales in the previous month. A symbol is also shown to visualise this change.



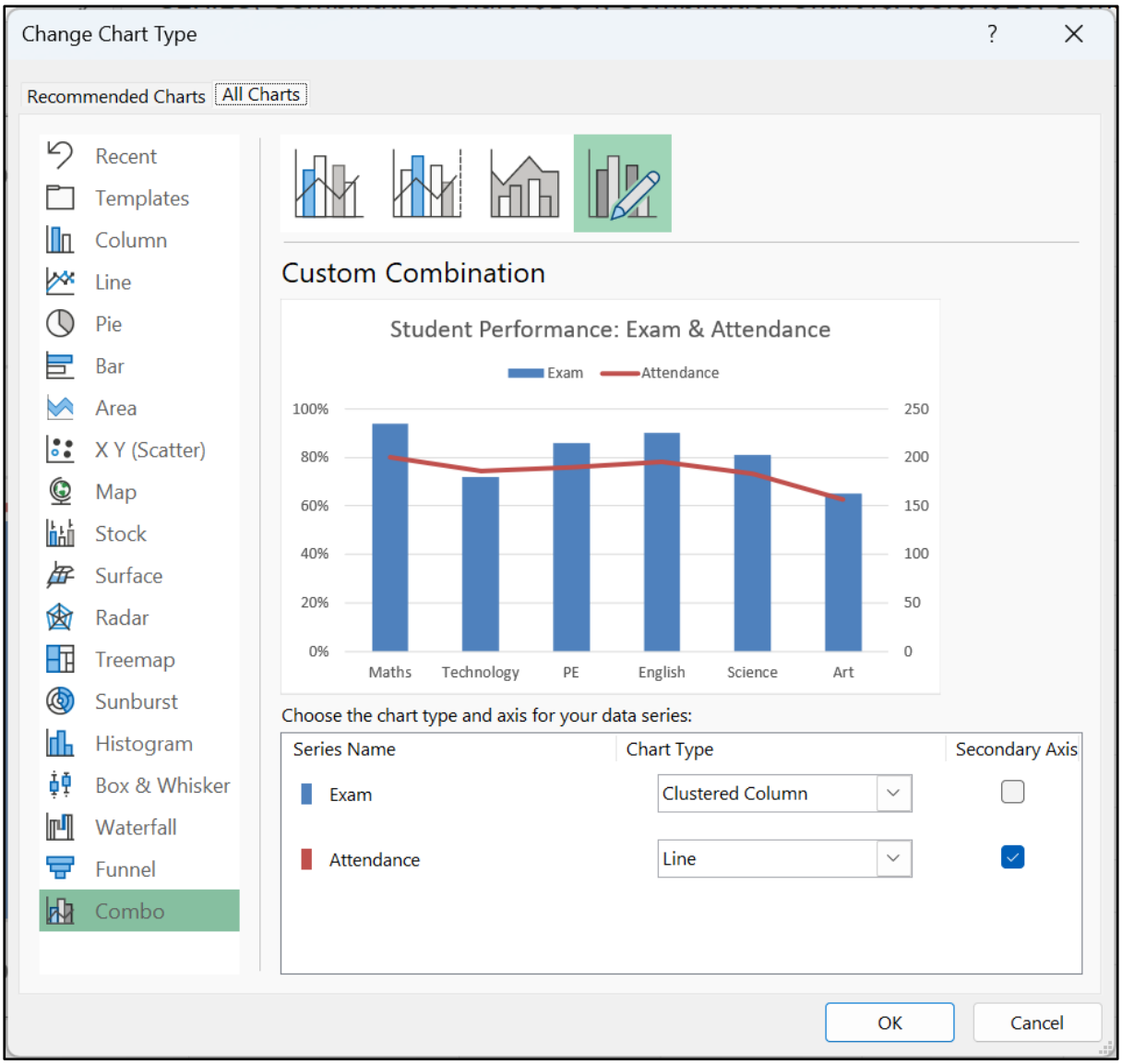
39. Add a Secondary Axis

Add a secondary axis to a chart when you need different data types, or values that are very different to each other, to co-exist on the same chart.

In the example below the chart shows exam grades by percentage in the first axis and attendance figures by number in the second axis. A secondary axis is required as you could not present values going from 0.1 to 1.0, and values from 150 to 250 on one axis.



1. Right click on the data series you want to scale on the secondary axis and select **Change Series Chart Type**.
2. At the bottom of the Change Chart Type window, specify the chart type for this data series. In this example, it is line (as shown in the following image) and check the box for **Secondary Axis**.
3. Click **OK**.


