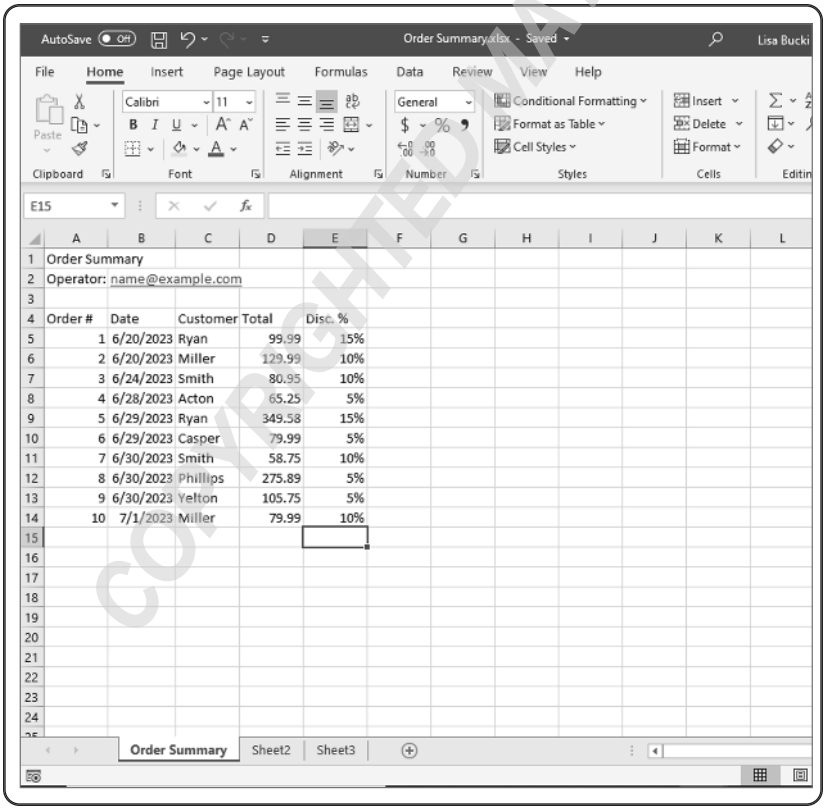
How Do I Start Using Excel?

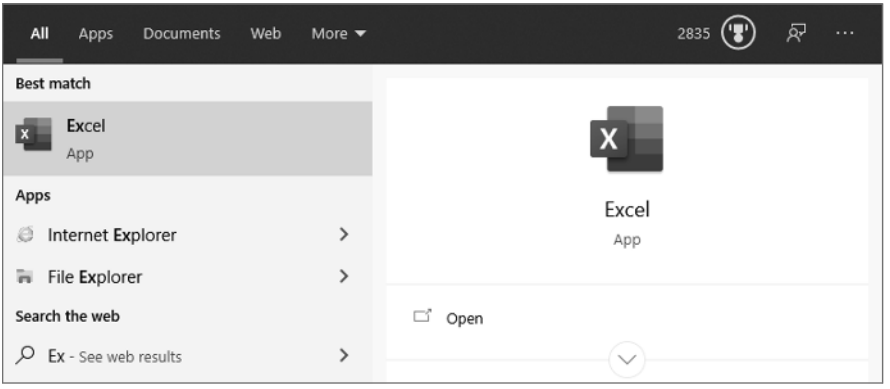


Excel has a lot in common with other programs you may have used, including the other Microsoft 365 applications. Its interface is easy to navigate yet loaded with powerful features designed to save you time and work. Getting dialed in on all the basics will enable you to spend more of your time analyzing the meaning of your data, which is the important thing, right? This chapter introduces you to the "must know" skills for kicking off your work in Excel. It covers essential command and navigation features of the user interface, reviews key techniques for creating and working with files, and guides you through getting data into sheet cells and making selections.

Starting and Exiting Excel

Windows 10 gives you a few options for starting a program so that you can get to work. You may already have your preference for how to start up, but if not, you can try one of these methods:

- **Start button.** Click the Start button at the left end of the Windows taskbar. Move the mouse pointer over the right edge of the list of programs in the Start menu so that a scroll bar expands, and then use the scroll bar or the scroll wheel on your mouse to scroll down until you see Excel in the list. Then choose Excel. You also can pin a larger tile for starting Excel to the right side of the Start menu. Right-click Excel in the list of Start menu programs, and choose Pin to Start. Then you can open the Start menu and click the large tile. If you need to remove the tile later, right-click it and and choose Unpin from Start.
- **Windows logo key.** Press the Windows logo key on your keyboard. Press the down arrow on your keyboard as needed until Excel is selected, and then press Enter.
- **Search box.** Click in the Search box to the right of the Start button on the taskbar. If a tile for Excel appears in the Top Apps section, click it. If not, start typing **Excel**, and then choose Excel App when it appears under Best Match, as shown in Figure 1.1.



1.1 Select Excel App when using Windows Search to start Excel.

Genius

If using the Start menu to launch Excel isn't for you, then you can pin an Excel button to the taskbar. With Excel open, right-click its button on the taskbar, and then choose Pin to Taskbar. Click the pinned Excel button on the taskbar to start the program. If you decide you want to unpin the button, right-click it on the taskbar and choose Unpin from Taskbar.

When Excel opens, it prompts you to create a new document or open an existing one. The later section called "Working with Files" provides more details about those choices. For now, you could just click the Blank Workbook thumbnail to create a new file.

When you've finished all your work in Excel for the day, you should close or exit the program. You could shut down Windows without closing Excel, but it's a better practice to close Excel first to ensure you've saved all your work. As when starting Excel, you have these options for closing or exiting the program:

- Click the Close (X) button at the upper-right corner of the screen.
- Press Alt+F4.

To close the current file without exiting Excel, click the File tab near the upper-left corner of the Excel window, and then choose Close. If you have a file with unsaved work open and exit Excel or close the file, a message box asks whether you want to save changes to the file. You can click the Save or Don't Save button as needed.

Caution

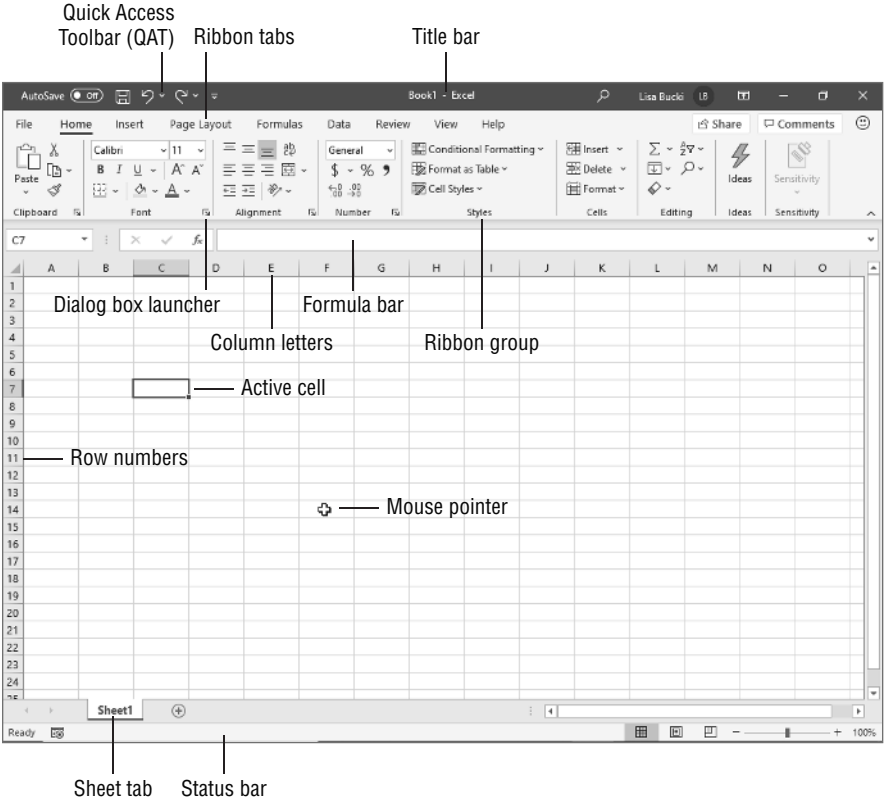
If you have multiple Excel files open, closing one of them doesn't close down Excel overall. You have to close every open Excel file to make sure you've completely exited the program.

