

- » Getting oriented in Excel
- » Creating and saving workbooks
- » Working with spreadsheet templates
- » Entering and editing data
- » Sharing workbooks with others

Chapter **1**

Getting Started with Spreadsheets

Orienteering is an outdoor sport where participants navigate between waypoints on an unfamiliar course using nothing but a map and a compass. Think of it as a real-world treasure hunt — except instead of gold, you might find a mud puddle or a tree you're pretty sure you've seen before. If that sounds a little too outdoorsy, consider the IKEA alternative: winding through an endless maze of bookshelves and meatballs, desperately searching for the exit.

Unlike both of those scenarios, this Excel adventure won't leave you lost or questioning your life choices. No map, no compass — just a series of waypoints to guide you through the wilds of worksheets:

- » Using screenshots to draw your attention to various parts of Excel
- » Entering and editing data in an Excel worksheet
- » Creating and saving Excel workbooks, both from scratch and by way of prebuilt Excel templates
- » Sharing spreadsheets, collaborating in real-time, and keeping the conversation going

Our first stop is a Rosetta Stone of sorts, decoding what you're seeing onscreen when you launch Excel.

Exploring Excel's User Interface

Whenever you launch Excel, it eagerly greets you with a blank workbook featuring a single worksheet tab — like a fresh notepad just waiting for you to scribble all over it. You also see a tabbed menu interface across the top that Microsoft insists on calling the ribbon — because apparently “menu bar” wasn't fancy enough. The ribbon includes a set of static tabs, along with other contextual tabs that pop up when Excel deems them necessary (whether you agree or not). Just above this ribbon spectacle sits a collection of icons known as the Quick Access Toolbar — your personal stash of frequently used commands, which I cover in the “Customizing the Quick Access Toolbar” section later in this chapter.

Below the ribbon, shown in Figure 1-1, you see a row composed of three sections, because two wouldn't be enough, and four would be excessive:



TIP

» **Name Box:** Most users rely on this area to see the address of the currently selected worksheet cell.

You can do a surprising number of things in the Name Box — more than two dozen! No need to feel overwhelmed; think of this as a peek into just how much Excel can do. Chapter 11 provides more details.

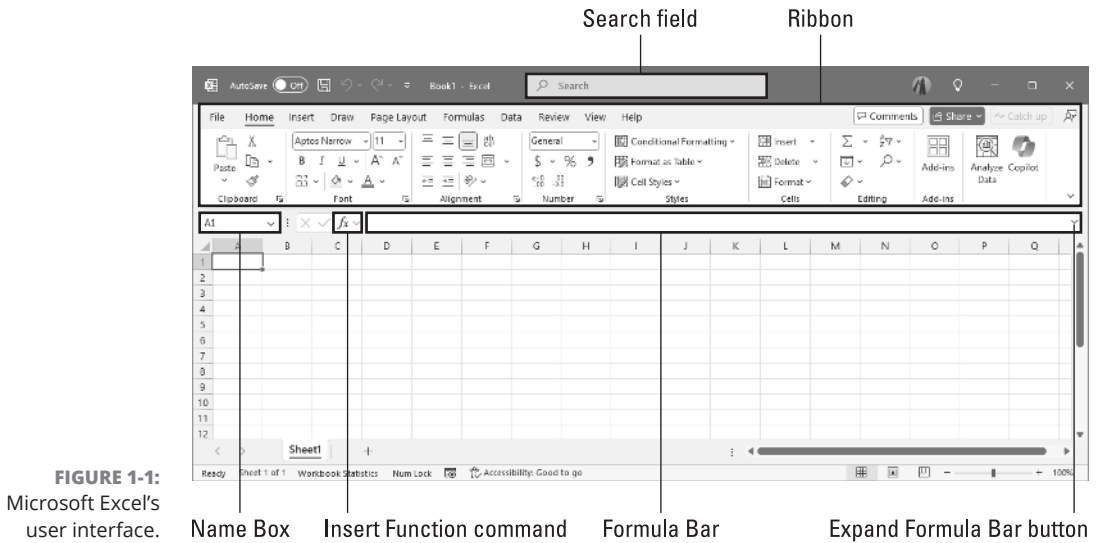
» **Insert Function button:** Excel's real power comes from its hundreds of worksheet functions, which let you crunch numbers from simple sums to complex calculations using inputs called arguments. Clicking this button opens a search-friendly dialog box, followed by another that walks you through building the formula step by step. The “Leveraging worksheet functions” section later in this chapter offers a straightforward way to get started.

» **Formula Bar:** This expandable section shows what's inside the selected worksheet cell. If a cell has a formula, you see the result in the cell, while the Formula Bar reveals the formula itself. You can edit cell contents directly in the formula bar or within the cell itself. To do so, double-click on a cell or press F2 (Windows) or Cmd+U (macOS).



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Cells can contain up to 32,000 characters, including text, numbers, symbols, non-printable characters like carriage returns, or formulas.



The Expand Formula Bar button sits on the right-hand side of the Formula Bar. Clicking it — or pressing Ctrl+Shift+U (Windows) or Cmd+Shift+U (macOS) — expands the Formula Bar to show up to 11 rows. Just keep in mind that this reduces the number of visible worksheet rows. You can also resize the Formula Bar by dragging its bottom edge, balancing the need to see more cell contents and keeping more of the worksheet in view.

