**Excel pre-preparation content**

Office 365

The easiest way to get started with Excel, is to use Office 365.

Office 365 does not require downloading and installation of the program. It simply runs in your browser.

In our tutorial we will use Office 365, which can be accessed from [www.office.com](https://www.office.com/).

Install

Once you have successfully logged into Office through [www.office.com](https://www.office.com/), click on the Excel icon on the left side to enter the application:

A screenshot of a computer

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After entering the Excel application, click on the New blank workbook button to get started with a new workbook.

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Enter a name for your workbook, and hit the enter button:

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The Excel view has columns and rows, similar to a squared math exercise book.

Do not worry if the functionality looks overwhelming at first. You will get comfortable as you learn more in the chapters to come.

For now focus on the rows, columns, and the cells.

Ok. Let's make a function!

* First, double click the cell A1, the one that is marked with the green rectangle in the picture.
* Second, type =1+1.
* Third, hit the **enter** button:

A screenshot of a spreadsheet

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[Copy Values](javascript:void(0);)

Overview

This chapter is about giving you an overview of Excel. Excel's structure is made of two pieces, the **Ribbon**and the **Sheet**.

Have a look at the picture below. The **Ribbon** is marked with a red rectangle and the **Sheet** is marked with a yellow rectangle:

A computer screen shot of a spreadsheet

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First, let's start with explaining the **Ribbon**.

The Ribbon explained

The **Ribbon** provides shortcuts to Excel commands. A command is an action that allows you to make something happen. This can for example be to: insert a table, change the font size, or to change the color of a cell.

The **Ribbon** may look crowded and hard to understand at first. Don't be scared, It will become easier to navigate and use as you learn more. Most of the time we tend to use the same functionalities over again.

The **Ribbon** is made up by the **App launcher**, **Tabs**, **Groups**and **Commands**. In this section we will explain the different parts of the **Ribbon**.

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App launcher

The App launcher icon has nine dots and is called the Office 365 navigation bar. It allows you to access the different parts of the Office 365 suite, such as Word, PowerPoint and Outlook. App launcher can be used to switch seamlessly between the Office 365 applications.

Tabs

The tab is a menu with sub divisions sorted into groups. The tabs allow users to quickly navigate between options of menus which display different groups of functionality.

Groups

The groups are sets of related commands. The groups are separated by the thin vertical line break.

Commands

The commands are the buttons that you use to do actions.

Now, let's have a look at the **Sheet**. Soon you will be able to understand the relationship between the **Ribbon** and the **Sheet**, and you can make things happen.

The Sheet explained

The **Sheet** is a set of rows and columns. It forms the same pattern as we have in math exercise books, the rectangle boxes formed by the pattern are called cells.

Values can be typed to cells.

Values can be both numbers and letters:

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Each cell has its unique reference, which is its coordinates, this is where the columns and rows intersect.

Let's break this up and explain by an example

Have a look at the picture below. Hello world was typed in cell C4. The reference can be found by clicking on the relevant cell and seeing the reference in the **Name Box** to the left, which tells you that the cell's reference is C4.

A screenshot of a computer

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Another way to find the reference is to first find the column, in this case C, then map that towards the row, in this case 4, which gives us the reference of C4.

**Note:** The reference of the cell is its coordinates. For example, C4 has the coordinates of column C and row 4. You find the cell in the intersection of the two. The letter is always the column and the number is always the row.

Multiple Sheets

You start with one **Sheet** by default when you create a new workbook. You can have many sheets in a workbook. New sheets can be added and removed. Sheets can be named to making it easier to work with data sets.

**Are you up for the challenge?** Let's create two new sheets and give them useful names.

First, click the plus icon, shown in the picture below, create two new sheets:

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**Tip:** You can use the hotkey **Shift + F11** to create new sheets. Try it!

Second, right click with your mouse on the relevant sheet and click rename:

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Third, enter useful names for the three sheets:

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In this example we used the names **Data Visualization**, **Data Structure** and **Raw Data**. This is a typical structure when you are working with data.

**Good job!** You have now created your first workbook with three named sheets!

Syntax

A formula in Excel is used to do mathematical calculations. Formulas always start with the equal sign = typed in the cell, followed by your calculation.

**Note:** You claim the cell by selecting it and typing the equal sign (=)

Creating formulas, step by step

* Select a cell
* Type the equal sign (=)
* Select a cell or type value
* Enter an arithmetic operator
* Select another cell or type value
* Press enter

For example =1+1 is the formula to calculate **1+1=2**

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**Note:** The value of a cell is communicated by **reference(value)** for example A1(2)

Using Formulas with Cells

You can type values to cells and use them in your formulas.

Lets type some dummy values to get started. Double click the cells to type values into them. Go ahead and type:

* A1(309)
* A2(320)
* B1(39)
* B2(35)

Compare with the picture shown below:

A screenshot of a spreadsheet

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[Copy Values](javascript:void(0);)

**Note:** Type values by selecting a cell, claim it by entering the equal sign (=) and then type your value. For example =309.

**Well done!** You have successfully typed values to cells and now we can use them to create formulas.

Here is how to do it, step by step.

1. Select the cell C1
2. Type the equal sign (=)
3. Left click on A1, the cell that has the (309) value
4. Type the minus sign (-)
5. Left click on B2, the cell that has the (35) value
6. Hit enter

**Tip:** The formula can be typed directly without clicking the cells. The typed formula would be the same as the value in C1 (=A1-B2).

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The result after hitting the enter button is C1(274). Did you make it?

Another Example

Let's try one more example, this time let's make the formula =A2-B1.

Here is how to do it, step by step.

1. Select the cell C2
2. Type the equal sign (=)
3. Left click A2, the cell that has the (320) value
4. Type the minus sign (-)
5. Left click B1, the cell that has the (39) value
6. Hit the enter button

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You got the result C2(281), right? **Way to go!**

**Note:** You can make formulas with all four arithmetic operations, such as addition (+), subtraction (-), multiplication (\*) and division (/).

Here are some examples:

* =2+4 gives you 6
* =4-2 gives you 2
* =2\*4 gives you 8
* =2/4 gives you 0.5

In the next chapter you will learn about **Ranges**and how data can be moved in the **Sheet**.