Taking a Look Around

When you're writing a document in a word processor, you can get away with just typing a lot and not knowing the nuances of how to get around. Excel is trickier than that. Some of the features of its interface are important to being able to work accurately in the program, especially when it comes to creating formulas that calculate or organizing data effectively. While some of what this section covers may seem familiar based on your work with other programs, especially other Microsoft 365 programs, you might learn about a few unique Excel interface features that offer powerful shortcuts.

Reviewing key screen features

At first glance, the Excel screen can look a bit busy with an extreme number of buttons and letters and numbers and boxes. Each sheet in an Excel file has more than 16,000 columns and 1,000,000 rows, for a total of more than 17 billion cells! That sounds overwhelming, so I'm going to zero in on the key screen features you need to know to work in Excel, which are shown in Figure 1.2. Later parts of the book will cover other features of the Excel interface in discussions about particular tasks and actions.



1.2 You will work with these tools in Excel.

Here's what you need to know about the screen features shown in Figure 1.2:

- **Title bar.** The title bar identifies the name of the current file and holds other tools at its left and right end.
- **Quick Access Toolbar.** Found at the left end of the title bar, the Quick Access Toolbar (QAT) offers Save, Undo, and Redo buttons by default. The Undo and Redo buttons become active after you start performing actions in cells. Clicking the down arrow at the right end of the QAT opens the Customize Quick Access Toolbar menu, where you can choose the name of another button that you want to add to the QAT.

- **Ribbon.** The ribbon below the title bar uses tabs to organize the majority of the commands that you'll use in Excel. Click a ribbon tab to see its commands. The names along the bottom of the ribbon identify commands that are grouped together because they have related or similar functions. In most cases, you click a button on the ribbon to choose a command, though clicking a button with a drop-down list arrow on it opens a list of additional choices. Still other ribbon buttons are split, with both a regular button on the top and a down arrow on the bottom part of the button. Clicking the top half of a split button executes the command immediately, while clicking the bottom part with the arrow opens a list of choices. Other buttons are split the other way, with the main button on the left and a drop-down list arrow on the right. Pressing the Alt key displays letters and numbers, sometimes called *keytips*, that you can press to choose a ribbon tab and then a command.

Note

I'll use a type of shorthand throughout the book to tell you which ribbon command to choose, giving the tab, group, and specific button. For example, if I say "Choose Data ➔ Sort & Filter ➔ Filter," it means to click the Data tab on the ribbon, look for the Sort & Filter group of commands, and in that group, click Filter. Command sequences can be longer if a list or menu appears.

- **Dialog box launcher.** Some groups on the ribbon include a small button called a *dialog box launcher* in the lower-right corner. Clicking one of these buttons opens a dialog box with more detailed choices, such as the Format Cells dialog box.
- **Formula bar.** You will use this area to enter and edit cell contents. The Formula bar also displays the contents of the active cell. Or, if the active cell contains a formula, the formula appears in the Formula bar, while the formula results appear in the cell itself.
- **Row numbers and column letters.** The working area in Excel is organized into rows and columns of cells. The column letters across the top of the grid and the row numbers down the left side identify the address or location of a cell or range. The bands with the letters and numbers are also called *row and column headers*.
- **Active cell.** A bold outline, sometimes called the *cell selector*, identifies the active or currently selected cell. When more than one cell is selected, the bold box surrounds the entire selection.
- **Mouse pointer.** When you're using the mouse in Excel, the mouse pointer changes shape often to cue you when it's in the correct position to perform a particular action. By default, the pointer shape is a bold white plus, as shown in Figure 1.2, but at times it may change to a black plus, a two-headed arrow, and other shapes.

- **Sheet tab.** A tab appears for each worksheet in the file. The later section "Working with Sheets" explains how to add and work with sheets.
- **Status bar.** This area below the worksheet displays status information and has tools for changing the zoom that I'll cover shortly.

Note

The more recent subscription versions of Excel have made it easier to get help when you're stuck with a feature or task. Make sure your computer is connected to the Internet to receive the best possible results, and then press F1 or choose Help ➔ Help ➔ Help to open a Help pane at the right side of Excel. Enter a command name, task, or other search keywords, and then press Enter to see matching results.

Workbooks versus worksheets

Excel files are called workbook files, though you may see them called *documents* like the files created using other Microsoft 365 applications. The more specific name, *workbook*, stems from how Excel enables you to organize your data in an orderly fashion on separate worksheets or sheets, each of which is represented by a sheet tab at the bottom-left corner of Excel. Just as it's easier to organize and find information in a booklet with pages rather than a long, continuous scroll, placing sets of data on separate worksheets gives you faster access to your data.

Before you make your first entries in a new workbook file, take a few extra minutes to plan in your mind how you'd like to organize the data in the file. For example, you typically wouldn't want to combine both sales and inventory data on a single sheet. More typically, you would place the sales data on one worksheet, and the inventory data on another. For large datasets, sales and inventory might even be tracked in separate workbook files. Let the type of data dictate how you organize it. In a workbook file tracking weather data, each month's data could be placed on a separate sheet. A workbook file with real estate listings might have the listings for each ZIP code on a separate tab. A construction business might place each project estimate for a client on a separate sheet.

Changing views

The View tab on the ribbon (Figure 1.3) enables you to change the view in Excel and turn some view features on and off. The default view, Normal, was shown in Figure 1.2. If you have a sheet that you want to print and think you might need to adjust how it breaks between separate pages, change to the Page Break Preview view. The Page Layout view not only shows page breaks, but it also shows how headers and footers will appear when printed. The Workbook Views group of the View tab holds the buttons for changing to

one of these views. Three buttons near the right end of the status bar also enable you to change between the views.