Below the Formula Bar lies the worksheet grid, made up of a fixed number of rows and columns. Rows are numbered from 1 to 1,048,576, while columns follow a lettered system: A through Z for the first twenty-six, AA through AZ for the next set, continuing on until the final column, XFD.



Every worksheet contains 1,048,576 rows and 16,384 columns — over 17 billion cells in total — giving you plenty of room to get lost in data.

Traversing the ribbon

The ribbon in Excel is divided into two groups: the headliners — main tabs that are always present — and the special guests, known as tool tabs. The rock star tabs that never leave the road, er screen, include:

- » **File:** Opens the Backstage View, where Excel handles all the behind-the-scenes business — opening, saving, printing, sharing workbooks, and tweaking settings.



- » **Home:** There's no place like the Home tab — it's where Excel keeps the most-used commands for formatting, editing, sorting, and filtering. Check here before you start clicking around like a lost tourist.

If all those icons are starting to blur together, think of ScreenTips as little cue cards. Hover over any ribbon or toolbar command, and Excel will remind you what it does. Windows users even get keyboard shortcuts — macOS users, not so much.

- » **Insert:** Think of this as Excel's "Add Stuff" tab. Drop in PivotTables, PivotCharts, and slicers (see Chapter 12), or spice things up with shapes, images (safe-for-work only, please), and text boxes (see Chapter 3).
- » **Page Layout:** Fine-tunes how your worksheet looks when printed — margins, scaling, and other settings that help you wrestle Excel into submission — *on paper, at least* (see Chapter 3).
- » **Formulas:** The command center for Excel's number-crunching wizardry. Dig into function libraries, troubleshoot formulas, and tweak calculation settings — because sometimes, Excel needs a little nudge to do the math right (see Chapters 6 through 10).
- » **Data:** Where Excel turns into a data-guzzling machine. The Get & Transform Data and Queries & Connections sections let you pull in info from just about anywhere using Power Query (see the bonus chapter "Automating Data Transformation with Power Query" available at www.dummies.com/go/excel1fd). The Data Types feature (see Chapter 15) adds self-updating "smart" cells — because why settle for static data that just sits there? The rest of the tab wrangles sorting, filtering (see Chapter 4), and what-if analysis, like scenario management (see Chapter 18).
- » **Review:** This tab is like Excel's safety net — catching typos, flagging accessibility issues (see Chapter 3), adding comments (see the "Collaborating with Others" section of this chapter), and locking down spreadsheets to protect them from *ahem* enthusiastic but error-prone users (see Chapter 14).
- » **View:** The toolkit for controlling what's visible in Excel. Freeze rows and columns in place (see Chapter 4), switch between custom views and adjust zoom levels (see Chapter 11), or step into the world of automation with macros and Excel's Macro Recorder (see Chapter 16). Because sometimes, seeing is believing.
- » **Help:** Need somebody? Not just anybody? This tab (or, on macOS, the Help menu) connects users to support resources, troubleshooting information, and usage tips for Excel — so you can get by with a little help from this tab (or menu).

SEARCHING EXCEL'S MENUS

If you're feeling adrift, get back on firm ground with Excel's multipurpose Search feature. Access it in one of the following ways:

- Click the Search field in Excel's title bar.
- Press Alt+Q (Windows) or Cmd+Ctrl+U (macOS).

Choose from suggestions based on recent or common actions, or start typing to generate a dynamic list of commands. To search within the worksheet, enter a term and select Find in Worksheet (Windows) or Find (macOS).

A second Search the Menus field appears when you right-click the worksheet frame or any cell. This search is limited to ribbon commands — use Find instead when hunting for data (covered in Chapter 11).



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Depending on your rights and licensing, the Automate tab may appear, granting access to Office Scripts for automating repetitive tasks with JavaScript-based scripts. Any user can enable the Developer tab, packed with tools for creating and editing macros (see Chapter 16) — perfect for those ready to tinker under Excel's hood.

Despite its name, the ribbon isn't particularly fluid — the built-in commands refuse to budge. If it's making you feel tied up in knots, cut through the clutter by adding new command groups to existing tabs or creating entirely new tabs. Here's how to try your hand at menu design:

1. Open the Customization dialog box:

- **Windows:** Choose File ⇨ Options ⇨ Customize Ribbon or right-click the ribbon and select Customize the Ribbon (opens the Excel Options dialog box).
- **macOS:** Choose Excel ⇨ Preferences ⇨ Ribbon & Toolbar (opens the Ribbon & Toolbar dialog box).

2. Show or hide tabs by toggling the checkboxes in the Customize the Ribbon list.

3. Edit an existing tab:

- a) Select a tab from the Customize the Ribbon list (defaults to Main Tabs). Select Tool Tabs or All Tabs to explore further.
- b) Click New Group (+ then New Group on macOS) to add a custom group.

