

Microsoft Excel: Basics

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Module 1: Introduction to Excel

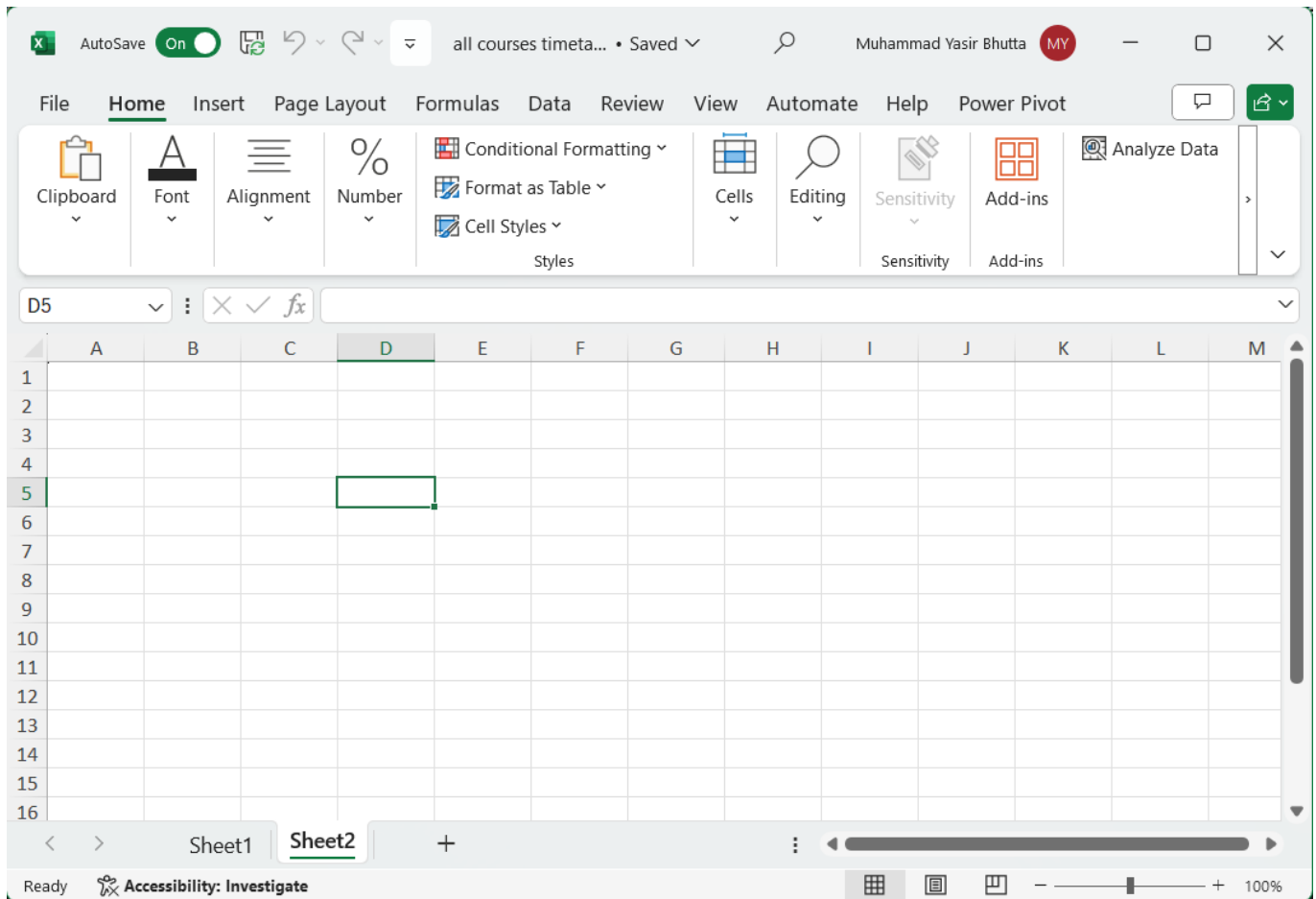
- What is Excel?
- When to use a spreadsheet
- The Excel workbook and worksheet
- Navigating around Excel
- Entering and editing data

Microsoft Excel

Microsoft Excel is an electronic spreadsheet program developed by Microsoft. It's widely used for storing, organizing, and manipulating data.

Microsoft Excel can be used to

- perform mathematical calculations
- serve as powerful data management tools
- create different charts and graphs
- retrieve data from external data sources and use it in worksheets



Microsoft Excel: Interface

Excel Mobile App:

1. Worksheets and Workbooks:

- **Workbooks**

- A Microsoft Excel workbook is a file that contains one or more worksheets that you can use to organize various kinds of related information.

