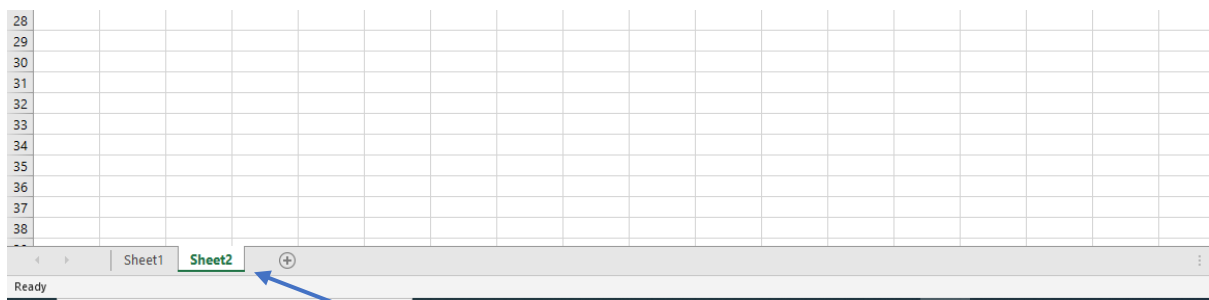# Edge Hill University
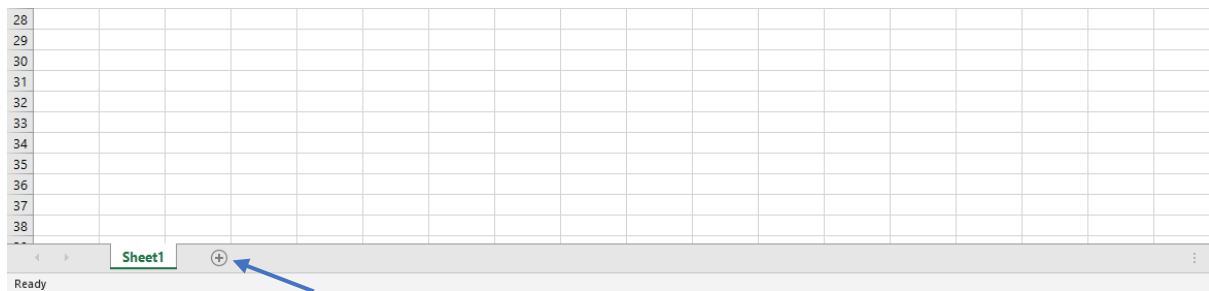
Getting Started with Microsoft Excel | Functions and Worksheet Management

Contents
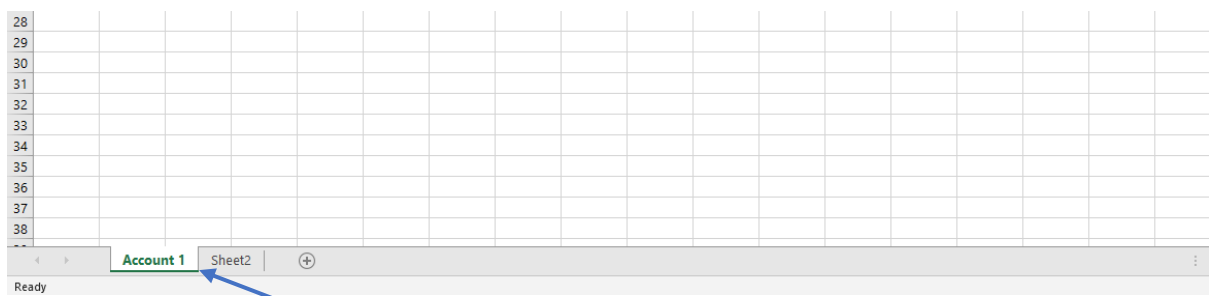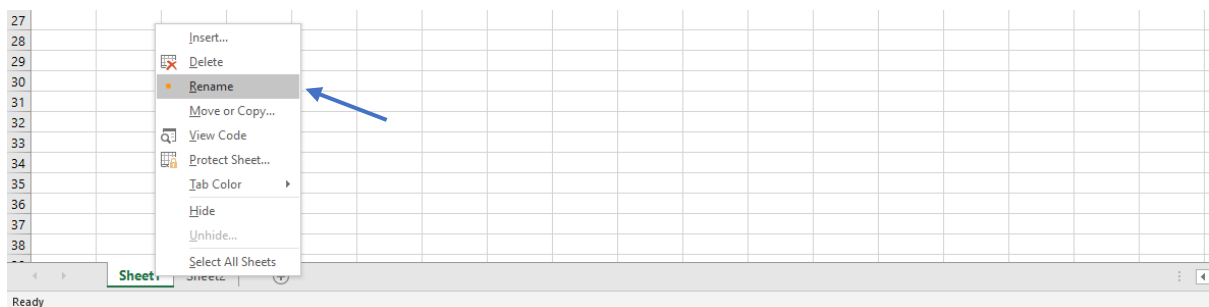
Adding and Editing Worksheets

To add further worksheets to a workbook, click the **+** icon next to the last sheet.

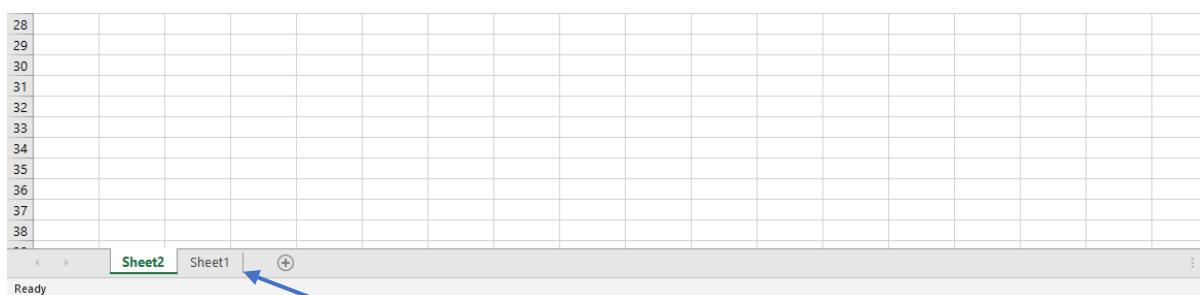To rename a worksheet **right-click** its name then select **Rename** from the available options.

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Moving and Copying Sheets

Worksheets can be moved or copied within the same workbook or to a different workbook. To move a sheet within the same workbook, click on the worksheet's name then drag it left or right to the new position.


To move a sheet outside of the workbook, or make a copy of a sheet, open a different workbook or create a new one then **right-click** on the name of the sheet to be moved and select **Move** or **Copy**. Select the name of the workbook the sheet will be moved or copied to and the position.
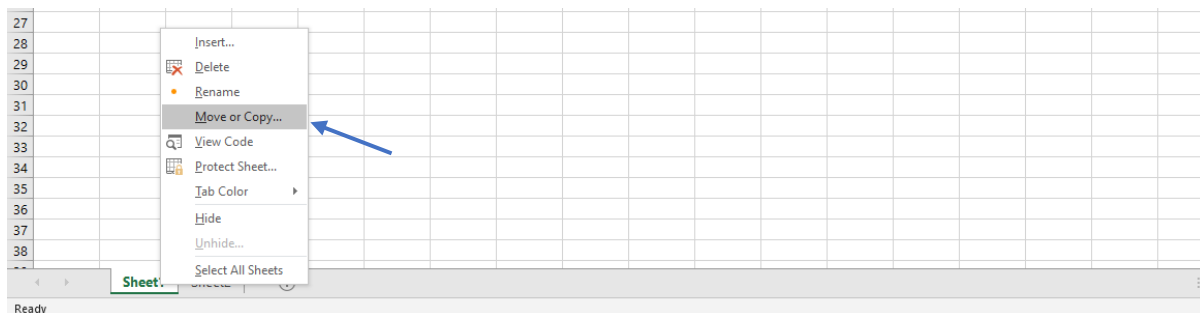
Viewing Multiple Workbooks