Change Chart Type
Recommended Charts
All Charts
Recent
Templates
Column
Line
Pie
Bar
Area
X Y (Scatter)
Map
Stock
Surface
Radar
Treemap
Sunburst
Histogram
Box & Whisker
Waterfall
Funnel
Combo
Custom Combination
Student Performance: Exam & Attendance
Exam
Attendance
100%
80%
60%
40%
20%
0%
250
200
150
100
50
0
Maths
Technology
PE
English
Science
Art
Choose the chart type and axis for your data series:
Series Name
Chart Type
Secondary Axis
Exam
Clustered Column
Attendance
Line
OK
Cancel

40. Save the Chart as a Template

This is one of the best chart tips available.

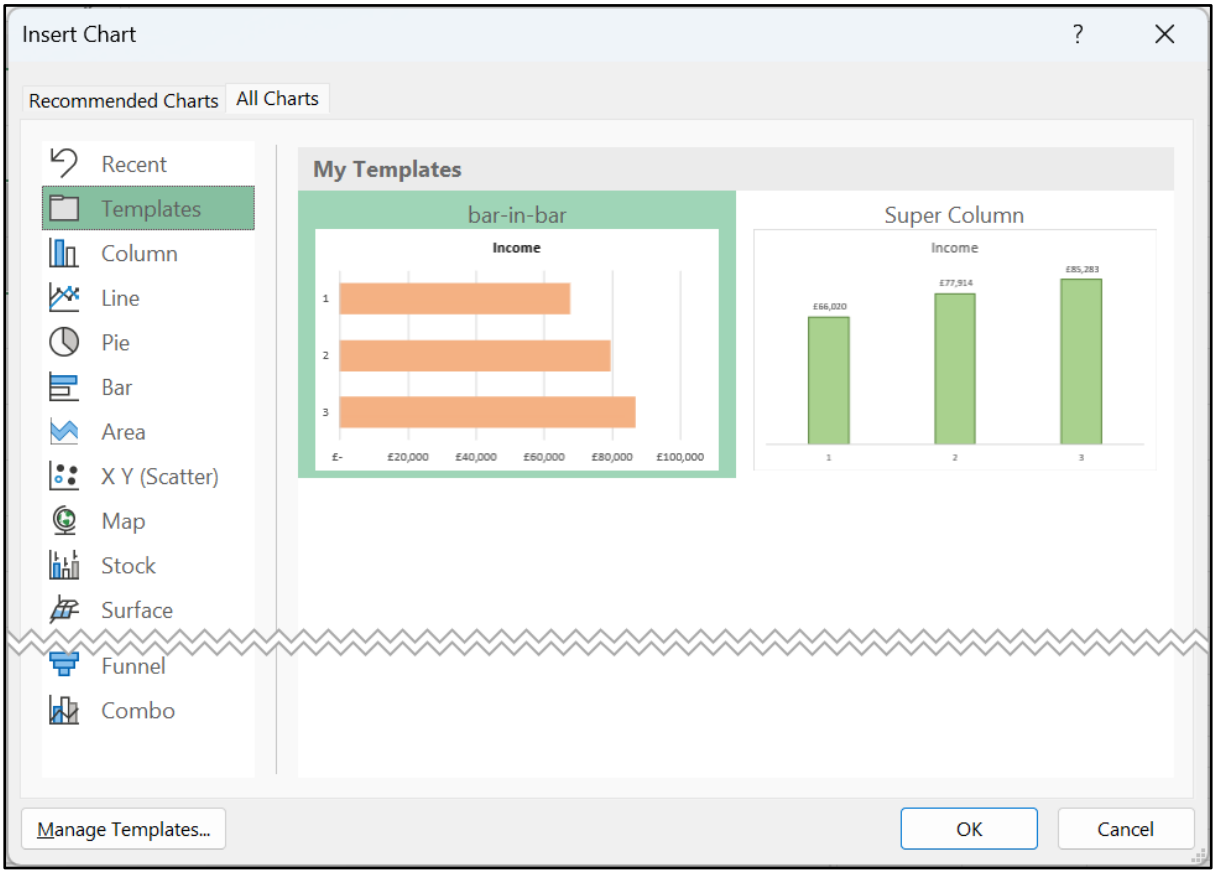
Saving a chart template will save all the formatting and layout changes that you made, making future chart creation or changes super-fast and simple.

To save a chart template:

1. Right-click on the chart and click **Save as Template**.
2. You will be taken to the chart templates folder in your directories and encouraged to save it there. Enter a name for your template and click **Save**.

Then when inserting a new chart:

1. Navigate to the **Templates** folder in the **All Charts** tab of the window.
2. Select the template to use and click **OK**.



The chart will have all the formatting and layout settings as specified in advance.