- c) **Rename it by clicking Rename (. . . then Rename on macOS).**
 - d) **Add commands by selecting them from the Choose Commands list and clicking Add >> (> on macOS). Use << Remove (< on macOS) to remove commands.**
4. **To create a new tab, click New Tab (+ then New Tab on macOS), then rename it and add groups and commands as needed.**

Here's a peek at some of the tool tabs that may make special appearances — stepping on stage when a task calls for them:

- » **Header & Footer:** This tab takes the stage when you decide what should grace the top or bottom of each page — because every sheet deserves a proper introduction and a grand finale (see Chapter 3).
- » **Analyze:** This tab steps into the spotlight for PivotTables and PivotCharts (see Chapter 12), giving you tools to connect, explore, and wrangle your data.
- » **Design:** This tab makes a stylish appearance when you select a cell in an Excel table (see Chapter 5), a PivotTable, or click on a chart or PivotChart (all covered in Chapter 12). While “Design” may not always be in the name, similar variations appear for Sparklines, slicers, and Timelines (you guessed it, all in Chapter 12).
- » **Format:** This feature-specific tab appears for charts, PivotCharts, shapes, and images — because sometimes your data needs a little wardrobe upgrade.
- » **Query:** This tab enables you to edit, load, reuse, combine, and share data connections through Power Query — because why do the heavy lifting when you can make Excel do it for you? See the bonus chapter “Automating Data Transformation with Power Query” (available at www.dummies.com/go/excel fd).



Enterprise and government users can — and frankly should — enable the Inquire add-in. This powerhouse of a tool helps document workbooks, compare workbook versions, and fine-tune performance, making it a must-have for anyone wrangling complex spreadsheets.

Customizing the Quick Access Toolbar

The Quick Access Toolbar is like Excel's junk drawer — full of useful stuff, but only if you take the time to set it up. You can stash your favorite commands above or below the ribbon. By default, it includes AutoSave, Save, Undo, and Redo, which I cover later in the chapter. In Excel for Windows, tapping Alt turns your screen

into an eye chart of alphanumeric shortcuts for every command on the toolbar and ribbon — macOS users must use their mouse. To make it your own:

» **Add a single command:**

- **Windows:** Right-click a ribbon command and select Add to Quick Access Toolbar
- **macOS:** Unfortunately, you can't add commands on the fly, but you can use the Finetuning instructions

» **Finetuning:**

- **Windows:** Go to File ⇨ Options ⇨ Quick Access Toolbar to open the Excel Options dialog box.
- **macOS:** Go to Excel ⇨ Preferences ⇨ Ribbon & Toolbar to open the Ribbon & Toolbar dialog box.

From there, you can shuffle icons, relocate the toolbar, and decide whether command labels should appear as ScreenTips.

» **Starting over** (if your customizations spiral into chaos):

- **Windows:** In the Excel Options dialog box, click Rest and choose whether to restore just the Quick Access Toolbar or reset all ribbon customizations.
- **macOS:** Click . . . in the Ribbon & Toolbar dialog box then reset the toolbar or include the ribbon in your do-over.



You already know that Ctrl is the go-to key for most keyboard shortcuts in Windows. Alt has some quirks, especially when numbers get involved. Tapping Alt lets you trigger Quick Access Toolbar shortcuts using either the number pad or the numbers row up top. However, hold down Alt while pressing a number on the number pad summons special characters instead — like Alt+7 giving you a bullet (•). Other numbers conjure up different symbols, which is either a handy trick or an unexpected detour, depending upon what you are trying to do.

One of my favorite areas to explore is Commands Not in the Ribbon list within the Choose Commands From list. This hidden trove contains hundreds of commands left off the ribbon — either due to space constraints or feature deprecation. Here are a few gems I often add to my Quick Access Toolbar:

- » **AutoFilter:** A one-click wonder that filters a normal range of cells based on whatever's in the selected cell. But don't get any wild ideas — this trick doesn't work within Excel tables (see Chapter 5).

- » **Custom Views:** Think of this as Excel's version of quick-change artist, letting you swap between saved worksheet and workbook layouts. I cover Custom Views in Chapter 11.
- » **Full Screen:** Clears away the ribbon, Formula Bar, and Status Bar so you can focus on your data — or just make Excel look extra dramatic. Press Escape to bring everything back.



TIP

The Customize Quick Access Toolbar drop-down lets you decide whether to apply changes For All Documents (customizing the toolbar on this device) or for a specific workbook. Workbook-specific toolbars stick with the file, so they can follow you to other computers — like a loyal sidekick.

Activating worksheets

Chapter 11 takes a deep dive into navigating worksheets and workbooks, so I'll keep things brief here. Each document you create in Excel is called a workbook, which consists of one or more worksheets — each represented by a tab at the bottom of the worksheet grid. Think of worksheets as pages in a ledger, neatly (or not so neatly) organized within your workbook.

Here are a few ways that you can activate a worksheet tab:

- » **Click the tab:** Simple and straightforward.
- » **Sheet navigation arrows:** Found just above the Status Bar, these let you nudge the visible tabs to the left or right — provided you have more tabs than can fit comfortably on screen.
- » **Activate dialog box:** Right-click the sheet navigation arrows to summon the Activate dialog box (Figure 1-2). Pick a worksheet from the list and click OK — or double-click a sheet name to skip the extra step.



REMEMBER

The Activate dialog box only lists visible worksheets — so if a sheet is playing hide-and-seek, it won't show up there. To track down hidden worksheets, use the Navigation task pane (covered in Chapter 11). For more on making sheets disappear (or reappear), check out the upcoming “Hiding or unhiding worksheets” section.