Multiple open workbooks may be viewed together in the same screen, click **View > Arrange All** then select an appropriate layout from the options available.
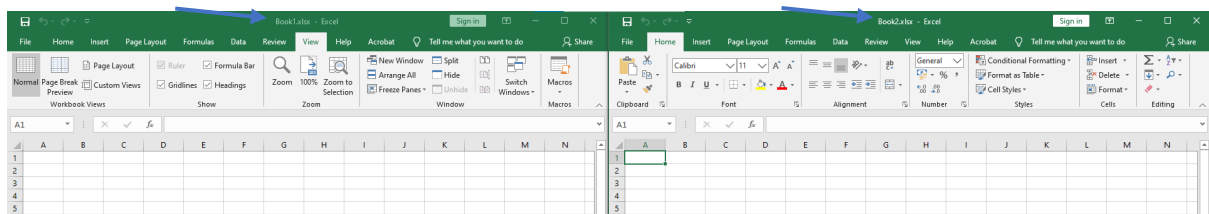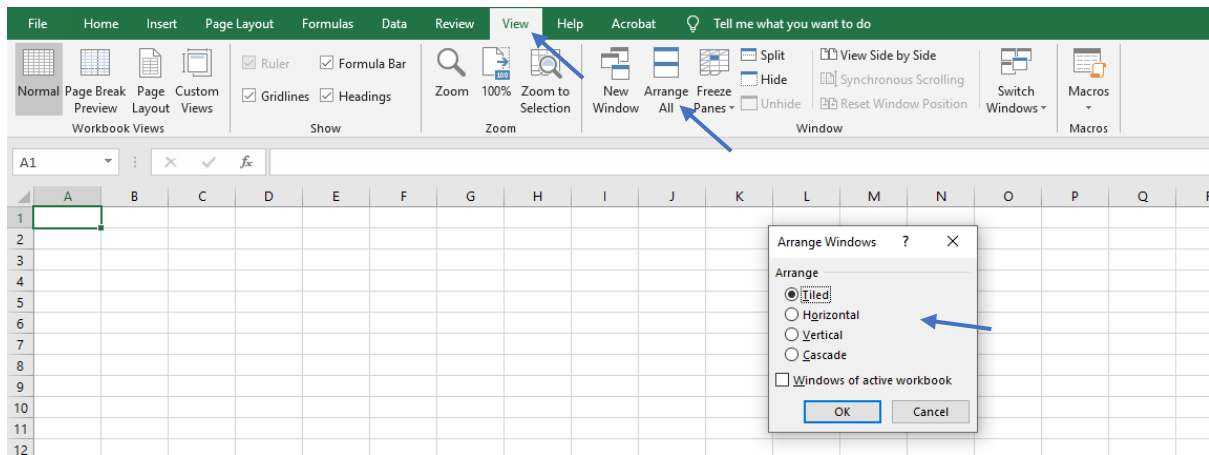
Multiple windows of the same workbook may also be viewed together in the same screen providing the option to work on different sheets of the same book side by side. Click **View > New Window** repeatedly for the number of copies of the window required then click **View > Arrange All**.
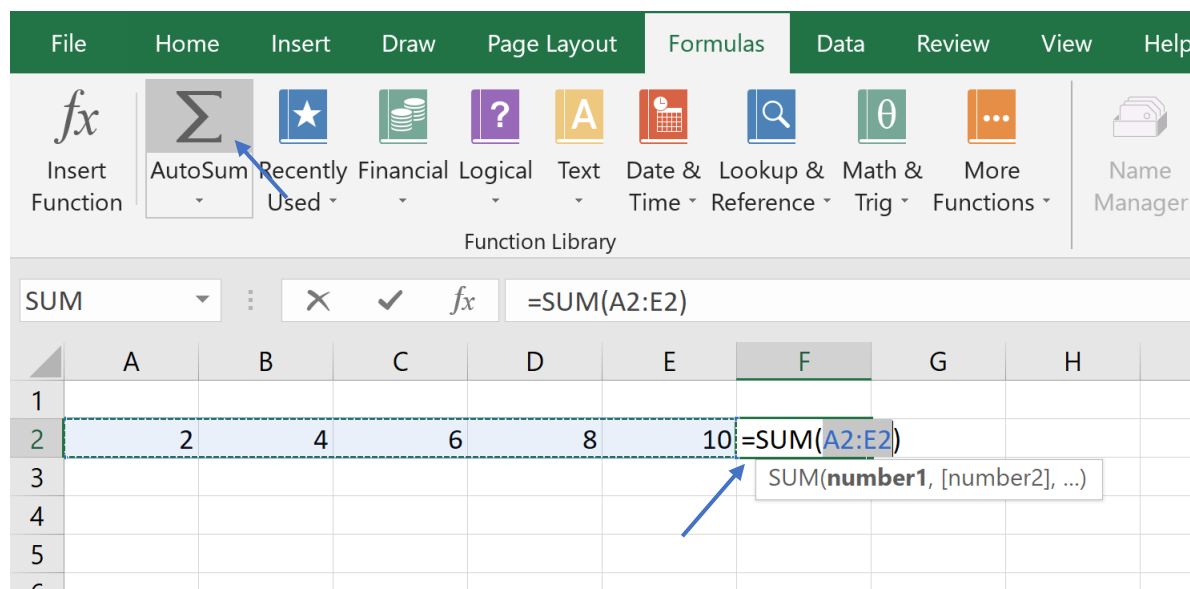
Hint: Anything added to one of the windows will be added to all of the windows.
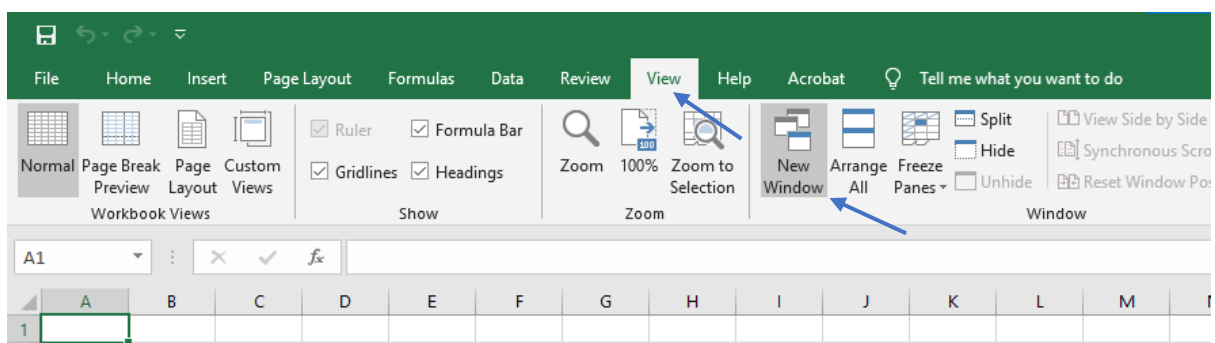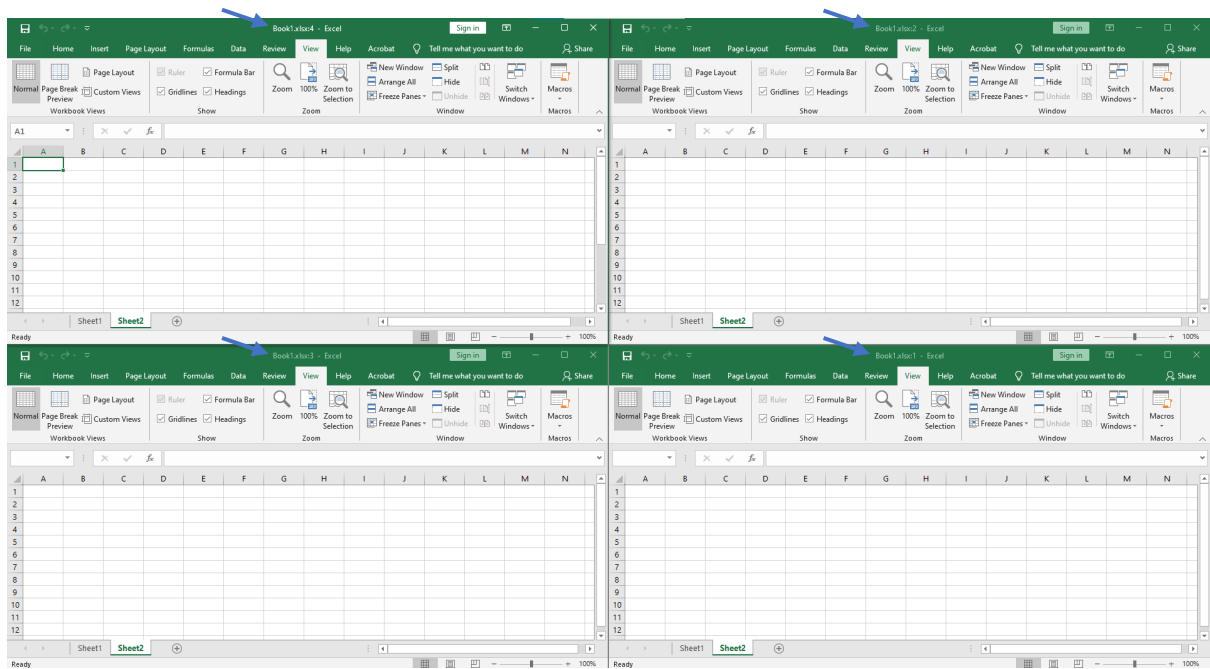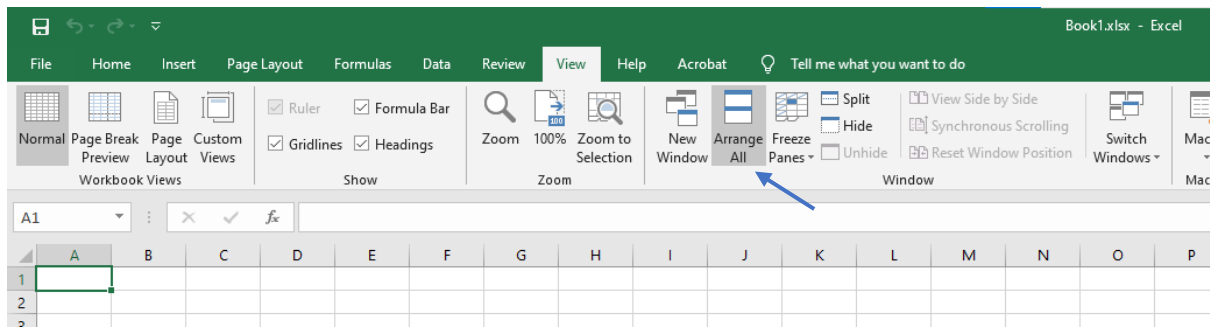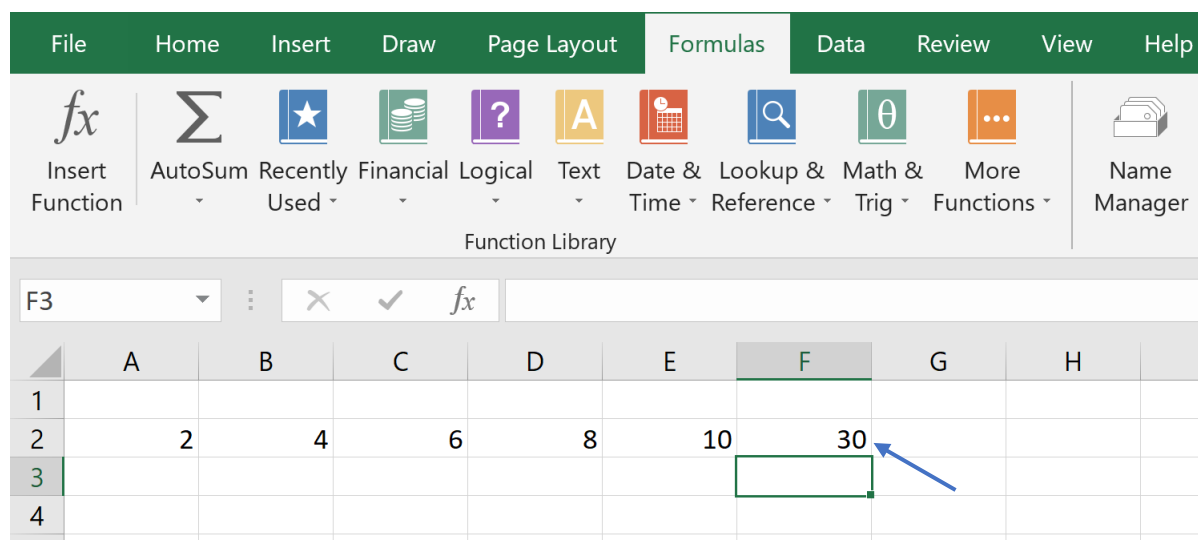
AutoSum