1.3 Use the View tab choices to adjust screen appearance.

The Show group of the View tab has Formula Bar, Gridlines, and Headings check boxes that you can use to toggle those screen features on and off. (*Headings* is another name for row and column headers.) When you want to finalize a workbook file and discourage other people from making edits, you might click the Formula Bar check box to uncheck it, thus hiding the Formula bar. It's common to turn off the gridlines and headings displays for some types of worksheets, such as an executive dashboard that shows summary information and a few charts. In particular, hiding the gridlines makes some sheets more readable and attractive. Keep in mind that these settings in the Show group of the View tab control only on-screen display of gridlines and headers. If you want to control whether gridlines and headers print, you'll have to adjust the page setup, which is covered in Chapter 9.

Note

The tools in the Sheet View group of the View tab only become active when you're working on a workbook file stored in a OneDrive, OneDrive for Business, and SharePoint location. You can use the New Sheet View button to create a custom view of a shared workbook file. The custom view enables you to work without disruption, no matter what someone else working on the shared file does.

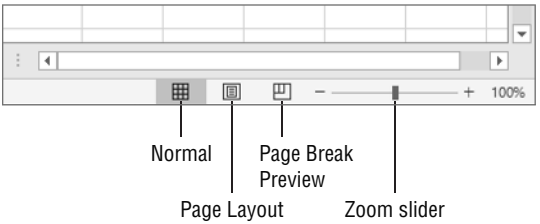
Another aspect of Excel's on-screen appearance that you might want to tinker with is whether the ribbon is fully visible. The small up arrow button in the lower-right corner of the ribbon is called the Collapse the Ribbon button. You can click it or press Ctrl+F1 to hide everything but the ribbon tabs, allowing more sheet rows to appear on-screen. When you need to choose a command, just click a tab to expand the ribbon temporarily, choose the desired button or item, and then continue working. The ribbon will collapse again on its own. To return the ribbon to its normal appearance and function, click a ribbon tab, and then click the Pin the Ribbon button—it has a pushpin on it—in the lower-right corner of the ribbon or press Ctrl+F1 again. You also can double-click a ribbon tab to collapse the ribbon or pin it back open.

Zooming

Today's trend of computers offering ever-higher screen resolutions has its pros and cons. While graphics and video look gorgeous in hi-res, screen features and content in business-oriented programs can look small and difficult to read. Whether you've forgotten your glasses or just have eyestrain from a full day of screen time, increasing the zoom or zooming in can make sheet data easier to read. On the other hand, decreasing the zoom or zooming out allows more rows and columns to appear on-screen at once, which can be handy in some situations, such as when you need to select a large set of data for a chart.

The Zoom group of the View tab holds choices for changing the zoom. You can select an area on the worksheet, and then click the Zoom to Selection button in that group so the selection will fill the screen, usually by zooming in. To return to the normal zoom, click the 100% button in the group. Clicking the Zoom button opens the Zoom dialog box, which enables you to choose a preset zoom percentage or enter your own setting in the Custom text box; click OK to apply your choice and close the dialog box.

You also can use the Zoom slider shown in Figure 1.4 to change the zoom on the fly. You can drag the slider "thumb" to the left to zoom out or to the right to zoom in. Or, you can click the Zoom Out (-) or Zoom In (+) buttons at either end of the slider to zoom out or in at preset 10% increments. When you change the zoom using any method, the change normally applies to the current sheet only. Note that Figure 1.4 also shows the status bar buttons for changing the view.



1.4 These controls at the right end of the status bar enable you to change the view and zoom.

Genius

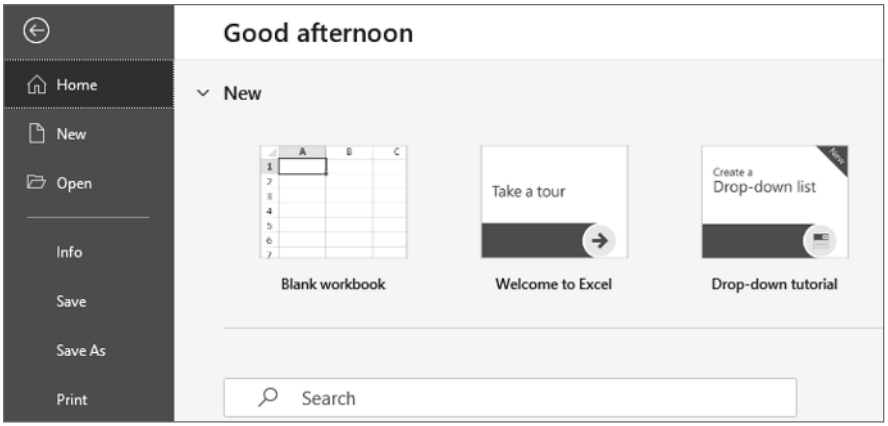
A zoom setting of 120–125% strikes a good compromise between increasing the zoom enough to reduce eyestrain while still allowing plenty of rows and columns to appear on-screen at once.

Working with Files

Now that you've had an overview of how Excel ticks, it's time to turn to the practical business of starting to work with files. When you click the File tab on the ribbon, a screen loaded primarily with choices for working with files appears. This screen is sometimes called Backstage or Backstage view. You can use the choices on the File tab to create, save, export, and print files, among other actions.

Creating a blank file

You learned at the start of the chapter that when you start Excel, it prompts you to open or create a file. You can click the Blank Workbook thumbnail to create a new, blank file at that point. If you've already started Excel and opened a file (blank or otherwise), you can choose File ➔ Blank Workbook (Figure 1.5) to create another blank file. But for my money, it's fastest to press Ctrl+N to create a new file. No matter the method, Excel assigns a placeholder name (Book1, Book2, and so on) to each blank file you create until you save it under a new name.



1.5 Choose File ➔ Blank Workbook to create a new, blank workbook file.

Caution

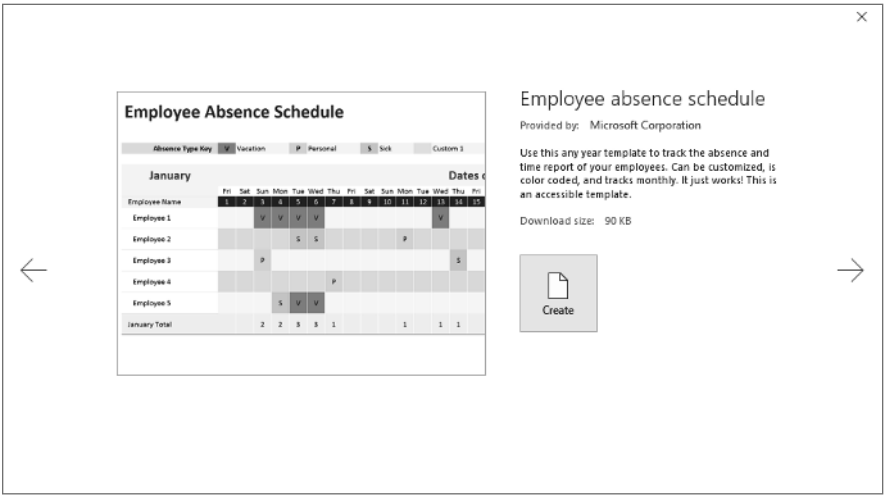
If you work in Excel for the web, the cloud-based version of Excel, you might have gotten very comfortable with how it automatically saves the file for you as you work. Unfortunately, the desktop version of Excel isn't as helpful, so you should make sure you save your work frequently. See the later section called "Saving and Closing a File" to learn how to save.