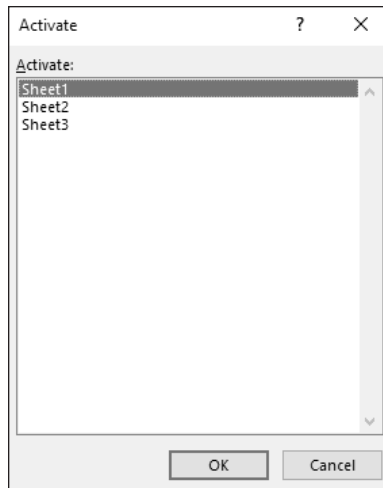


FIGURE 1-2:
The Activate
dialog box.

Exploring the Status Bar

The Status Bar — Excel’s command center that hides out in plain sight — keeps you in the loop with various feedback mechanisms and quick-access tools. Here’s a rundown of the default options (as shown in Figure 1-3):

» **Cell Mode Indicator:** Your cell’s current mood, expressed in one word:

- **Ready:** Just sitting there, minding its own business.
- **Enter:** Actively receiving data or a formula.
- **Point:** Waiting for you to pick cells for a formula, like a kid in a dodgeball lineup.
- **Edit (Windows Only):** Mid-editing, hoping you don’t regret your choices.

Chapter 17 gets into the nitty-gritty of Enter, Point, and Edit modes.

» **AutoFilter Status:** Tells you how many records match your filter criteria — so you’re not left wondering why half your data mysteriously vanished. Filtering gets the full treatment in Chapter 4.

» **Calculate Status:** Signals that some values may be outdated because Automatic Calculation is turned off or when Excel enters Manual Calculation mode due to a large data set. Clicking it or pressing F9 (Windows only) recalculates outdated formulas in the open workbook.

Press Ctrl+Alt+F9 (Windows) or Cmd+Shift+= (macOS) to force a full recalculation of all formulas across all open workbooks. Windows users can also press Ctrl+Shift+Alt+F9 to rebuild the dependency tree — an internal structure that tracks relationships between formulas and the cells they reference — and



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then recalculate everything. Mac users can achieve a similar result by toggling Manual Calculation mode (via Excel ⇨ Preferences ⇨ Calculation) and then switch back to Automatic to force a full recalculation.

Unlike most Status Bar features, the AutoFilter and Calculate settings cannot be toggled on or off — they appear only when relevant, like pop-up guests in your spreadsheet party.

» **Accessibility Assistant:** Indicates if an accessibility issue has been detected — click the icon to open the Accessibility Checker (Chapter 3) where you can review and fix potential concerns so that your workbook is inclusive and easy to navigate for all users.

» **AutoCalculate Functions:** Instantly crunches numbers when you select multiple cells, serving up average, count, numerical count, minimum, maximum, and sum — like a tiny data butler.

Click any calculation in the Status Bar to copy the value to the clipboard, letting you paste it elsewhere like the Excel wizard you are.



TIP

» **View Modes:** Located out on the right-hand side, these buttons let you switch between Normal (standard spreadsheet view), Page Layout (Excel's best guess at how your data will break across pages), and Page Break Preview (a true print preview, complete with headers and footers, so you can see exactly what will make it on the printed page).

» **Zoom Slider:** Don't worry, this won't pull you into yet another online meeting. Located on the far right, this lets you zoom in until your data takes over the screen or zoom out until it vanishes into microscopic oblivion. In Windows, percentage zoom level appears next to it — click the number to open the Zoom dialog box for precise control.

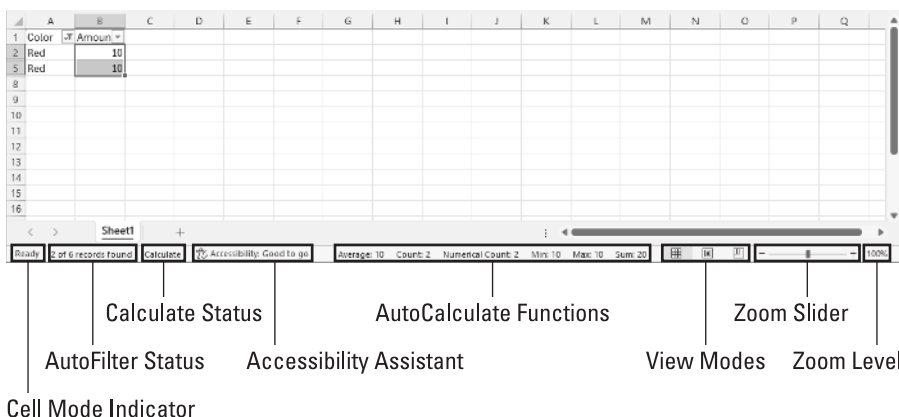


FIGURE 1-3:
The Status Bar.

You can customize the Status Bar by turning features on or off. Just right-click anywhere on it and toggle the options you want. For example, I often disable the Zoom Slider because I inevitably graze it while using the horizontal scroll bar — instantly throwing my worksheet into either billboard mode or microscopic territory, neither of which is particularly helpful. Other options you may wish to enable include:



WARNING

- » **Sheet Number:** Displays where the current worksheet stands in the lineup — along with the total number of sheets in the workbook. It's a handy way to confirm whether you're on Sheet 3 of 27 or just hopelessly lost.
- » **Workbook Statistics:** Click to open a dialog box that provides a quick summary of key details of the workbook, including the number of sheets, cells with data, tables, charts, and more.
- » **Caps Lock, Num Lock, Scroll Lock Indicators:** Letting you know if you've purposefully engaged one of these settings — or if you're typing LIKE YOU'RE SHOUTING and wondering why.