A useful feature in Excel is the AutoSum feature. Click in the empty cell at the end of a group of cells to be added together then click **Formula > AutoSum**.


Now click on the green formula tick or press the **Enter** key to apply.

Hint: AutoSum adds figures in cells above the output cell by default, but if the wrong cells are inadvertently selected by Excel simply drag the highlighted selection to cover the correct cells to be added.

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Relative Addressing

Excel assumes that when a formula is copied to a new location, the cells being used in the formula should also be changed; for example, if the formula in cell A3 is set to add cells A1 and A2, then if the formula from A3 is dragged out and across to cell B3, Excel will automatically modify the formula to add cells B1 and B2. This is Relative Addressing.

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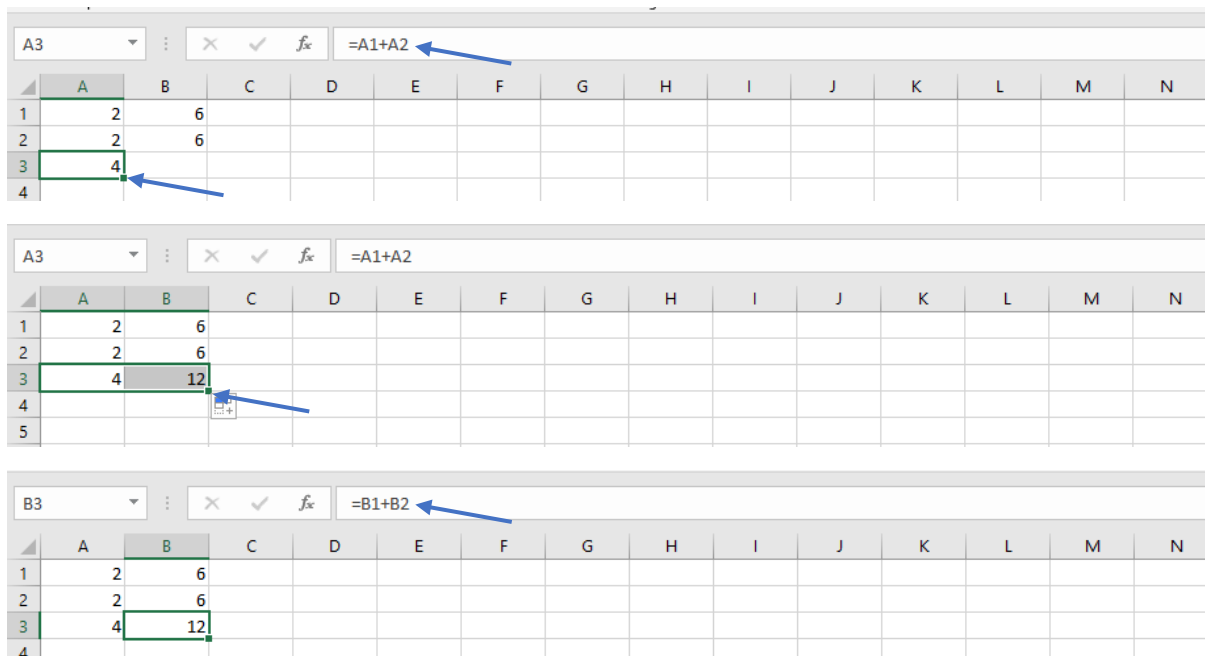
Absolute Addressing

Sometimes when a formula is to be copied to other cells, a fixed cell address is required rather than having Excel automatically selecting the cells to be used. Absolute addressing provides this option. The Absolute reference key is the $ sign. The dollar sign fixes the cell to ensure that it stays the same when the formula is copied; for example, if the formula =A1+A2 is applied to A3 then dragged out to cover B3, the Relative Addressing formula normally applied to B3 would be =B1+B2.