Exploring templates

If starting from a blank slate sounds like too much work, if you're looking for worksheet design ideas, or if you're fairly certain someone else has already created just the type of file you're looking for, then you might just find what you need in the huge selection of templates offered through Excel. A template is simply a pre-made file that typically includes labels, placeholder content or prompts, formulas, and formatting. When you use a template file, which has a slightly different file format than a regular workbook file, it creates a new workbook file with the same contents as the template for you. You fill it out with your own content from there and save the copied file. Thousands of business and personal templates are available for download, including planners, calendars, budgets, invoices, and inventory lists.

To find and download a template, follow these steps:

1. **Choose File → New.** The options for creating a new file appear.
2. **Scroll down to see thumbnails for suggested templates.**
3. **Click a template thumbnail to select it.** As shown in Figure 1.6, a larger preview of the template appears, along with a description and the download size information.



1.6 You get to preview a template before downloading it.

4. **If the template looks like what you want, click the Create button.** The template downloads to your computer, and a new file based on the template opens in Excel. You can then add your own content and save the copy of the template file.

If you didn't see a template that looked promising in Step 2, you can scroll back up and click one of the Suggested Searches choices under the Search for Online Templates text box. Or, you could click in that text box, type a search term or brief description, and press Enter. Excel displays thumbnails for matching templates in its search results. At that point, you could continue with Step 3 to select and download a template.

Caution

The templates you download through Excel are from a trusted source, so they should be free from viruses. If you obtain a template from another source, make sure to check it for viruses and other malware.

Excel automatically stores each template you download into a subfolder of your Windows 10 user folder so that you can reuse it. The next time you choose File ➔ New, downloaded templates will appear at the top of the screen to the right of the Blank Workbook thumbnail. If you've downloaded numerous templates, you may have to click an arrow button to scroll right to find the one that you'd like to reuse. To remove a template from the choices at the top of the screen, right-click it and choose Remove from List.

Opening an existing file

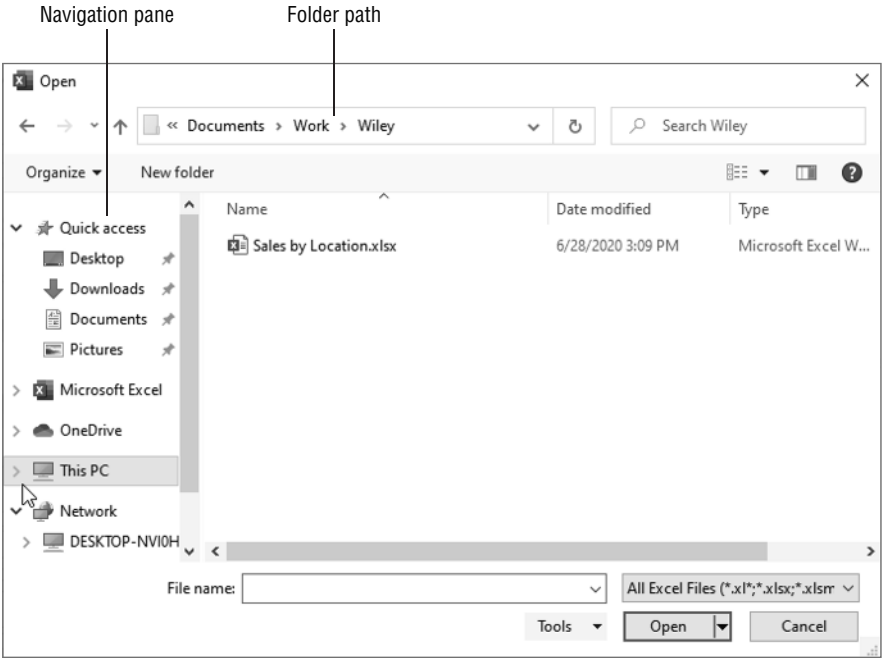
When you start Excel or click the File tab, the initial screen that appears includes a Recent list, which includes previously saved files you've worked in during the not-too-distant past. Click a file in that list to open it immediately.

If the file to open is not on the Recent list, click the Open choice at the left (below New). Toward the middle of the screen, a list of locations appears. Depending on the type of Microsoft 365 subscription you have, there might be OneDrive and Sites locations for cloud-based storage. You can choose a location like that to look for files.

Lower, under Other Locations, the This PC and Browse choices appear. If you click This PC, the list at the right changes to show the files in the same folder as the currently opened file (if any). You can use the up arrow button to the left of the folder breadcrumb trail at the top to navigate a bit and display different files.

I prefer to click Browse and use the good old Open dialog box (Figure 1.7) to navigate to the location holding a file and open it. As shown in Figure 1.7, when you move the mouse pointer over the Navigation pane at the left, arrows appear to the left of the listed locations so that you can expand and collapse the listing. Clicking the right arrow beside This PC would show all the storage locations under This PC, including available disk drives on your computer. Double-click an item in the Navigation pane to show its contents in the file list at the middle of the dialog box. If you need to open a folder from the file list,

double-click it. The Address box at the top of the dialog box shows the path to the current folder. When the file you want to open appears in the file list, either double-click it or click it and click the Open button.



1.7 Use the Open dialog box to locate and open an existing file.

Genius

Glitches happen. Your laptop might lose power and shut down before you saved your file, or the system might restart on you after a Windows update installed in the background. To try to recover an unsaved file in Excel, choose File ➔ Open. Below the list of files at the right, click the Recover Unsaved Workbooks button. The Open dialog box that appears lists any unsaved files. Click the file to reopen, and then click the Open button.

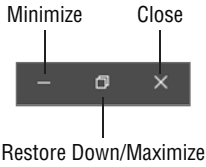
Switching to another file

While it's possible for a huge amount of data to "live" in a single Excel workbook file, in practice you'd make life a bit rough on yourself to jam a file so full of sheets and cell

entries that you can't find what you need when you need it. That said, even when you follow best practices and maintain a focused scope for the content in each of your workbook files, you may encounter situations where you need to be working with two or more files at once. You might need to copy some information from one workbook to another, or you might want to view a formula you created in one file to refresh your memory while creating a similar formula in another file, among other reasons.

With the needed files open, you can use the View tab shown in Figure 1.3 to switch to another file when needed. On the View tab, click the Switch Windows button in the Window group, and then click the name of the file. If you like using the taskbar, you can move the mouse pointer over the Excel button. When a thumbnail for each open file appears, click the desired thumbnail. To use the keyboard to display another file, press and hold the Alt key, briefly press the Tab key while still holding Alt, use the arrow keys to select the thumbnail for the file to display, and then release the Alt key.

Another method is not really "switching" files exactly. You can change the size and position of Excel windows on-screen, such as when you might want to be able to see data from two files at the same time. The Minimize and Restore Down/Maximize buttons sit to the left of the Close (X) button in the upper-right corner of each Excel window, as shown in Figure 1.8.