Scroll Lock is Excel for Windows's little gremlin, waiting for the perfect moment to ruin your day. When active, the arrow keys stop moving the selection and instead sends the whole worksheet gliding around like a greased-up air hockey puck. To disable it, press ScrLk again — if your keyboard even has one. If not, search for “On-Screen Keyboard” in Windows, and click ScrLk to wrestle back control.

- » **Macro Recording:** When enabled, a button appears that allows you to start or stop the Macro Recorder — because why not make Excel do the heavy lifting? More on that in Chapter 16.

Entering and Editing Data

If you're itching to create a spreadsheet from scratch, you're in luck — after touring the Excel interface, it's time to build a simple task tracker. This example introduces basic data entry, formatting, and formulas while providing a preview of features explored in more detail later in the book.

Starting a task tracker

Here's how to get started with building a task tracking spreadsheet:

1. **Add the following column titles (referred to as headers in Excel) to a blank Excel worksheet — if you don't already have one open, try closing**

and reopening Excel, or check the “Creating new workbooks” section later in this chapter:

- **Cell A1:** Task
- **Cell B1:** Due Date
- **Cell C1:** Priority
- **Cell D1:** Status
- **Cell E1:** Time Spent (Hours)



TIP

Column headers organize data, make the spreadsheet easier to read, and improve ease of use with certain Excel features, such as sorting lists (Chapter 4) and report writing with PivotTables (Chapter 12).

2. Enter the following example tasks (inspired by “The Jersey Shore”) into the cells below:

- **A2:** Gym
- **A3:** Tan
- **A4:** Laundry
- **A5:** Party

3. In column B, add due dates for each task:

- a) Type 1/1 (the one day of the year that some folks actually go to the gym) in cell B2, then press Enter.**

In unformatted cells, Excel converts entries in m/d or mm/dd format to d-mmm, with the hidden year defaulting to the current year. To display the full date in m/d/yyyy format, select Home ⇄ Number Format drop-down ⇄ Short Date.



TIP

Applying the Short Date format in advance to cells allows you to save keystrokes by omitting the year for dates within the current year.

- b) Type 04/01/2026 in cell B3, then press Enter.**

Excel pranks you by dropping the leading zeroes — see Chapter 2 for how to display them if needed.

- c) Overwrite the values in cells B2:B3 with yesterday’s date and today’s date, respectively, using the m/d format.**

Excel adds the current year automatically since both cells have date formats applied.

- d) Drag the Fill Handle from B2, shown in Figure 1-4, to cell B5 to fill the series of dates.**



TIP

To create a series of month-end dates, enter two consecutive month-end dates in adjacent cells, select both, and then drag the Fill Handle down. Excel will recognize the pattern and extend it accordingly. This works for any data where Excel can identify a logical sequence.

4. Use column C to track priority:

- **C2:** High
- **C3:** Medium
- **C4:** Low
- **C5:** High



TIP

As you may have noticed in cell D5, Excel can autofill entries based on similar entries within the current column of the current region ⇄ simply press Enter when the desired entry appears after typing matching characters.

5. Use column D to track status:

- **D2:** Completed
- **D3:** In Progress
- **D4:** Pending
- **D5:** Never Ending



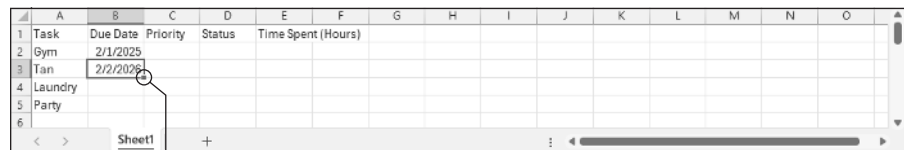
TIP

Chapter 14 covers creating in-cell drop-down lists with the Data Validation feature, streamlining data entry and ensuring consistent inputs.

6. Use column E to track hours:

- **E2:** 2
- **E3:** 1.5
- **E4:** 3
- **E5:** 4

FIGURE 1-4:
Use the
Fill Handle.



Fill Handle

Applying basic formatting

A common next step is to dress up data:

1. Select the header cells (a necessary step before applying formatting):

- **Mouse action:** Click once on cell A1, hold down the left mouse button, and drag across to cell E1.
- **Keyboard action:** Use the Up Arrow key to return to cell A1, hold down Shift, and the Right Arrow to select across to cell E1.



TIP

To select the entire contiguous block of cells that surround the active cell, press Ctrl+A (Windows) or Cmd+A (macOS) to select the current region. If you press the shortcut again, Excel selects the entire worksheet.

2. Apply basic formatting (see Chapter 2 for more advanced formatting options):

- **Bold:** Choose Home ⇨ Bold or press Ctrl+B (Windows) or Cmd+B (macOS).
- **Underline:** Choose Home ⇨ Underline or press Ctrl+U (Windows) or Cmd+U (macOS).



TIP

Some commands, such as Underline, include a drop-down button that provides additional functionality, such as the Double Underline command.

- **Center:** Choose Home ⇨ Center to align the text in the center of each cell. While there's no built-in shortcut, see the “Customizing the Quick Access Toolbar” section earlier in this chapter to create your own.