To change the formula so the A2 part remains constant change the formula to read =A1+A2

Now when the formula is dragged out, because of the change to Absolute Referencing the A1 cell reference will still change but the A2 cell reference will remain the same.
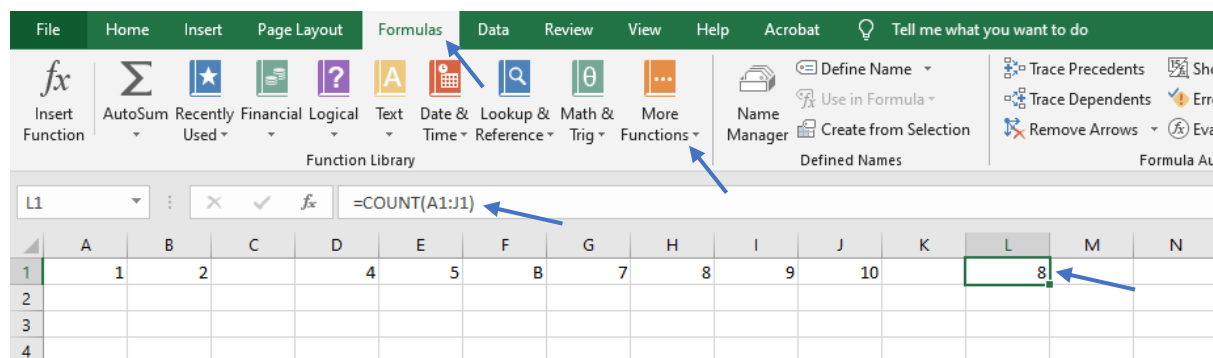

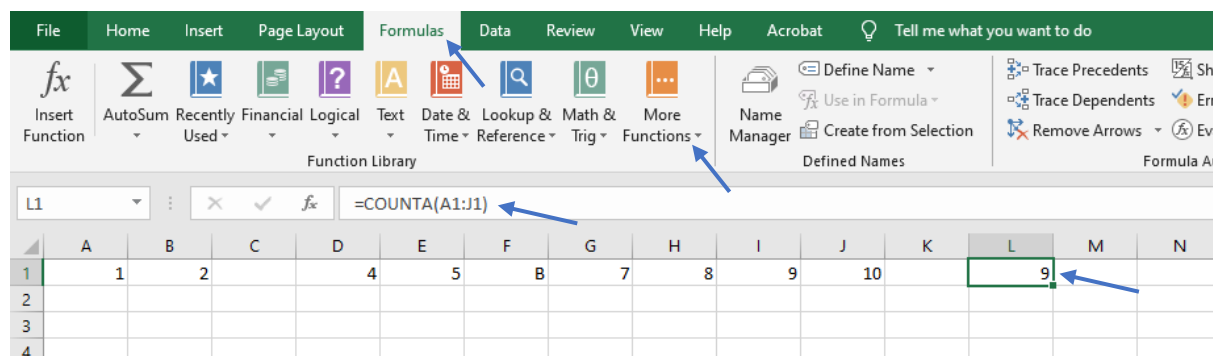ehu.ac.uk/techskills   Contents Page

Count Function

To count the number of cells in a range which contain a number, click **Formulas > More Functions > Statistical > COUNT**.

To count the number of cells in a range which contain a number or letter, Click **Formulas > More Functions > Statistical > COUNTA**.

To count the number of cells in a range which are blank, click **Formulas > More Functions > Statistical > COUNTBLANK**.
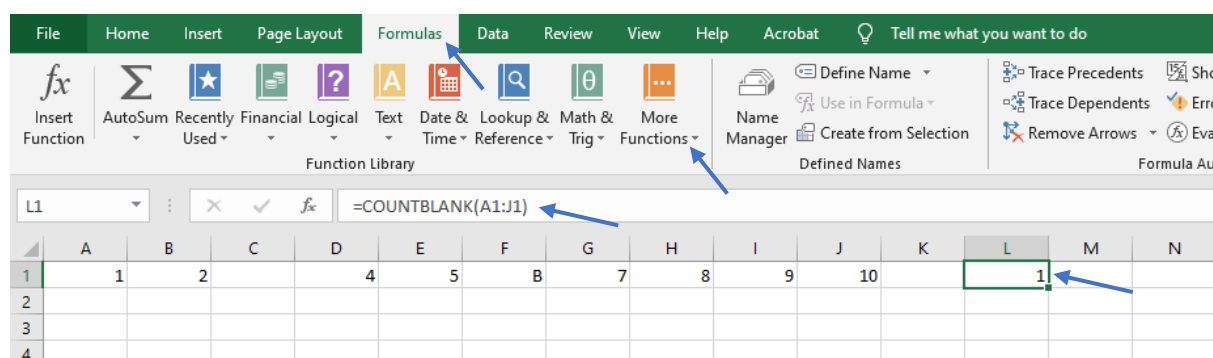
Average Function

The average of a group of cells can be calculated using a formula. Click on the cell in which to display the average then click **Formulas > AutoSum > Average**. Select the cells to calculate the average of, then press the **Enter** key.

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Max and Min Function

To insert a formula that will display the maximum or minimum number in a list click the cell in which to display the max/min then click **AutoSum** then either **Max** or **Min**. Select the cells to find the maximum or minimum value of, then press the **Enter** key.

Round Function

To use the round function, select the cell in which to show a rounded number, then click **Formulas > Math and Trig > Round**. Select the cell to be rounded the select the number of decimal places to round it to; for example, =ROUND(A1+A2,2) will round the A3 cell value to two decimal places.


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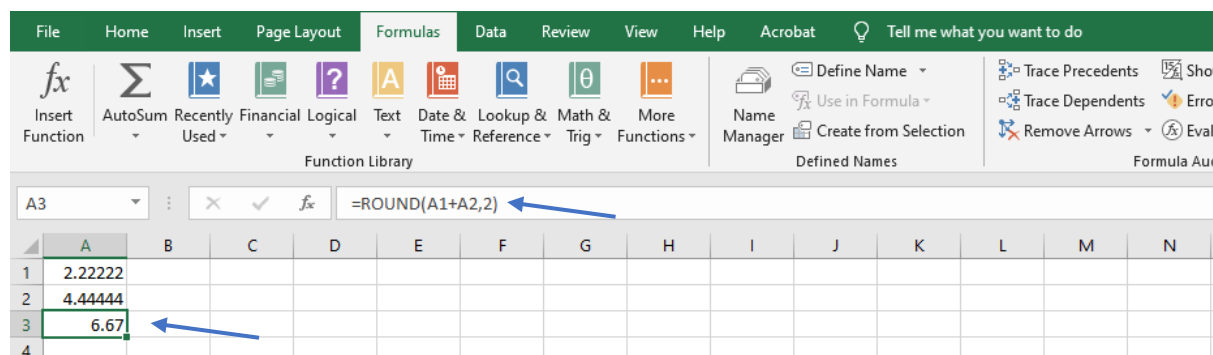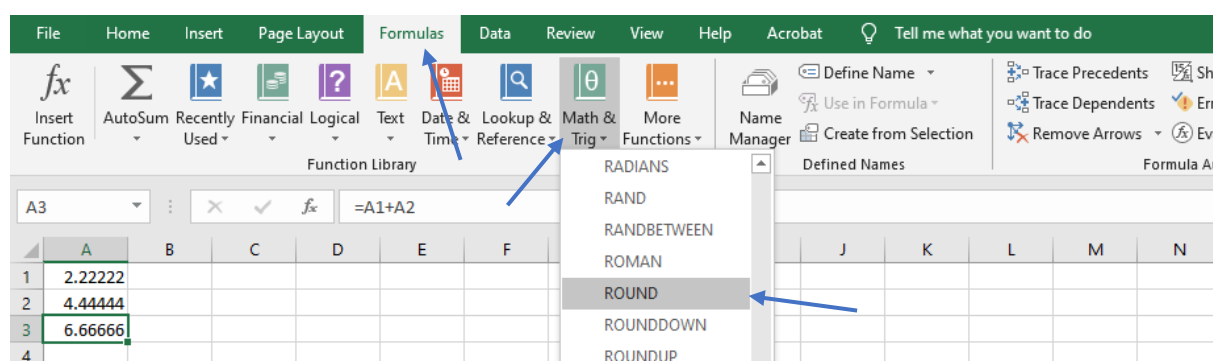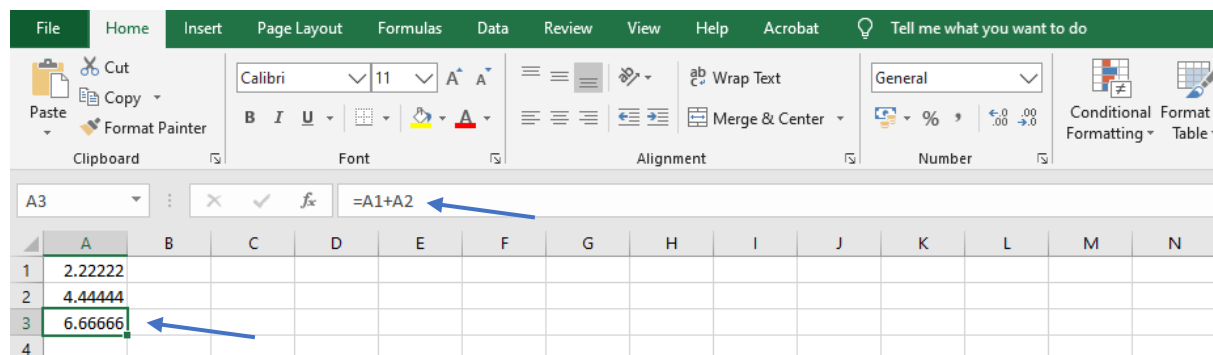
IF function

