CHAPTER 1

Introducing Excel

IN THIS CHAPTER

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This chapter is an introductory overview of Excel 365. Excel 365 runs on Windows, macOS, the web, iOS, iPadOS, and Android, though not all functions are available outside of Windows and macOS. If you're already familiar with a previous version of Excel, reading (or at least skimming) this chapter is still a good idea.

Understanding What Excel Is Used For

Excel is the world's most widely used spreadsheet software and is part of the Microsoft Office suite. Other spreadsheet software is available, but Excel is by far the most popular and has been the world standard for many years.

Much of the appeal of Excel is its versatility. Excel's forte, of course, is performing numerical calculations, but Excel is also useful for nonnumeric applications. Here are just a few uses for Excel:

Crunching numbers: Create budgets, tabulate expenses, analyze survey results, and perform just about any type of financial analysis you can think of.

Creating charts: Create a variety of highly customizable charts.

Organizing lists: Use the row-and-column layout to store lists efficiently.

Manipulating text: Clean up and standardize text-based data.

Accessing other data: Import data from a variety of sources such as databases, text files, web pages, and many others.

Creating graphical dashboards: Summarize a large amount of business information in a concise format.

Creating graphics and diagrams: Use shapes and illustrations to create professional-looking diagrams.

Automating complex tasks: Perform a tedious task with a single mouse click with Excel's macro capabilities.

Understanding Workbooks and Worksheets

An Excel file is called a *workbook*. You can have as many workbooks open as you need, and each one appears in its own window. By default, Excel workbooks use an `.xlsx` file extension.

NOTE

In old versions of Excel, every workbook opened in a single Excel window. Beginning with Excel 2013, each workbook opens in its own window. This change makes Excel work more like other Office applications and gives you the opportunity to put different workbooks on different monitors more easily.

The tabs in a workbook are called *worksheets*. Each workbook contains one or more worksheets, and each worksheet consists of individual cells. Each cell can contain a number, a formula, or text. A worksheet also has an invisible drawing layer, which holds charts, images, and diagrams. Objects on the drawing layer sit over the top of the cells, but they are not *in* the cells like a number or formula. You switch to a different worksheet by clicking its tab at the bottom of the workbook window. In addition, a workbook can store chart sheets; a chart sheet displays a single chart and is accessible by clicking a tab.

Don't be intimidated by all the different elements that appear within Excel's window. You don't need to know what all of them mean to use Excel effectively. And after you become familiar with the various parts, it all starts to make sense and you'll feel right at home.

Figure 1.1 shows you the more important bits and pieces of Excel. As you look at the figure, refer to Table 1.1 for a brief explanation of the items shown.

TABLE 1.1 Parts of the Excel screen that you need to know

Name	Description
Column letters	Letters range from A to XFD—one for each of the 16,384 columns in the worksheet. You can click a column heading to select an entire column or click between the column letters and drag to change the column width.
File button	Click this button to open Backstage view, which contains many options for working with your document (including printing) and setting Excel options.
Formula bar	When you enter information or formulas into a cell, it appears in this bar.
Horizontal scrollbar	Use this tool to scroll the sheet horizontally.
Macro recorder indicator	Click to start recording a Visual Basic for Applications (VBA) macro. The icon changes while your actions are being recorded. Click again to stop recording.
Name box	This box displays the active cell address or the name of the selected cell, range, or object.
New Sheet button	Add a new worksheet by clicking the New Sheet button (which is displayed after the last sheet tab).

Name	Description
Page view buttons	Click these buttons to change the way the worksheet is displayed.
Quick Access Toolbar	This customizable toolbar holds commonly used commands. The Quick Access Toolbar is always visible, regardless of which tab is selected.
Ribbon	This is the main location for Excel commands. Clicking an item in the tab list changes the Ribbon that is displayed.
Ribbon Display Options	A drop-down control that offers three options related to displaying the Ribbon.
Row numbers	Numbers range from 1 to 1,048,576—one for each row in the worksheet. You can click a row number to select an entire row or click between the row numbers and drag to change the row height.
Search box	Use this control to find commands or have Excel issue a command automatically. Alt+Q is the shortcut to access the Search box.
Selected cell indicator	This dark outline indicates the currently selected cell or range of cells. (There are 17,179,869,184 cells on each worksheet.)
Sheet tabs	Each of these notebook-like tabs represents a different sheet in the workbook. A workbook can have any number of sheets, and each sheet has its name displayed in a sheet tab.
Sheet tab controls	Use these buttons to scroll the sheet tabs to display tabs that aren't visible. You can also right-click to get a list of sheets.
Status bar	This bar displays various messages as well as summary information about the range of cells selected. Right-click the status bar to change which messages are displayed.
Tab list	Use these commands to display a different Ribbon.
Title bar	This displays the name of the program and the name of the current workbook. It also holds the Quick Access Toolbar (on the left), the Search box, and some control buttons that you can use to modify the window (on the right).
Vertical scrollbar	Use this tool to scroll the sheet vertically.
Window controls	There are three controls for minimizing the current window, maximizing or restoring the current window, and closing the current window, which are common to virtually all Windows applications.
Zoom control	Use this to zoom your worksheet in and out.