Many formatting commands function as toggles, such as Bold or Underline, while others require selecting an alternative option, such as Left Align when choosing not to center text in a cell.

3. Select cell E1, then choose Home ⇨ Wrap Text.

Excel automatically adjusts the row height to ensure all data within the cell is visible.

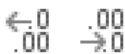
Line breaks for wrapped text are based on the column width. To insert a manual line break, press Alt+Enter (Windows) or Option+Return (macOS).



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4. To format the hours with two decimal places, select cells E2:E5, and then choose Home ⇨ Comma Style.

If necessary, adjust the decimal places by clicking Home ⇨ Increase Decimal or Home ⇨ Decrease Decimal.



5. To adjust the width of column D, click the letter D at the top of the worksheet to select the entire column, and then go to Home, and then choose Home ⇨ Format ⇨ AutoFit Column Width.



REMEMBER

Sometimes Excel misinterprets your intent. For example, selecting cell D4 and choosing Home ⇨ Format ⇨ AutoFit Column Width *reduces* the column width to fit the seven characters in Pending, instead of displaying Never Ending in full, as you might have expected. To avoid this, select the entire column or the relevant range first, or double-click the column's right edge when the double-headed arrow appears to auto-fit to the widest cell contents. See Chapter 3 for more on adjusting column widths.

Leveraging worksheet functions

Worksheet functions are Excel's built-in magic tricks — prepackaged formulas that crunch numbers, manipulate data, and make your life easier. They work by using specific values called arguments, which you feed into the function like ingredients in a recipe. Whether you're doing simple math or wrangling a monster-sized data set, these functions have your back. You'll find them hanging out in the Function Library group of the Formulas tab of the ribbon. Some standout examples include:

- » **Arithmetic:** SUM, AVERAGE (Chapter 2)
- » **Lookups:** VLOOKUP, HLOOKUP, XLOOKUP (Chapter 6)
- » **Text manipulation:** UPPER, LOWER, TEXTSPLIT, SUBSTITUTE (Chapter 7)
- » **Logical operations:** IF, IFS, SWITCH, CHOOSE (Chapter 8)
- » **Data analysis:** UNIQUE, SORT, FILTER (Chapter 9)



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Most worksheet functions are a single string of alphanumeric characters, but some functions come in two parts separated by a period, followed by parentheses. Most worksheet functions require at least one argument — a cell reference, text, numbers, or another even formula — neatly tucked inside the parentheses like a well-wrapped data burrito.

For instance, the SUM function is an ideal way to add a total to cell E6. This can be done in two ways. The first is using the AutoSum command:

1. **Select the cell where the total should appear; for example, E6.**
2. **Choose Home ⇨ AutoSum.**

The second way is to use a manual formula:

1. **Type =SUM(in cell E6 to start the formula.**
2. **Select cells E2:E5 using one of these methods:**

- Drag the mouse across E2:E5
- Use the Up Arrow key to navigate to cell E5, hold Shift, then navigate to cell E2
- Manually type E2:E5 or E5:E2

3. Type `)` to close the formula, and then press Enter.

Using either approach, the completed formula `=SUM(E2:E5)` appears. The SUM function has 255 arguments, but most users only use the first one:



REMEMBER

» **number1:** The first range or amount to include in the total, for example, E2:E5.

» **number2..255:** Optional additional ranges or amounts.

Always reference cell ranges when possible, such as `=SUM(E2:E6)` instead of going full-on manual with `=SUM(E2,E3,E4,E5)` or, worse, writing a formula that screams inefficiency `=SUM(E2+E3+E4+E5)`. Using a range ensures that if you insert a row between rows 2 and 5, the new value is automatically included in the total — sparing you from a future forehead-smacking moment when your total is mysteriously off.



TIP

» The Table feature (Chapter 5) includes a Total Row option, which creates total rows without manual formulas — and better yet, it automatically updates when additional amounts are added to the list. No extra effort (or forehead-smacking) required!

Here's how to create a slightly more complex formula:

1. **Type Completion % in cell G1.**
2. **Add this formula to cell G2:** `=COUNTIF(D2:D5, "Completed") / COUNTA(A2:A5)`.

The COUNTIF function (Chapter 8) counts the number of instances of the word “Completed” in cells D2:D5, while the COUNTA function counts the number of non-blank cells in A2:A5. As covered in Chapter 2, the / operator performs division.



REMEMBER

Similarly named worksheet functions can return wildly different results, so don't let Excel lull you into a false sense of security. Take COUNT, for example — it only tallies up numeric values, meaning `=COUNT(A2:A5)` would return a big fat zero if the range contains nothing but text. So, if you were expecting a number and got ghosted instead, now you know why.

%

3. **Select cell G2 and then choose Home ⇨ Percent Style to format the result as a percent.**

Handling Workbook Operations

As noted earlier in this chapter, launching Excel conjures up a blank workbook featuring a single worksheet tab. You can dive straight into data entry or open an existing workbook instead. If you open an existing workbook, Excel discreetly sweeps that initial blank workbook away, like a magician making a coin disappear, no dramatic hand flourish required. Because you've likely put some effort into building a worksheet, let's make sure it's saved for later use.