IF is a logical function. It compares the contents of a cell and based on this performs an action in another cell. To set up an IF function, click on the cell in which to display the result of the function then click **Formulas > Logical > IF**. In the Function Arguments dialog box add the required information; for example, to create a function "if cell A3 is greater than or equal to 10 then cell A4 will display Good and if cell A3 is less than 10, cell A4 will display Requires Improvement", follow the below process.

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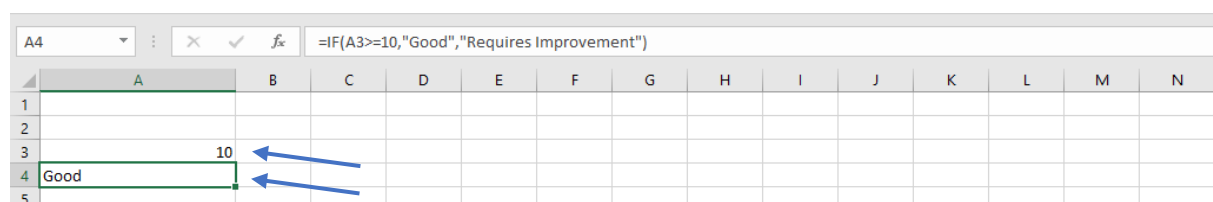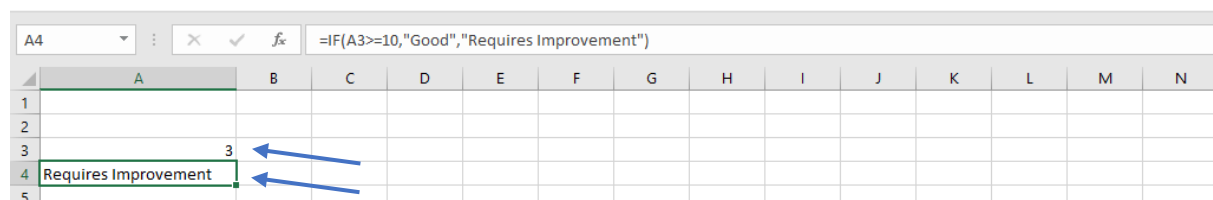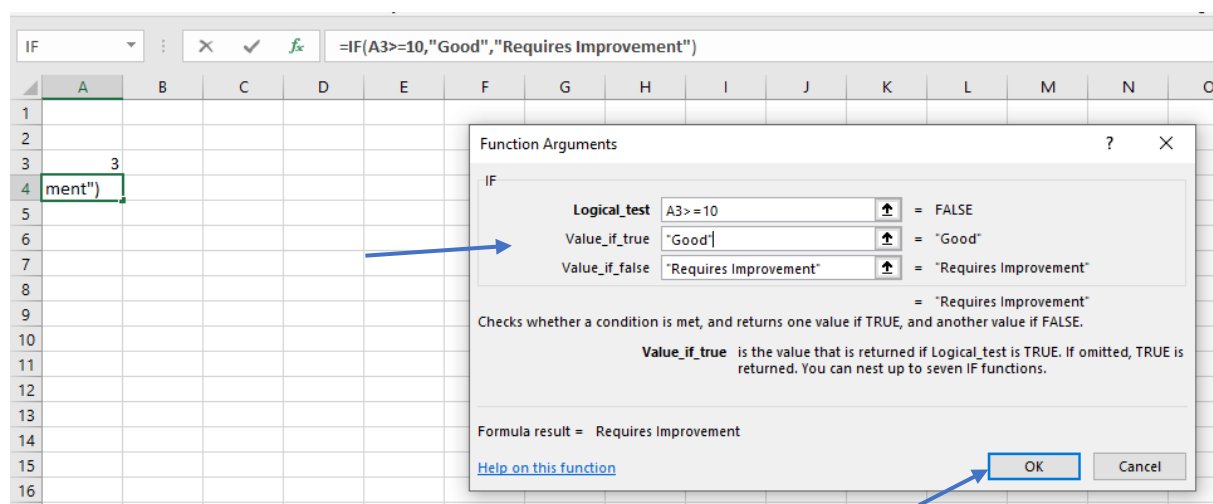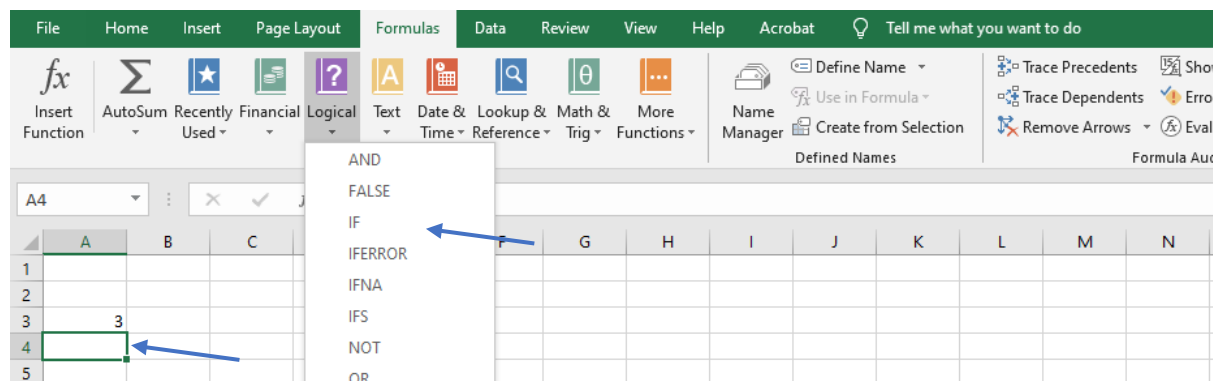
Count IF

Count IF will count numeric items in a range if they match a set condition specified. To set up a COUNT IF function, click on the cell in which to display the result of the function, then click **Formulas > More functions > Statistical > COUNTIF**. Enter the range and criteria - any items within the range which match the criteria will then be counted.