1.8 You can also work with a window's size and position to facilitate working with multiple files.

Here's how those buttons work and come into play when working with multiple files:

- **Minimize.** Clicking this button collapses the file down to the Excel taskbar button, effectively switching you to the next open Excel file.
- **Restore Down/Maximize.** A window is maximized when it fills the computer screen, and clicking this button on a maximized window reduces the window to a smaller (but still visible) size. The button changes from Restore Down to Maximize when the window is not maximized. In a situation where you need to see information in two separate files at the same time, click the Restore Down button for each window. To resize each window, move the mouse pointer over the window border so that it changes to a white double-headed arrow, and then drag until the window reaches the dimensions you want. Then drag each window by its title bar to position it on-screen as desired. Click the Maximize button to return a window to full screen size.

Note

The Window group of the View tab offers additional choices for viewing and sizing workbook windows, such as Arrange All, which opens a dialog box with choices for arranging the open windows. You also can right-click the Windows taskbar and use some of its choices, such as Show Windows Side by Side, to arrange the open windows. Keep in mind, though, that the taskbar shortcut menu choices apply to open windows from all programs.

Making Your First Cell Entries

The intersection of a row and column in Excel forms a cell that can hold an entry. The column letter and row number combined identify the *cell address*, also called the *cell reference*. For example, the address for the cell in column C of row 9 is C9. Knowing the cell address comes in handy when you need to jump to a particular piece of information in a worksheet, as well as when you are building formulas.

Excel holds a few surprises for you when you're moving around and making different types of cell entries. I'll highlight the shortcuts and the pitfalls for you.

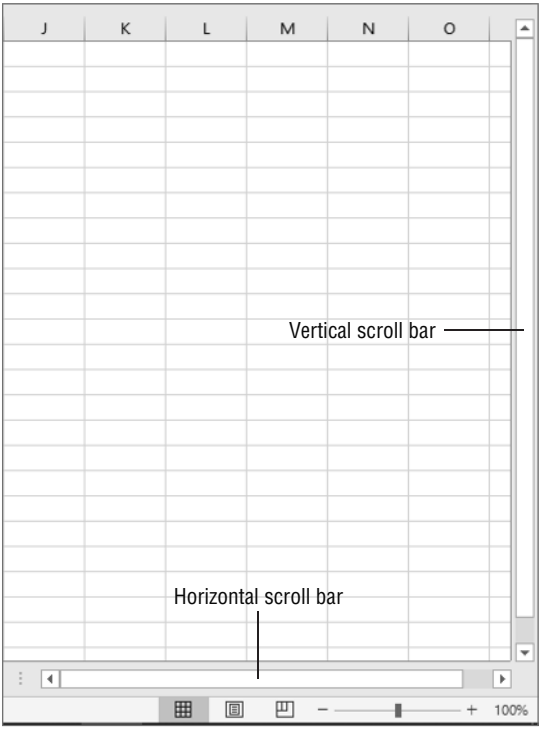
Moving around the sheet

When you move around the worksheet, you change the cell that's the active cell. Any entry that you make will then appear in the active cell, which is why I'm covering moving around as a prelude to making cell entries. The most obvious way to move around a worksheet is to press the down, up, left, and right arrow keys, moving the cell selector one cell in the arrow direction. Or, you can click a cell that appears on-screen to make it active immediately.

Genius

If you know the address for a cell that doesn't currently appear on-screen that you want to select, press Ctrl+G or choose Home ➔ Editing ➔ Find & Select ➔ Go To. In the Reference text box of the Go To dialog box, type the cell address, and then click OK. Boom, cell selected!

You also can use the scroll bars to change the area of the worksheet currently displayed on-screen. The vertical scroll bar at the right controls up and down movement, and the horizontal scroll bar at the bottom controls left and right movement. Figure 1.9 shows these scroll bars. Drag the scroll box in the scroll bar to move more quickly, or click an arrow at either end of the bar to move in smaller increments. And—this is important—moving with the scroll bars does not change the active cell. So after you use a scroll bar, be sure to click the cell you need to select.



1.9 Use the scroll bars to display another section of the worksheet.

My other favorite keyboard shortcuts for moving around in Excel include the PgUp and PgDn keys, which move the active cell up or down by one screenful of rows. (Keep in mind that the number of rows may vary depending on your zoom setting and row heights in the sheet.) I also like Ctrl+End, which selects the cell at the bottom-right corner of the range that holds data on the sheet, and Ctrl+Home, which jumps back to cell A1.

Caution

If the PgUp and PgDn keys on your keyboard are integrated with a 10-key keypad, you must press the Num Lk (Number Lock) button to turn off having the keys enter numbers and activate the alternate functions of the keys. Press Num Lk again to return to number entry.

Text and values

Once you've selected a cell, you can type in various types of information. This section covers the most basic types of entries, while Chapters 3 and 4 will cover how to enter and

create formulas—a topic whose scope requires two chapters. After you type an entry in a cell, to finish the entry and select the next cell, press Enter if you want to move down the column or press Tab if you want to move across the row. Keep these notes about the different types of entries in mind as you begin to populate a worksheet with data:

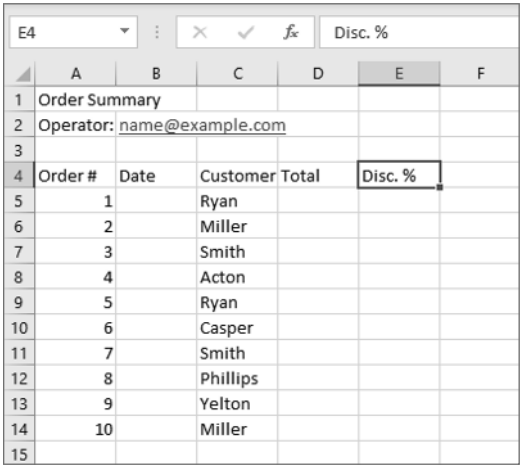
- **Text.** Also called labels, text entries can serve as items in a list of data, column or row headings and other types of identifiers, or notes or instructions on the sheet. Excel considers any alphanumeric entry that begins with a letter to be text. Text entries can include entries that begin with a number, such as 10 Handbags or A123. By default, text entries align to the left in the cell.

Caution

Excel's AutoCorrect feature automatically fixes some text entry typos, as well as some entries that aren't typos. For example, if you enter EHR, the acronym for "electronic health records," AutoCorrect changes it to HER. Similarly, WOH, which might stand for "work on hand," gets changed to WHO. You can edit the entry to fix unwanted corrections. Choose File ➔ Options, click Proofing at the left side of the Excel Options dialog box, and then click AutoCorrect Options to adjust these corrections.

- **Values.** These are the numeric entries you make in a sheet and are typically the values used to perform calculations. By default, value entries align to the right in the cell. If you have an instance where you need for Excel to store a numeric entry as text, type a **'** (single quote) at the start of the entry.
- **Hyperlinks.** If you type a website address or email address into a cell, Excel automatically converts it to a hyperlink. You can click the hyperlink in a cell (when you see the hand mouse pointer over the hyperlink) to open the linked web page or create a new email message to a contact. You have to click and hold on the cell to select the cell itself. Note that you also can insert other types of hyperlinks, such as a link to a contract or other relevant resource document, by pressing Ctrl+K or choosing Insert ➔ Links ➔ Link (choose the top part of the Link button) and then using the Insert Hyperlink dialog box to select the file to link.