Saving Excel workbooks

The more time I spend working, the greater the odds a workbook will mysteriously close without saving. It's all too easy to get lost in a spreadsheet rabbit hole and forget to hit save — until it's too late. If you're used to online tools like Google Sheets, Excel's file management can feel like a rude awakening when you realize your hard work isn't automatically preserved. Here's how to make sure that doesn't happen:



TIP

» **File menu:** Choose File ⇨ Save or Save As. If you've already saved the workbook, Save updates the existing version, while Save As allows you to save a copy under a new name.

If you save your workbook to OneDrive or SharePoint, you can toggle AutoSave on via the Quick Access Toolbar. Once enabled, your work is automatically saved every few seconds to a minute, ensuring you don't lose progress — even if Excel (or life) throws a curveball.



» **Quick Access Toolbar:** Click Save or tap the Alt key in Windows and then type the shortcut that appears in a screentip.

» **Keyboard shortcut:** Press Ctrl+S (Windows) or Cmd+S (macOS). If you've already saved the workbook at least once, this shortcut updates the saved version. Otherwise, it opens the Save As dialog box, allowing you to specify the name and location for the workbook.



TIP

Chapter 18 details ten disaster recovery techniques that, with any luck, you should never need. Spoiler alert: One of the best defenses is to save your work to a cloud-based drive like OneDrive.

Opening existing workbooks

Excel doesn't expect you to start from nothing each time — you can open an existing workbook in a couple of ways:

- » **Menu commands:** Choose File ⇨ Open ⇨ Browse (Windows) or File ⇨ Open (macOS) to display the Open dialog box or Finder window, respectively.
- » **Keyboard shortcut:** Press Ctrl+O (Windows) or Cmd+O (macOS) to skip the menu and select a file to open.

You can also check out File ⇨ Home (Windows) or File ⇨ Open Recent (macOS) to browse recent workbooks and folders — because even Excel knows you're just trying to find that file you swore you saved yesterday.

If you have multiple workbooks open, Excel typically shows only one at a time, but you're not stuck with that — you can view more than one simultaneously. Here's how to switch between workbooks or arrange them onscreen:

- » **Keyboard shortcut:** Press Ctrl+Tab (Windows).
- » **View ⇨ Switch Windows ⇨ [Window Name]:** Lists all open workbooks, except the sneaky hidden ones, like the Personal Macro Workbook (covered in Chapter 16).
- » **View ⇨ Arrange All:** Opens the Arrange All dialog, where you can choose how to display your workbooks:
 - **Tiled:** Workbooks arranged in non-overlapping boxes
 - **Horizontal:** Workbooks stacked in rows, one above the other
 - **Vertical:** Workbooks placed in columns, side by side
 - **Cascade:** Workbooks stacked with overlapping windows, like a deck of cards

Creating new workbooks

Need a new workbook? Here are a couple of ways to start fresh:

- » **Menu commands:** Windows users can select File ⇨ Home ⇨ New Blank Workbook or File ⇨ New ⇨ Blank Workbook, while macOS users must choose File ⇨ New.
- » **Keyboard shortcut:** Press Ctrl+N (Windows) or Cmd+N (macOS).

Any of these approaches create a new, blank workbook with a single worksheet tab — a clean slate, ready for whatever data you throw at it.

Using Excel templates

Excel workbook templates are like training wheels for your spreadsheets — ready-made designs spare you from starting from scratch. They also double as cheat sheets for good spreadsheet design, with formatting and formulas baked in to keep things running smoothly. Here's how to grab one:

» File menu:

1. Choose **File ⇨ New (Windows)** or **File ⇨ New from Template (macOS)**.

The Template screen or Microsoft Excel dialog box opens.

2. Scroll through the suggested templates — macOS users have to scroll down more than one screen — or perform a keyword search using the **Search for Online Templates** field (Windows) or **Search** field (macOS).

3. Click any template that seems to be a good match, and then click **Create** to generate a new workbook based on the template.

» **Worksheet tab context menu:** Windows users can right-click any worksheet tab, select **Insert**, choose a template from the **General** or **Spreadsheet Solutions** tabs (shown in Figure 1-5), and click **OK** to add it to the workbook.

» **Microsoft website:** Head over to create.microsoft.com to explore a vast library of templates for Excel and other Microsoft 365 applications.

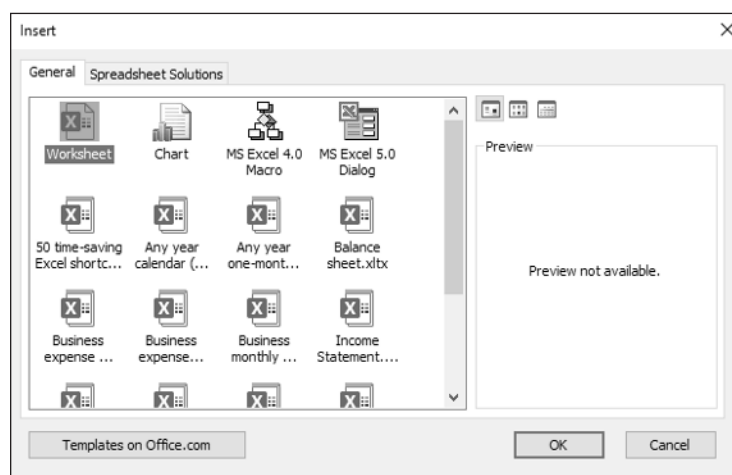


FIGURE 1-5:
The Insert
dialog box.