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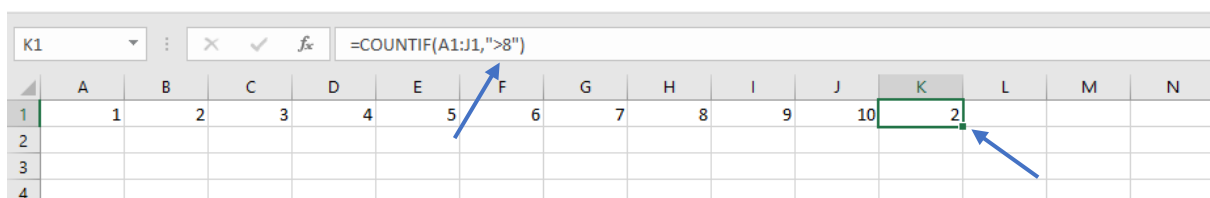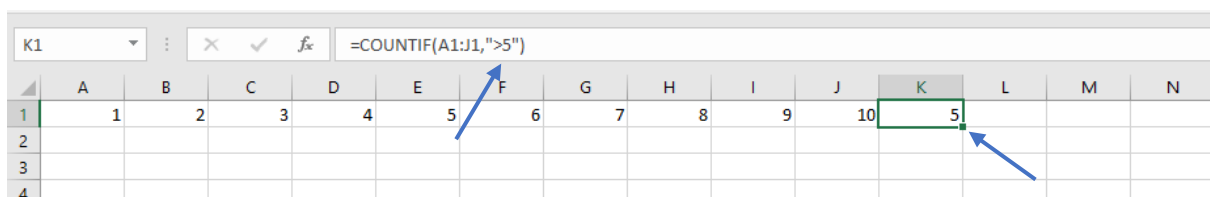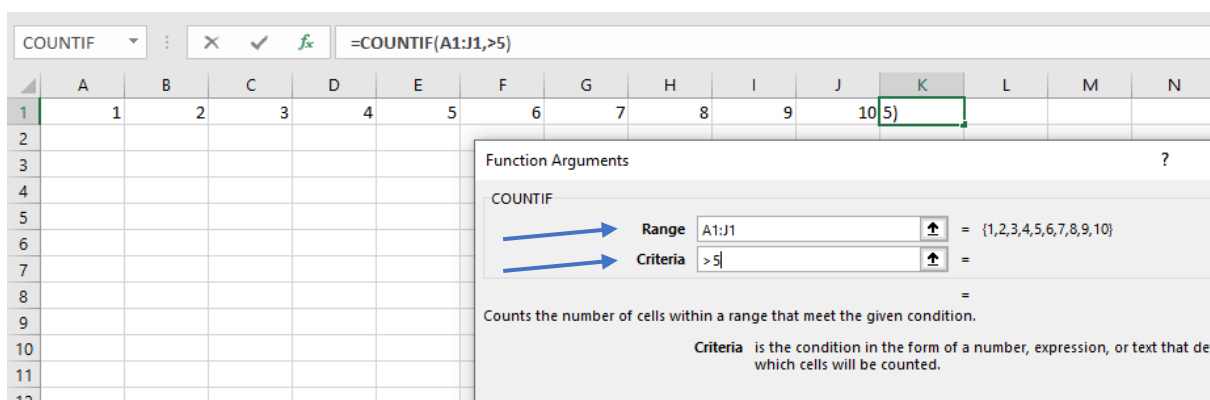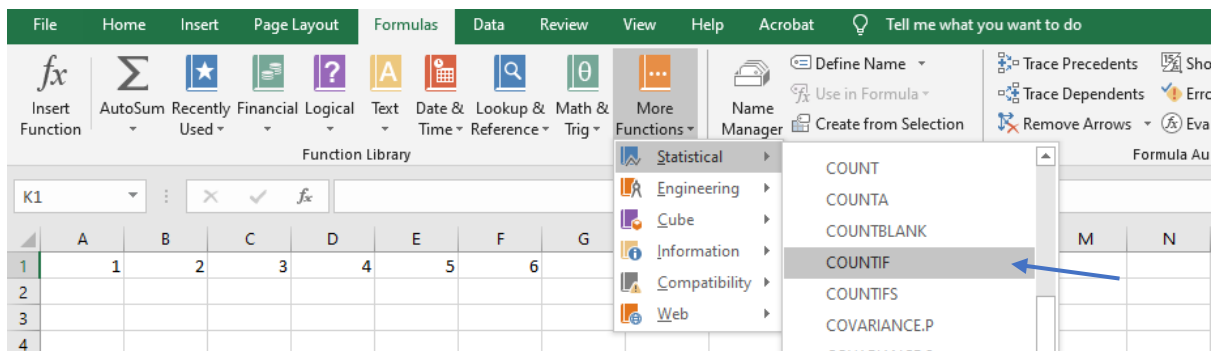
Sum IF

Sum IF will sum the values in a range if they match a set condition specified. To set up a SUMIF function, click on the cell in which to display the result of the function, then click **Formulas > Math and Trig > SUMIF**. Enter the range and criteria - any items within the range which match the criteria will then be added together.

Conditional Formatting

Conditional Formatting is used to automatically change the formatting of cells if they meet certain criteria. To create a new rule, select the cells the rule is to be applied to then click **Home > Conditional Formatting > New Rule**.
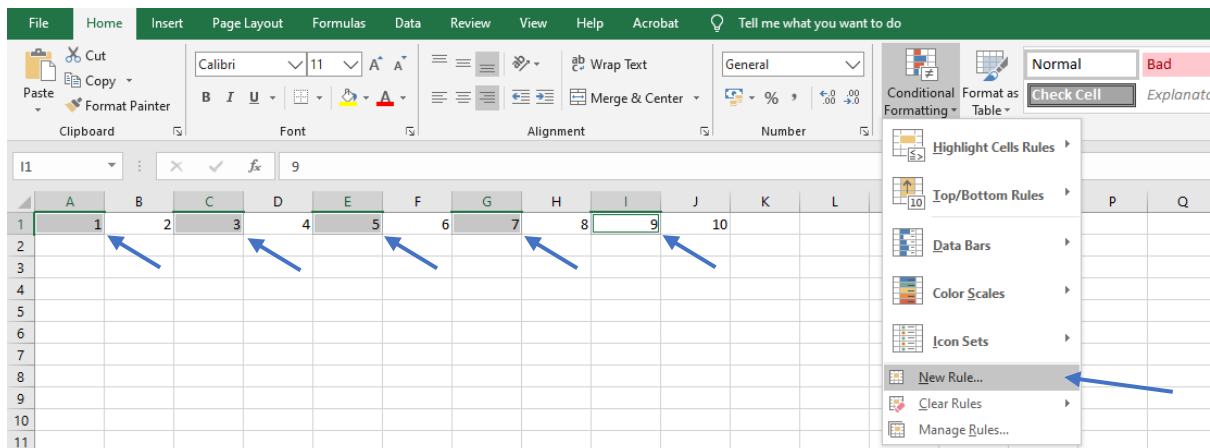

Different options are available; for example, to change the cell colour of all cells in the selected range which are above average, select "Format only cells that are above or below average" then click the **Format…** button to select the formatting to be applied. Click the **OK** button and the cells which meet the criteria will change to the formatting selected.