Figure 1.10 shows examples of text, value, and hyperlink entries in a sheet. Any entry that is too long to fit in its cell automatically spills over into the next cell to the right, like the email address entered in cell B2. Chapter 5 will present a few techniques for addressing how entries fit in cells, such as increasing the column width. Excel also provides shortcuts for entering series of information. See "Using Auto Fill and Filling Series" in Chapter 2 to learn more.



E4 | Disc. %

	A	B	C	D	E	F
1	Order Summary					
2	Operator: name@example.com					
3						
4	Order #	Date	Customer	Total	Disc. %	
5	1		Ryan			
6	2		Miller			
7	3		Smith			
8	4		Acton			
9	5		Ryan			
10	6		Casper			
11	7		Smith			
12	8		Phillips			
13	9		Yelton			
14	10		Miller			
15						

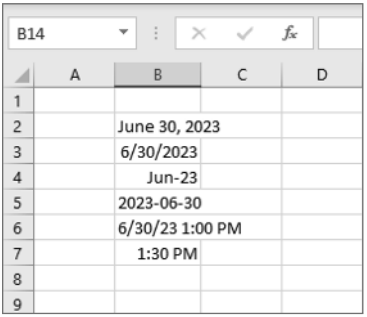
1.10 You can make basic entries like these in sheet cells.

Genius

Despite that little inconvenience of sometimes having to toggle Num Lk on and off, I love having a 10-key keypad on my laptop or keyboard to speed up numeric data entry in Excel. It's much easier to use the compact keypad layout than to stretch for the number keys near the top of the keyboard, especially if you've had any 10-key typing training. If you're a heavy Excel user looking to up your data entry game, check out some online 10-key tutorials.

Dates and times

Excel treats dates and times differently than other types of entries. It converts each date or time entry into a date serial number behind the scenes, even though the date and time continues to display as usual in the cell. Because it stores dates as serial numbers, you can create formulas to do date-related actions, such as finding out how many days fall between a start date and an end date. As a practical matter, you don't have to worry about the serial number. All you have to do is type the date, time, or a combination of the two in a format that Excel recognizes and then press Enter or Tab. Figure 1.11 shows examples of acceptable date and time entries. Don't forget to include AM or PM when you're typing a time according to the regular 12-hour clock. In some cases, Excel automatically changes the width of the column when you make one or more date entries.



1.11 Excel recognizes dates and times typed using these and other formats.

If you use a format that Excel does not recognize as a date or time, Excel will either display an error or treat the entry as text (left aligned) rather than a date (right aligned). In other cases, Excel might recognize a date or time you enter but convert it to another format when you finish the entry, based on location settings for dates and times in Excel and other default date settings in the Windows operating system. Don't worry, though. Chapter 5 explains how to change the number formatting manually for dates and other numbers in the section called "Changing the Number or Date Format."

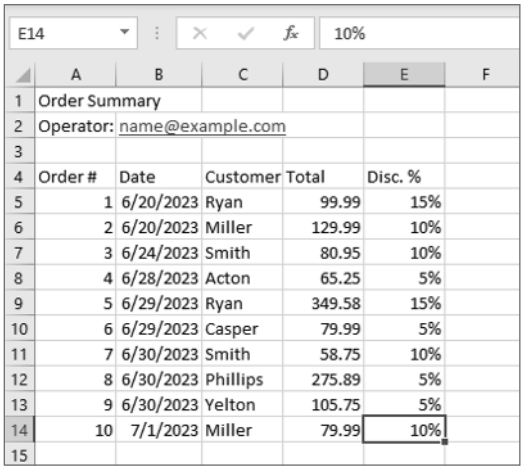
Number formatting on the fly

You've just seen how Excel can interpret date entries in cells and adjust the formatting. Similarly, Excel can recognize certain types of number formatting depending on what other characters you include with the number. Knowing how this "on the fly" formatting works can save you some typing time, as in these cases:

- **Decimals.** If you type a . (decimal point) when entering a number followed by additional numbers, that sets the number of decimal places displayed in the cell. So, if you type 11.1234, Excel displays the entry with all four decimal places. However, if the last number entered after the decimal place is a 0 (zero), Excel truncates that digit. That is, 11.1230 would be displayed as 11.123.
- **Thousands (and beyond).** By default, if you type 1000 in a cell, Excel displays it as 1000. But if you include the thousands separator and enter 1,000, Excel displays it as 1,000. If you enter 1,000,000, Excel displays 1,000,000. You get the drift.
- **Currency.** You can type a currency symbol such as the $ (dollar sign) or € (Euro symbol) at the beginning of an entry, and Excel will recognize it as currency. Include a decimal point and two decimal places, and comma separators if needed, as well.
- **Percentages.** Now, this is where things get a little trickier because of how percentages work in math. A percentage is part of the whole. In math, the "whole" value is 1.00 or 100%. So .25 is 25%, .75 is 75%, and so on. Years ago in Excel, you had to enter the decimal value (such as .25) in the cell and then apply a number format

to change it to a percentage. Now, you can just include the % (percent sign) when you type the value in the cell, and Excel automatically interprets it as a percentage. However, in formulas referencing the cell holding the percentage, Excel uses the corresponding decimal value to make the calculation.

Figure 1.12 shows some dates entered in column B, some values with two decimal places included in column D, and some discount amounts entered with the % (percent sign) in column E.



E14 | 10%

	A	B	C	D	E	F
1	Order Summary					
2	Operator:	name@example.com				
3						
4	Order #	Date	Customer	Total	Disc. %	
5	1	6/20/2023	Ryan	99.99	15%	
6	2	6/20/2023	Miller	129.99	10%	
7	3	6/24/2023	Smith	80.95	10%	
8	4	6/28/2023	Acton	65.25	5%	
9	5	6/29/2023	Ryan	349.58	15%	
10	6	6/29/2023	Casper	79.99	5%	
11	7	6/30/2023	Smith	58.75	10%	
12	8	6/30/2023	Phillips	275.89	5%	
13	9	6/30/2023	Yelton	105.75	5%	
14	10	7/1/2023	Miller	79.99	10%	
15						

1.12 The way you type some number entries helps Excel apply a number format automatically.

Caution

When a number format has been applied to a cell, even by typing as just described, the cell keeps that number format even if you later delete the cell contents. This may lead to unexpected results if you need to type a number that needs a different format later, so you'd need to clear the cell formatting or apply another number format as described in Chapter 5.

Making Selections

You've already seen how to move around the worksheet to a new active cell so that you can make a cell entry. For other operations, such as when you want to copy or move data

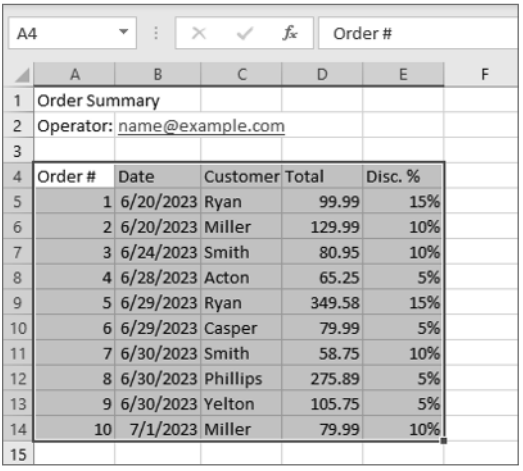
or work with data formatting and layout, you will usually need to make larger selections. Let's run through how to do that next.