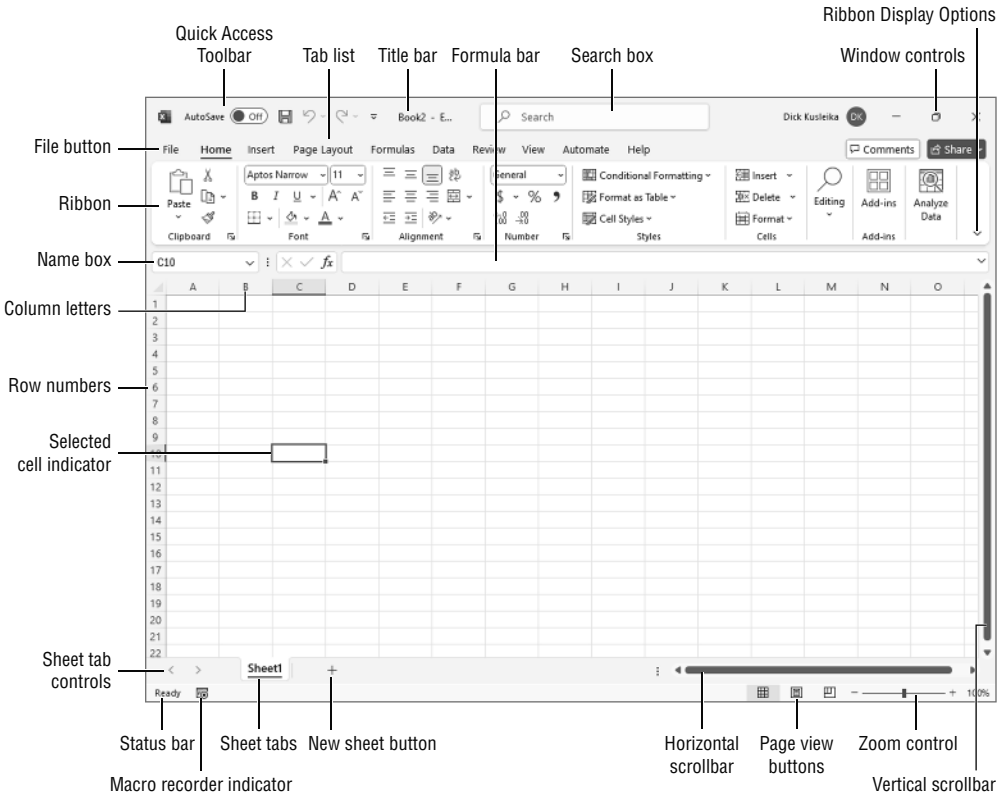
Moving Around a Worksheet

This section describes various ways to navigate the cells in a worksheet.

Every worksheet consists of rows (numbered 1 through 1,048,576) and columns (labeled A through XFD). Column labeling works like this: After column Z comes column AA, which is followed by AB, AC, and so on. After column AZ comes BA, BB, and so on. After column ZZ is AAA, AAB, and so on.

FIGURE 1.1

The Excel screen has many useful elements that you will use often.



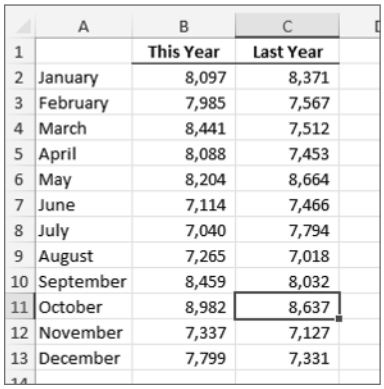
The intersection of a row and a column is a single cell, and each cell has a unique address made up of its column letter and row number. For example, the address of the upper-left cell is A1. The address of the cell at the lower right of a worksheet is XFD1048576.