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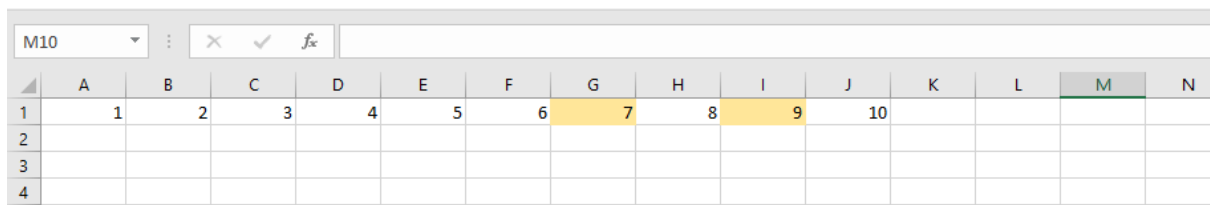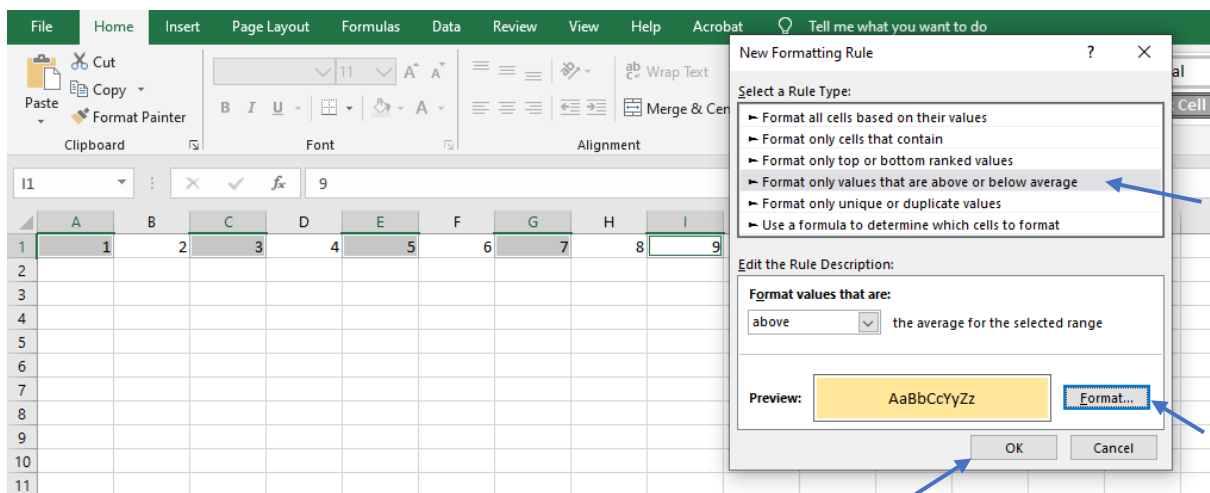
Naming Cells
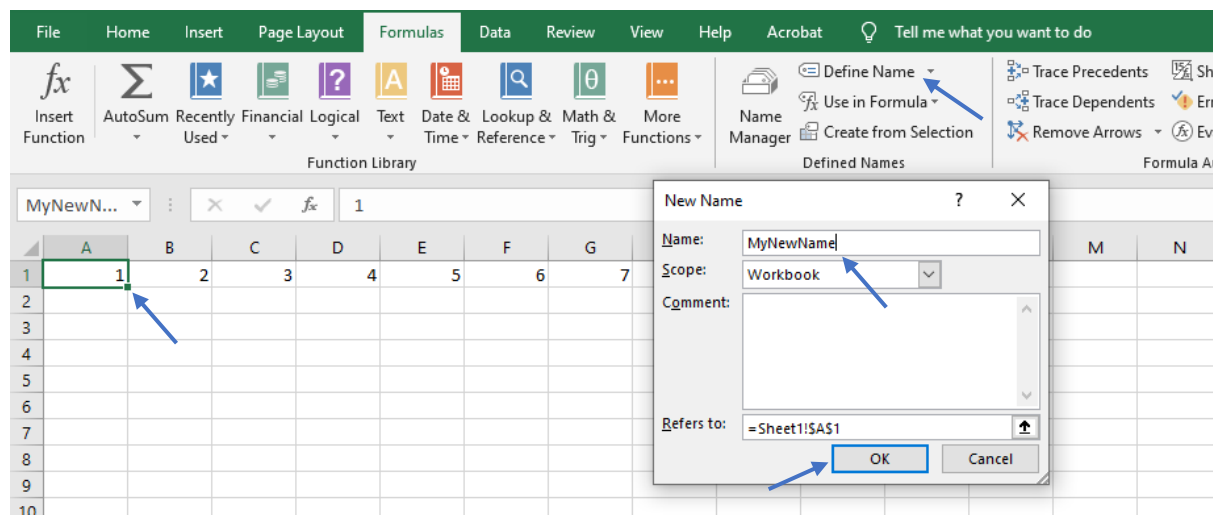
Names can be used to represent specific cells or ranges of cells making referencing them easier. To add a name to a cell or group of cells, select the cells then click **Formulas > Define Name** and enter a relevant name.
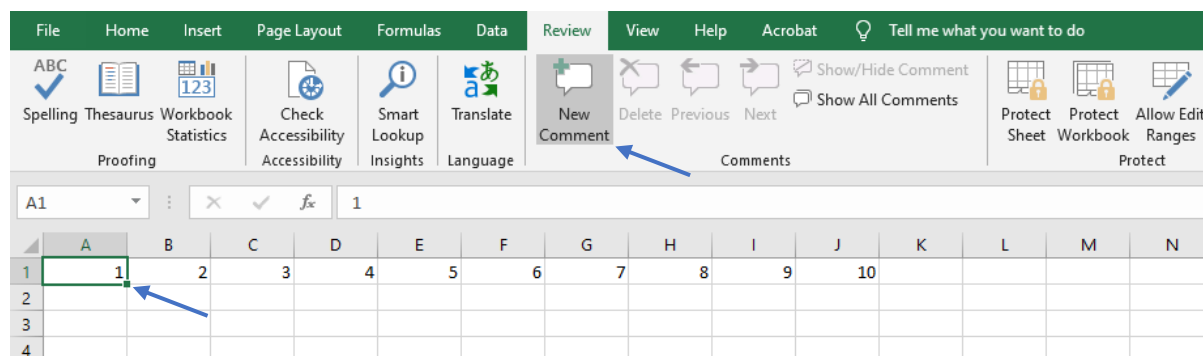

These names can now be used instead of cell references in a formula so when using a formula, instead of entering the cell reference, click **Formulas > Use in Formula** and select the named cell from the drop-down list which appears.

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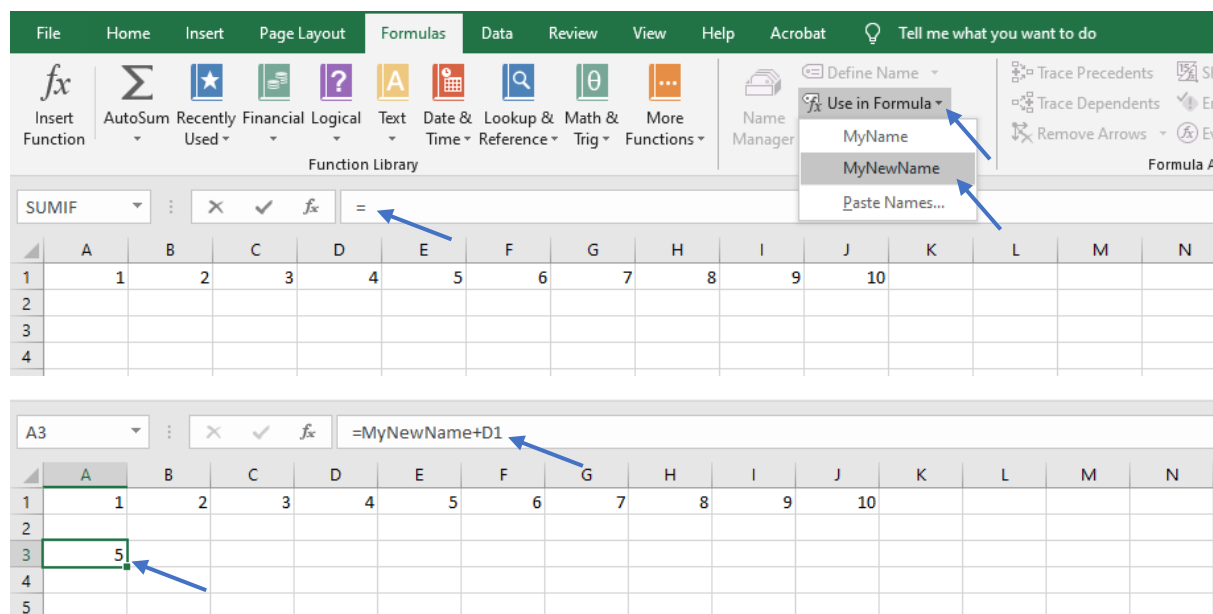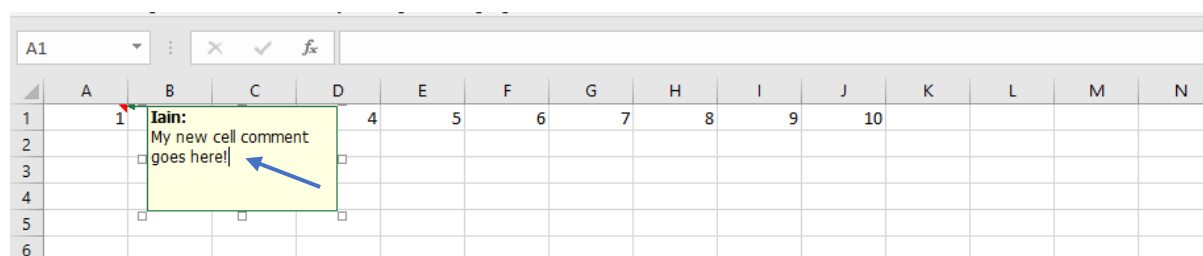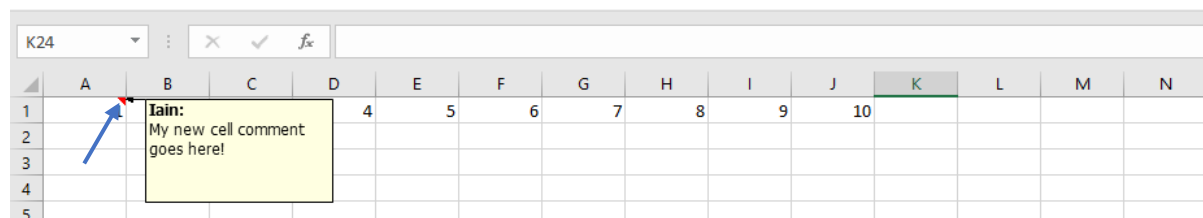
Cell Comments