Understanding cells and ranges

A *cell* is formed by the intersection of a single worksheet row and column. A *range* encompasses a rectangular group of cells, such as multiple cells holding sales data down a column or across a row. A range also can include multiple columns or rows of information. The *address* or *reference* for a range includes the address for its upper-left cell, a : (colon), and the address for its lower-right cell, as in F10:H25. If you refer to Figure 1.12, the range D5:D14 holds the Total amount for each order. The range A7:E7 holds the information for Order 3. And the range A4:E14 holds all the order information, including the labels or headers identifying each column of data.

Selecting a range

Most users prefer to use a mouse to make selections. Just drag diagonally over the range to select it. The bold selection border or cell selector expands accordingly, and shading appears over all the cells within the border. Alternately, you can click the upper-left cell, and then Shift+click the lower-right cell. Figure 1.13 shows an example, with the range of order information selected.



	A	B	C	D	E	F
1	Order Summary					
2	Operator:	name@example.com				
3						
4	Order #	Date	Customer	Total	Disc. %	
5	1	6/20/2023	Ryan	99.99	15%	
6	2	6/20/2023	Miller	129.99	10%	
7	3	6/24/2023	Smith	80.95	10%	
8	4	6/28/2023	Acton	65.25	5%	
9	5	6/29/2023	Ryan	349.58	15%	
10	6	6/29/2023	Casper	79.99	5%	
11	7	6/30/2023	Smith	58.75	10%	
12	8	6/30/2023	Phillips	275.89	5%	
13	9	6/30/2023	Yelton	105.75	5%	
14	10	7/1/2023	Miller	79.99	10%	
15						

1.13 Range A4:E14 is selected.

Caution

This brings up one of my biggest tech writing pet peeves. Some tech content uses the term "click and drag" rather than just drag. By definition "click" means to press and release the mouse button, while "drag" means to press and hold the mouse button while moving the mouse, so a "click and drag" action isn't really possible. To make selections, just drag, please.

If you're out in the field with your laptop, you may not have a mouse with you and may be stuck using the trackpad. I admit it, when it comes to making Excel range selections, I'm pretty trackpad incompetent, so I tend to switch to using keyboard shortcuts to make range selections. Using the keyboard is also more efficient when the range you need to select is wider or taller than the area that can show on-screen at once. Just select the upper-left cell for the range using the method of your choice, and then press and hold the Shift key while using the right and down arrow keys to expand the selection as needed.

If you know the range address for the range you want to select, click in the Name box, type the range address, and press Enter. For example, you could type B2:C7 in the Name box and press Enter to select the range B2:C7.

You also can select a noncontiguous selection. This is a selection that basically includes two or more ranges with space in between them, meaning they are nonadjacent. Select the first range as needed, and then press and hold the Ctrl key while dragging over an additional range or ranges to add with the mouse.

To deselect a range, click any cell on the sheet.

Selecting a row or column

You might select an entire row that contains column labels to apply identical font formatting to all the cells, or you might select an entire column when you want to adjust the column width or fill with a different background color. You also can select multiple rows or columns when needed. To select one or more rows or columns, follow these steps:

1. **Move the mouse pointer over the row or column header for the (first) row or column to select, until the mouse pointer changes to a black right arrow or down arrow.** (See Figure 1.14.)
2. **Perform one of the following actions:**
   - **Click the header for the row or column to select it.**
   - **Drag down to select multiple rows or right to select multiple columns.**

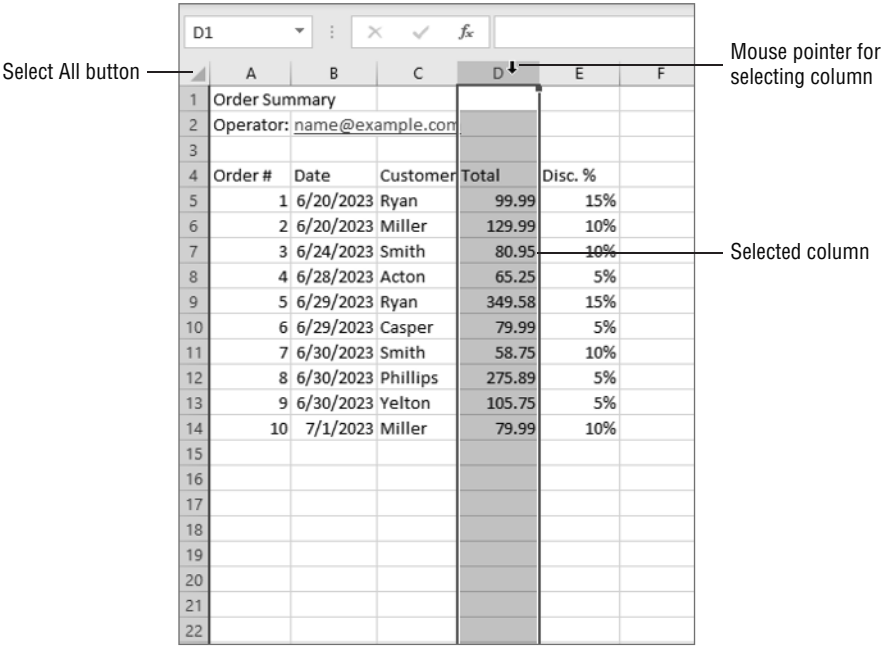


Figure 1.14 You can select one or more rows or columns.

Genius

If you want to select all cells in a worksheet, such as to adjust the formatting for all the cells, click the Select All button. It's in the upper-left corner of the sheet where the row and column headers intersect and has a triangle on it that points to the sheet cells (see Figure 1.14). You also can press Ctrl+A to select all the cells. Depending on the sheet contents, sometimes you need to press Ctrl+A twice to select absolutely every cell.

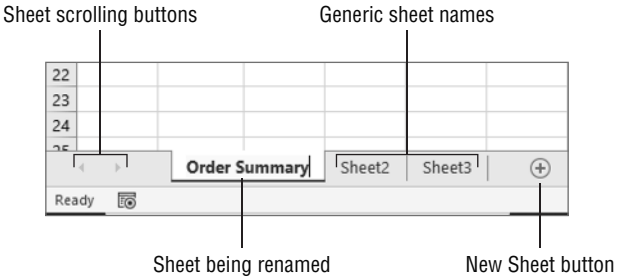
Working with Sheets

In recent versions of Excel, the default number of sheets in a new workbook file is one. Yep, one. That means if you want to expand to other sheets at all, you have to add the sheets into the workbook file. Theoretically, the number of sheets you can add and use in a given workbook file is limited only by the amount of memory in your computer. As a practical matter, unless you're a data scientist or other analyst working with a large data-set like US Census data or world weather data, a typical workbook file for you might need anywhere from a handful to a dozen sheets.