At any given time, one cell is the active cell. The active cell is the cell that accepts keyboard input, and its contents can be edited. You can identify the active cell by its darker border, as shown in Figure 1.2. If more than one cell is selected, the dark border surrounds the entire selection, and the active cell is the light-colored cell within the border. Its address appears in the Name box. Depending on the technique you use to navigate through a workbook, you may or may not change the active cell when you navigate.

The row and column headings of the active cell appear in a different color to make it easier to identify the row and column of the active cell.

FIGURE 1.2

The active cell is the one with the dark border—in this case, cell C11.



	A	B	C
1		This Year	Last Year
2	January	8,097	8,371
3	February	7,985	7,567
4	March	8,441	7,512
5	April	8,088	7,453
6	May	8,204	8,664
7	June	7,114	7,466
8	July	7,040	7,794
9	August	7,265	7,018
10	September	8,459	8,032
11	October	8,982	8,637
12	November	7,337	7,127
13	December	7,799	7,331

NOTE

Excel is also available for devices that use a touch interface. This book assumes you have a traditional keyboard and mouse, so it doesn't cover the touch-related commands. Note that the drop-down control in the Quick Access Toolbar has a Touch/Mouse Mode command. In Touch mode, the Ribbon and Quick Access Toolbar icons are placed farther apart.

Navigating With Your Keyboard

Not surprisingly, you can use the standard navigational keys on your keyboard to move around a worksheet. These keys work just as you'd expect: The down arrow moves the active cell down one row, the right arrow moves it one column to the right, and so on. PgUp and PgDn move the active cell up or down one full window. (The actual number of rows moved depends on the number of rows displayed in the window.)

TIP

You can use the keyboard to scroll through the worksheet without changing the active cell by turning on Scroll Lock, which is useful if you need to view another area of your worksheet and then quickly return to your original location. Just press Scroll Lock and use the navigation keys to scroll through the worksheet. When you want to return to the original position (the active cell), press Ctrl+Backspace and then press Scroll Lock again to turn it off. When Scroll Lock is turned on, Excel displays `Scroll Lock` in the status bar at the bottom of the window.

The Num Lock key on your keyboard controls the way the keys on the numeric keypad behave. When Num Lock is on, the keys on your numeric keypad generate numbers. Many keyboards have a separate set of navigation (arrow) keys located to the left of the numeric keypad. The state of the Num Lock key doesn't affect these keys.

Table 1.2 summarizes all the worksheet movement keys available in Excel.

TABLE 1.2 Excel worksheet movement keys

Key	Action
Up arrow (↑) or Shift+Enter	Moves the active cell up one row
Down arrow (↓) or Enter	Moves the active cell down one row
Left arrow (←) or Shift+Tab	Moves the active cell one column to the left
Right arrow (→) or Tab	Moves the active cell one column to the right
PgUp	Moves the active cell up one screen
PgDn	Moves the active cell down one screen
Alt+PgDn	Moves the active cell right one screen
Alt+PgUp	Moves the active cell left one screen
Ctrl+Backspace	Scrolls the screen so that the active cell is visible
Ctrl+Home	Moves the active cell to A1
Ctrl+End	Moves the active cell to the bottom-rightmost cell on the worksheet's used range
↑*	Scrolls the screen up one row (active cell does not change)
↓*	Scrolls the screen down one row (active cell does not change)
←*	Scrolls the screen left one column (active cell does not change)
→*	Scrolls the screen right one column (active cell does not change)

* With Scroll Lock on

Navigating With Your Mouse

To change the active cell by using the mouse, just click another cell and it becomes the active cell. If the cell that you want to activate isn't visible in the workbook window, you can use the scrollbars to scroll the window in any direction. To scroll one cell, click either of the arrows on the scrollbar. To scroll by a complete screen, click either side of the scrollbar's scroll box. To scroll faster, drag the scroll box or right-click anywhere on the scrollbar for a menu of shortcuts.

TIP

If your mouse has a wheel, you can use it to scroll vertically. Also, if you click the wheel and move the mouse in any direction, the worksheet scrolls automatically in that direction. The more you move the mouse, the faster you scroll.

Press Ctrl while you use the mouse wheel to zoom the worksheet. If you prefer to use the mouse wheel to zoom the worksheet without pressing Ctrl, choose File ➪ Options and select the Advanced section. Place a check mark next to the Zoom On Roll With IntelliMouse option.

Using the scrollbars or scrolling with your mouse doesn't change the active cell—it simply scrolls the worksheet. To change the active cell, you must click a new cell after scrolling.