To add a comment to a cell, select the relevant cell then click **Review > New Comment**.
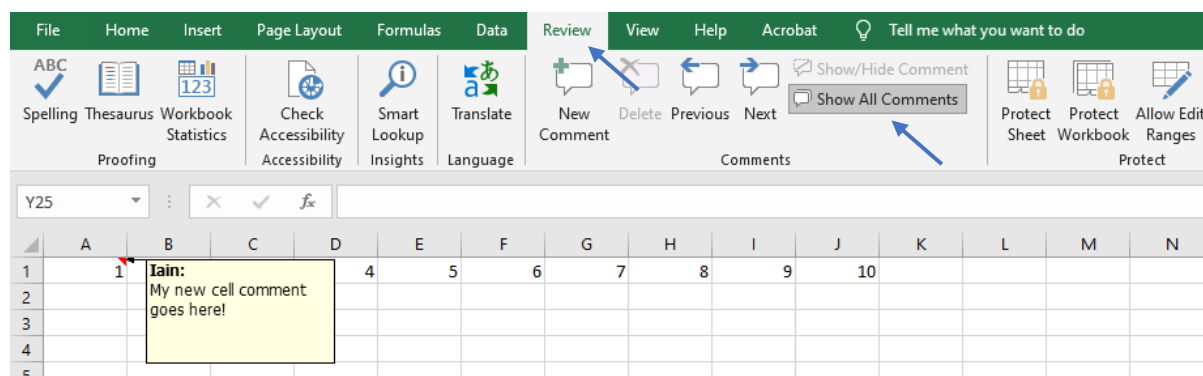

Enter a comment in the active box.

Any cells with comments attached can be easily identified as they will have a small red triangle in their top left corner; make the comment appear by hovering over the triangle.


To display all comments on a sheet at once click **Review > Show All Comments**.


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Linking Between Worksheets

A document link is a formula reference to a cell in the same sheet, another sheet in the same workbook or to another workbook. The sheet that contains the link is called the container document. The document which has the original data, is known as the source document. To create a link to a cell in a different sheet, enter = in the destination cell to begin the formula and then click on the cell in the other sheet to be linked to and press Enter. A typical example formula is show below.
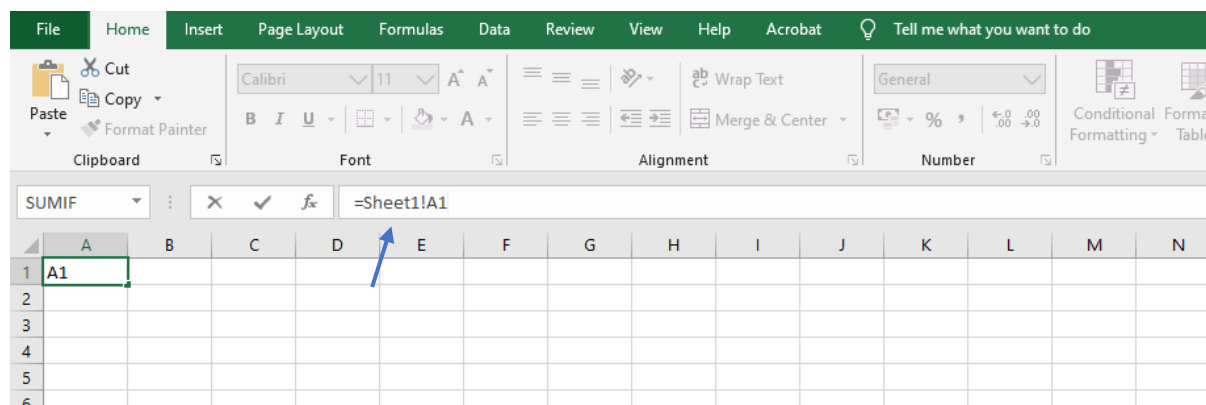

Linking Between Workbooks

It is also possible to link between different open workbooks in the same way. A typical example formula is show below.
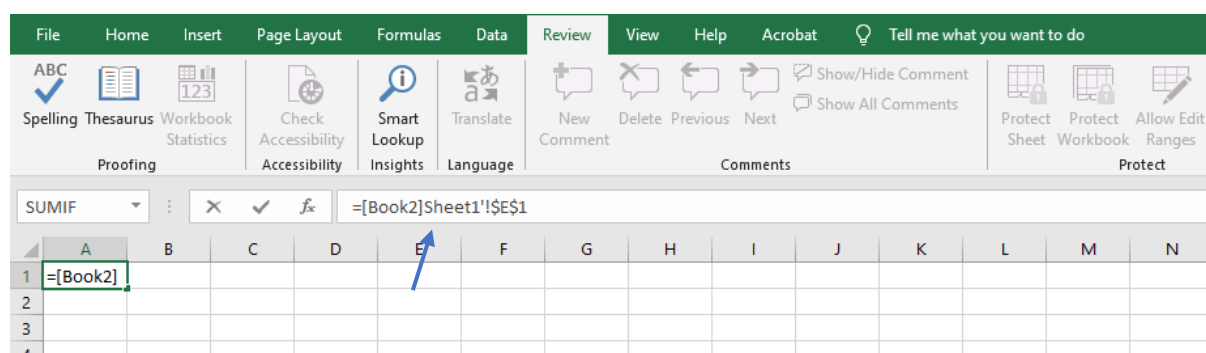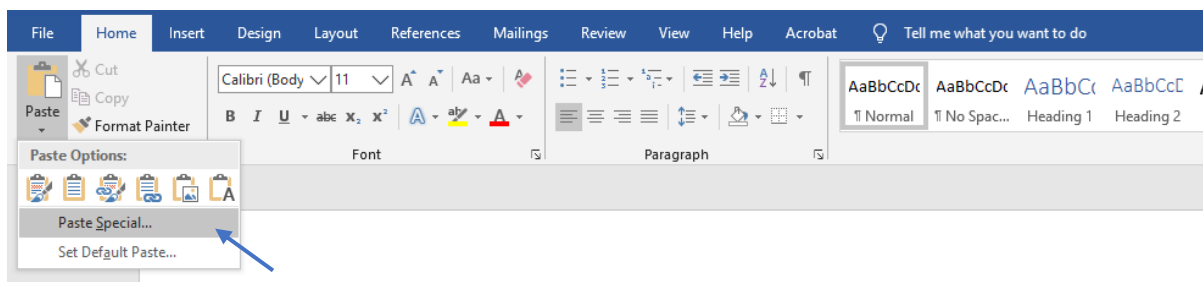
Linking in Word

It is possible to copy a spreadsheet from Excel into a Word document in a way that the data is linked to the workbook it originated from and any changes to the original workbook are reflected in the Word document. Select the cells to be copied then click **Home > Copy**.
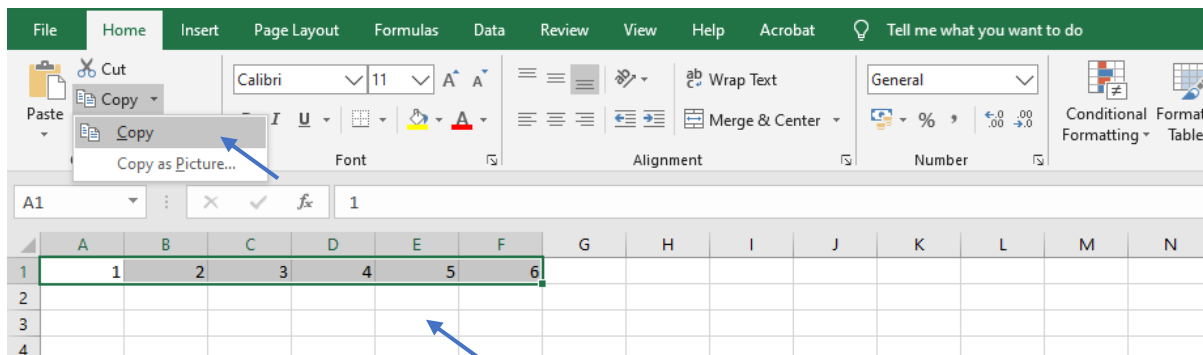
In the **Word** document, click **Paste > Paste Special**.

Select **Microsoft Excel Worksheet Object** then click the **OK** button.