Adding, renaming, and jumping to a sheet

Fortunately, you can add a new sheet to the workbook with a single click. Just click the New Sheet button to the right of the existing sheet tab(s). The new sheet appears immediately. Excel assigns generic names (Sheet1, Sheet2, and so on) as you add sheets. Renaming sheets to use more meaningful names is a good practice, particularly if you will be sharing the workbook file with other users who need to understand what sheet holds which data. Follow these steps to rename a sheet:

1. **Right-click the sheet tab.**
2. **Choose Rename from the shortcut menu.** Instead of Steps 1 and 2, you also can double-click the sheet name to select it.
3. **Type a new name to replace the generic name or any previous name you assigned to the sheet.** Figure 1.15 shows the new sheet name I typed.



1.15 Sheets have generic numbered names until you rename them.

4. **Press Enter.**

To move from one sheet to another, click the destination sheet tab to make it the active sheet. If your workbook file has more sheets (tabs) than can display on-screen at once, the sheet scrolling (arrow) buttons to the left of the first sheet tab become active so that you can scroll the desired sheet into view using one of these techniques:

- Clicking one of the buttons scrolls one tab at a time in the direction of the button arrow.
- Ctrl+clicking either button displays the first or last sheet tab.
- Right-clicking either button opens the Activate dialog box, where you can click the name of a sheet and then click OK to display that sheet.

If you want to see more sheet tabs on-screen at a time, move the mouse pointer over the button that has three dots on it to the left of the horizontal scroll bar. When the mouse

pointer changes into a pair of black horizontal arrows with two vertical lines (also known as a *split pointer*), drag to the right to make more room for tabs.

Genius

You can include multiple similar sheets in a workbook file, such as if you use the same layout to collect sales information from each quarter. After you add the sheets, click the first sheet tab, and then Shift+click the last sheet tab to group the sheets. When sheets are grouped, cell entries or formatting appears in the same locations on the other grouped sheets. (This is sometimes called working with a *3-D selection*.) When finished, right-click a grouped sheet tab and choose Ungroup Sheets.

Moving or copying a sheet

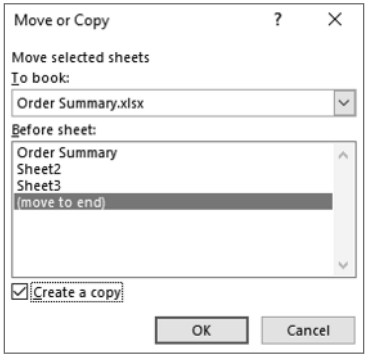
You can move a sheet to change its order among the sheet tabs. Simply use the mouse to drag the sheet tab left or right. As you're dragging, the mouse pointer changes to an arrow with a sheet on it. When the little black triangle above the tabs reaches the desired new sheet location, release the mouse button. Given that moving sheets becomes more difficult if you have to scroll the sheet tabs at all, take the desired sheet order into account when planning your workbook so that you can create your sheets in a solid order from the start.

Copying a sheet presents another opportunity to save data entry and formatting time. These steps lead the way:

1. **Right-click the sheet tab of the sheet you want to copy.**
2. **Choose Move or Copy from the shortcut menu**. The Move or Copy dialog box opens.
3. **Select the Create a Copy check box near the bottom of the dialog box to check it.**
4. **In the Before Sheet list, click the name of the sheet before which Excel should insert the sheet copy, or click (Move to End).** I often use the (Move to End) choice, as shown in Figure 1.16, to build a workbook a sheet at a time.
5. **Click OK.**

Note

You can use the Move or Copy dialog box to move or copy a sheet to another open workbook file. Select the destination file from the To Book drop-down list at the top of the dialog box, and then continue with Step 3 shown previously.



1.16 Copy a sheet to reuse the information you've entered on it.

Saving and Closing a File

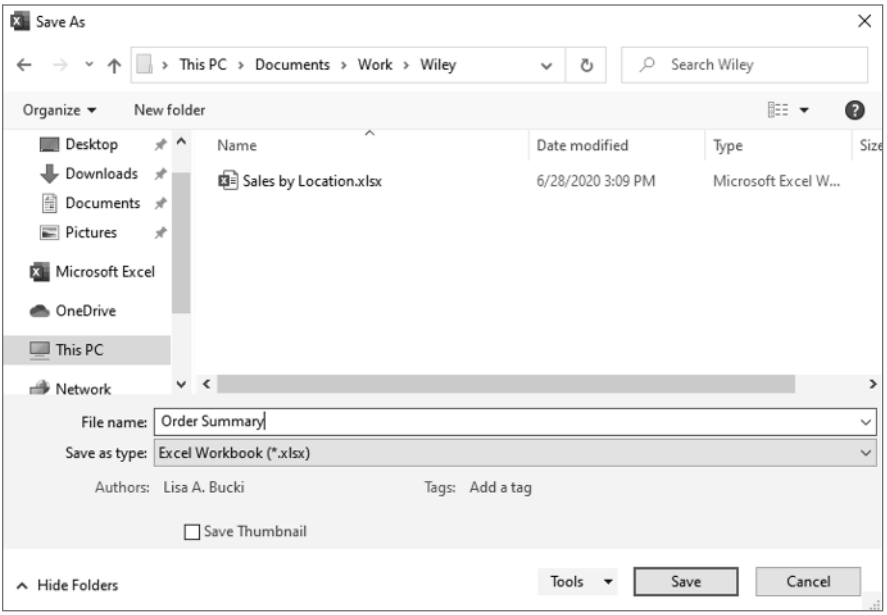
You can save your file and give it a unique name any time after you create the blank file or create a new file from a template. This is your opportunity to establish an orderly system for naming files, just as you should use an orderly system for naming and organizing folders. After all, how are you going to find your work later if you can't navigate to the right folder and don't know what you named the file? For example, if you work with a variety of clients, you could create a folder for each client using File Explorer in Windows 10. Then each file for a particular client could start with a project number and include the client name and year and month, as in *0123 BestClient 2023-06*.

From there, saving a file will seem similar to the process for opening a file covered earlier in this chapter. Follow these steps:

1. **Choose File ➔ Save As.** (You also can choose File ➔ Save the first time you save a file.) The Save As screen that appears again gives you the option of working with recently used folders in the list at the far right or working with the other save locations listed more toward the middle. Again, I'm going to stick with the traditional method of using the Save As dialog box. Feel free to explore other methods the screen presents on your own.

2. **Toward the middle, under Other Locations, click Browse.** Because the default save location set in Word options is the Documents folder for your Windows 10 user account, the address that initially appears at the top of the Save As dialog box reads This PC > Documents >.

3. **Use the Navigation pane and file list to navigate to the folder where you want to save the file.**
4. **Edit the name in the File Name text box as desired**. Figure 1.17 shows the Save As dialog box.



1.17 Workbook files have generic numbered names until you rename them.

5. **Click Save.**

To resave a file as you periodically add data or make changes, choose File ➔ Save, click the Save button on the QAT, or press Ctrl+S. After saving the file, you can choose File ➔ Close to close the file without exiting Excel.

Another Way to Save

When you save a new file for the first time, clicking the Save button on the QAT or pressing Ctrl+S works a bit differently than the File ➔ Save or Save As command. A Save This File window opens. You can enter a name in the File Name text box and then choose a default or recently used location from the Choose a Location drop-down list. (For at least one of my Microsoft 365 accounts, the default location listed is OneDrive in this list.) After choosing a location, click the Save button. This can be a good route for saving new files if you frequently save to the default location or one or two other folders.