- **Worksheets**

- The primary document that you use in Excel to store and work with data. Also called a spreadsheet.
- A worksheet is always stored in a workbook.
- A worksheet consists of cells that are organized into columns and rows.
- By default, Microsoft Excel provides one worksheet in a workbook.
- Calculations can be made based on data from multiple worksheets.
- Each Worksheet has a tab.
- To activate a particular sheet, you can click on its respective tab.

- **Columns & Rows**

- Each column and row of a worksheet has a unique name
- Each column carries a letter of the alphabet as its name while a row is numbered
- A worksheet consist of 16384 columns and more than one million rows.[^1]

- **Cells**

- Cell is the intersection of a column & a row.
- An active cell is the cell in which you can enter and edit data.

2. Cell References:

- Cells are identified by their **cell references**, which combine the column letter and row number (e.g., A3, B6, AA345).
- You can store various types of data in cells, including numbers, text, dates, times, and Boolean values.

3. Formulas and Functions:

- **Formulas** allow you to perform calculations using data from other cells. Start a formula by typing an equal sign (=) in the cell where you want the result.
- Formulas can include cell references and built-in **functions** (predefined calculations). Functions simplify complex tasks, such as finding averages, sums, or specific information in large tables of data.

4. Features:

- Excel offers powerful features, including:
 - **Calculation capabilities:** Perform arithmetic, statistical, and financial calculations.
 - **Graphing tools:** Create charts and graphs to visualize data.
 - **Pivot tables:** Analyze and summarize data from large datasets.
 - **Visual Basic for Applications (VBA):** A macro programming language for automating tasks.

5. Integration:

- Excel is part of the **Microsoft 365 suite**, which includes other productivity tools like Word, PowerPoint, and Outlook.

**Microsoft Excel's availability: **:

1. Desktop Version 🖥️:

- **Microsoft Excel** is available as a desktop application for both **Windows** and **Mac** operating systems.
- Users can install Excel on their personal computers or workstations to create, edit, and analyze spreadsheets.

2. Mobile Version 📱:

- **Microsoft Excel** is also available as a **mobile app** for smartphones and tablets.
- You can download the Excel app from app stores (such as **Google Play Store** for Android devices or the **Apple App Store** for iOS devices).
- The mobile app allows you to view, edit, and collaborate on Excel files while on the go.

3. Online Version (Excel Online) 🌐:

- **Excel Online** is the web-based version of Excel.
- It runs in a web browser (such as **Microsoft Edge**, **Google Chrome**, or **Mozilla Firefox**).
- Users can access Excel Online through their **Microsoft OneDrive** or **Microsoft 365** accounts.
- Excel Online provides basic spreadsheet functionality and allows collaboration with others in real time.
- [Microsoft 365 for the web](#)

Enter data manually in worksheet cells

[Video: How to: Enter data manually in worksheet cells | Microsoft Excel](#)

Number as Text

- A single quote (or an apostrophe) is used to signify Text in Excel.
- A number entered with the leading apostrophe is treated as Text and (generally) cannot be used in calculations.

Enter a dates or a time in a cell

- On the worksheet, click a cell.
- Type a date or time as follows:
 - To enter a date, use a slash mark or a hyphen to separate the parts of a date; for example, type 9/5/2002 or 5-Sep-2002.
 - To enter a time that is based on the 12-hour clock, enter the time followed by a space, and then type a or p after the time; for example, 9:00 p.

Tip: To enter the current time, press CTRL+SHIFT+; (semicolon).

See also:

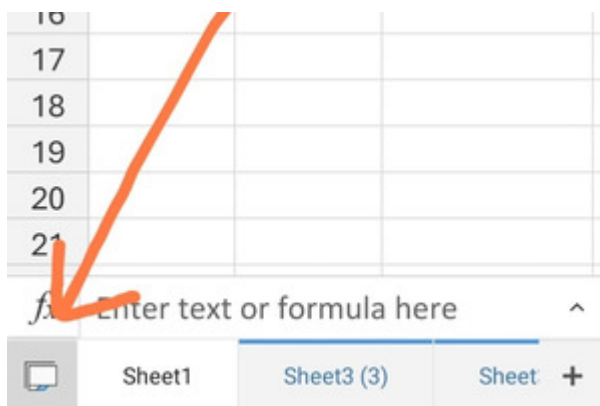
- [Control Automatic Data Conversions in Excel](#)

Managing Sheet

[Video: How to Manage Worksheets in excel](#)

Insert a new worksheet

- To view your sheets, tap the bottom left button on the toolbar.



- To create a new sheet, tap the **+** icon at the bottom of the screen

Rename a worksheet

1. To view your sheets, tap the bottom left button on the toolbar.
2. Then select the sheet you want to rename and tap on sheet tab again to open a context menu.
3. Tap **'rename'**
4. enter a new name

or

To rename the sheet, double-tap on the tab and enter a new name.

