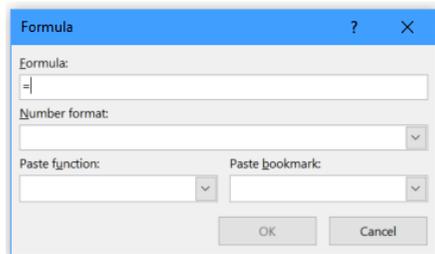


## Application: Word – Calculations in a Table

You can perform calculations and logical comparisons in a table by using formulas.

**Tip:** Formulas in Word (or Outlook tables) are field codes and can be manipulated in the same way as other fields. All formulas start with an equal sign (=). They can contain constants i.e. numeric values, cell references and calculation operators: plus (+), minus (-), multiplication (\*) and division (/).

1. Position the insertion point in the cell where the result is to go.
2. Select **Table Tools > Layout > Formula**.



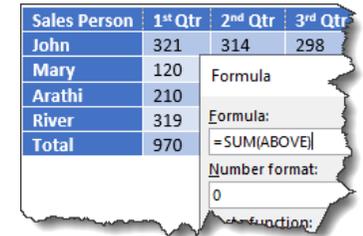
3. In the **Formula** field you can type the formula.
4. Specify the number format for the result.



### Built-in Formulas

As with Excel, there are built-in formulas you can use. These are listed at the end of this guide. We will use **SUM** as an example. This will add up all included cells.

1. Select **Table Tools > Layout > Formula**. Click on the **Paste Function** drop down list.
2. Select the required function. It will be inserted into the **Formula** field.
3. If there are numbers in the cells around the formula the formula will be completed using a positional argument. You can overtype this and add your own arguments if required. For example, if there are numbers above the cell the positional reference **ABOVE** will be added. The available positional references are as follows:



To add the numbers...	Type this in the Formula box
Above the cell	=SUM(ABOVE)
Below the cell	=SUM(BELOW)
Above and below the cell	=SUM(ABOVE,BELOW)
Left of the cell	=SUM(LEFT)
Right of the cell	=SUM(RIGHT)
Left and right of the cell	=SUM(LEFT,RIGHT)
Left of and above the cell	=SUM(LEFT,ABOVE)
Right of and above the cell	=SUM(RIGHT,ABOVE)
Left of and below the cell	=SUM(LEFT,BELOW)



## Manual Formulas

You can also write formulas by including cell references. The cell references use the column letter starting from A and the row number by counting from the first line of the table (even if this is a heading).

	A	B	C	D	Formula
1	Sales Person	Sales	Target	Result	
2	John	321	300		=C2-B2
3	Mary	120	150		
4	Arathi	210	200		
5	River	319	288		

**Tip:** Remember you can use a combination of built-in and manual formulas. For example: If =SUM(ABOVE) is the total for an invoice but you wanted to calculate the VAT, the formula would read:

{=SUM(ABOVE)\*20%}

## Copying a formula to other cells

If you copy a formula using a positional argument as described earlier, the copied cell will use the same arguments. However, it will not update automatically. You can update it by selecting the formula and pressing **F9**.

If you copy a formula with references to other cells, the cell references would need to be manually adjusted as the cell references will always refer to the original cells. Press **ALT F9** to display the code for the formula and adjust the cell references as required.

Sales Person	Sales	Target	Result
John	321	400	{ =C2-B2 \# "(0);0" }
Mary	120	150	{ =C2-B2 \# "(0);0" }
Arathi	210	200	{ =C2-B2 \# "(0);0" }
River	319	288	{ =C2-B2 \# "(0);0" }

**Tip:** Formulas in Word are a useful feature, but they aren't designed for complex calculations. For more complicated calculations you should use Excel.

## Updating Formulas

Results are only automatically updated when the formula is first inserted and when the document containing the formula is opened. You can also manually update them.

1. To update a specific field, **right click** on the field and select **Update Field** or press **F9**.
2. To update all fields in a document press **CTRL+A** to select the entire document, **right click** and select **Update Field** or press **F9**.