Delete a worksheet

1. To view your sheets, tap the bottom left button on the toolbar.
2. Then select the sheet you want to delete and tap on sheet tab again to open a context menu.
3. Tap **'Delete sheet'**
4. Tap **OK Button**

Reorder sheets

- To reorder sheets, tap and hold the sheet tab at the bottom of the screen and drag it to a new position.

Hide or unhide sheets

1. To view your sheets, tap the bottom left button on the toolbar.
2. Then select the sheet you want to hide and tap on sheet tab again to open a context menu.
3. A context menu will appear with the option to hide or unhide a sheet.
4. Tap **Hide**, to hide the sheet.

Change sheet tab color

1. To view your sheets, tap the bottom left button on the toolbar.
2. Then select the sheet you want to change sheet tab color and tap on sheet tab again to open a context menu.
3. Tap **Color**, to change the sheet tab color.

Duplicate sheet

To duplicate a sheet in Excel mobile app, you can follow these steps:

1. To view your sheets, tap the bottom left button on the toolbar.
2. A context menu will appear with the option to Duplicate.
3. Tap **Duplicate** to create a copy of the sheet.

Move sheet

See also:

- [Hide or Unhide worksheets - Microsoft Support](#)

Excel for Android touch guide

Excel for Android phones: Animated tips

Online Courses and Trainings - Microsoft Excel

- [Excel video training - Microsoft Support](#)
- [Microsoft Training](#)

True/False (Mark T for True and F for False)

- A workbook is a collection of worksheets. **True**
- Rows are numbered from 1 to 1,048,576. **True**
- A worksheet is the intersection of a row and a column. **False**
- The active cell is the cell that is currently selected. **True**
- Excel is a powerful tool for data analysis. **True**

Multiple Choice (Select the best answer)

What type of data can be stored in an Excel cell?

1. ☐ Numbers
2. ☐ Text
3. ☐ Dates
4. ☒ All of the above

What is a workbook?

1. ☒ A collection of worksheets
2. ☐ A single spreadsheet
3. ☐ A cell in a spreadsheet
4. ☐ A formula in a spreadsheet

What is a worksheet?

1. ☐ A collection of workbooks
2. ☒ A single spreadsheet
3. ☐ A cell in a spreadsheet
4. ☐ A formula in a spreadsheet

What are rows in a spreadsheet?

1. ☒ Horizontal divisions of the spreadsheet
2. ☐ Vertical divisions of the spreadsheet
3. ☐ Individual cells in the spreadsheet
4. ☐ Formulas in the spreadsheet

What are columns in a spreadsheet?

1. ☐ Horizontal divisions of the spreadsheet
2. ☒ Vertical divisions of the spreadsheet
3. ☐ Individual cells in the spreadsheet
4. ☐ Formulas in the spreadsheet

What is a cell in a spreadsheet?

- ☐ A collection of workbooks
- ☐ A single spreadsheet
- ☒ The intersection of a row and column
- ☐ A formula in a spreadsheet

What is the address of a cell?

- ☐ The name of the workbook
- ☐ The name of the worksheet
- ☒ The letter of the column and the number of the row
- ☐ The formula in the cell

What is the term used for a single page in an Excel workbook?

- ☐ workbook
- ☒ worksheet
- ☐ row
- ☐ column

What is the unique identifier for a cell in a worksheet?

- ☐ workbook
- ☐ worksheet
- ☐ row
- ☒ cell address

What are rows and columns?

- ☒ Rows are horizontal divisions of a worksheet, and columns are vertical divisions of a worksheet.
- ☐ Rows are vertical divisions of a worksheet, and columns are horizontal divisions of a worksheet.
- ☐ Both rows and columns are horizontal divisions of a worksheet.
- ☐ Both rows and columns are vertical divisions of a worksheet.

How many columns are there in an Excel worksheet by default?

- ☐ 256
- ☐ 512
- ☐ 1,048,576
- ☒ 16,384

How many rows are there in an Excel worksheet by default?

- ☐ 256
- ☐ 512
- ☒ 1,048,576
- ☐ 16,384

In Excel, how many worksheets are there in a default workbook?

- ☒ 1

2. ☐ 3
3. ☐ 5
4. ☐ 10

Review Questions

1. What is the difference between worksheet and Workbook?
2. What is a workbook in Excel?
3. What is a worksheet in Excel?
4. What are some of the benefits of using Excel workbooks and worksheets?
5. What is Active cell and explain the purpose of Name Box in MS Excel?
6. What are the key components of an Excel worksheet, and how do they contribute to organizing and analyzing data within a workbook?
7. Explain the process of adding, deleting, and renaming worksheets in an Excel workbook. How can these actions be beneficial in managing and organizing data?

Exercises

1. How do you insert a new worksheet into a workbook?
2. How do you delete a worksheet from a workbook?
3. How do you rename a worksheet?
4. How do you hide a worksheet?
5. How do you unhide a worksheet?

References and Bibliography

[^1]: [Excel specifications and limits](#)