Managing Worksheet Tasks

Now it's time to dive into the many ways that you can wrangle worksheets within an Excel workbook. A workbook must always have at least one visible worksheet — Excel won't let you delete the last sheet, no matter how determined you are to start from absolute zero. You can rename, insert, remove, move, or copy worksheets, because sometimes spreadsheets need a little rearranging to keep the chaos in check.



TIP

You can perform most of these actions on multiple sheets at once. Check out the upcoming “Grouping Worksheets” section to corral them, because herding unruly worksheets one by one is no way to live.

Renaming Excel worksheets

Each tab name can be up to 31 characters long, but how many tabs you can see at once depends on their length and your screen resolution. Cram in long names, and you'll be scrolling like a hamster on a wheel. Keep them short, and you can fit more in view. You have three ways to rename an Excel worksheet:

- » Choose Home ⇄ Format ⇄ Rename Sheet.
- » Right-click a worksheet tab and then choose Rename.
- » Double-click on a worksheet tab.

Any of these approaches enable you to edit a worksheet tab, which must have at least a single character. Press Enter or click any worksheet cell or into the Formula Bar to apply your change or press Escape if you change your mind.



TECHNICAL
STUFF

The following characters are strictly banned from worksheet names: asterisk (*), colon (:), question mark (?), slashes (\ /), and square brackets ([]). But beyond that, Excel is surprisingly openminded — even emojis are fair game. Try typing an invalid character, though, and Excel won't bother with a warning; it'll just silently toss your keystroke like it never happened.



REMEMBER

Excel won't let you name a worksheet “History” — not because it has a grudge against the past, but because Track Changes has already claimed it. And while we're at it, each worksheet tab must have a unique name within a workbook — no duplicates allowed no matter how much you want two sheets called “Stuff.”

Moving or copying worksheets

You can shuffle worksheets within a workbook just by dragging their tabs to a new spot — if only rearranging your living room were that easy! One of my favorite disaster recovery methods in Excel is duplicating a worksheet — an instant fall-back in case things go sideways. My go-to move for this is holding down the Ctrl (Windows) or Options (macOS) key while dragging a worksheet (or the first worksheet within a group of worksheets) into a new position, creating a copy without the hassle of menu diving. But if you prefer menus:

1. **Right-click the tab of the worksheet you want to move or copy, and then choose Move or Copy. . ., or select the worksheet and choose Home ⇨ Format ⇨ Move or Copy Sheet. . .**

The Move or Copy dialog box appears, as shown in Figure 1-6.

2. **To move the worksheet to another open workbook, select from the To Book list, or choose (new book).**



REMEMBER

You can move or copy worksheets only into a new workbook or an existing workbook that is currently open in Excel — no sneaky teleporting into a closed file.

3. **To specify the worksheet's position, choose a location from the Before Sheet list.**

If no selection is made, the worksheet is moved or copied to appear before the first sheet in the workbook.

4. **To make a copy of the worksheet or worksheets, click the Create a Copy checkbox.**

Excel moves worksheets to the specified or default location if you do not click Create a Copy.



REMEMBER

Moving or copying a worksheet cannot be undone, but other prior actions remain reversible.



WARNING

Take care when moving or copying worksheets between workbooks to prevent data loss. If you choose a destination in the To Book field without selecting Create a Copy, the worksheet is moved, not copied, and removed from the original workbook. The destination workbook becomes active, making it easy to overlook the change. Moving the last worksheet from a workbook causes Excel to close the workbook without a Save prompt.

5. **Click OK to apply the change.**



REMEMBER

If you try to move the first worksheet within a workbook but skip selecting an option from the To Book or Before Sheet fields, Excel just shrugs and does nothing — like a cat refusing to come when you call its name.

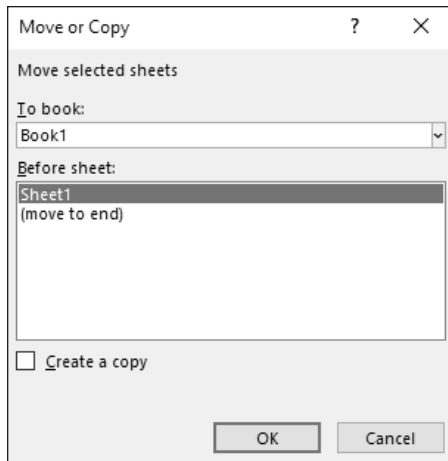


FIGURE 1-6:
The Move or
Copy dialog box.

Adding or deleting worksheets

The number of worksheets that you can add to an Excel workbook depends on your computer's memory — in theory, you can keep adding them until your machine freezes. But just because you can doesn't mean you should. Stuffing a workbook with too many sheets can turn navigation into a nightmare and tank your efficiency. There are four ways to mindfully insert worksheets:



- » Choose Home ⇨ Insert drop-down ⇨ Insert Sheet.
- » Right-click any worksheet tab, choose Insert, then click OK (Windows) or choose Insert Sheet (macOS).
- » Click the New Sheet button that appears just above Excel's Status Bar, and to the right of the furthest onscreen worksheet tab.
- » Press Shift+F11 (Windows) or Fn+Shift+F11 (macOS and some Windows keyboards).



TECHNICAL
STUFF

Pressing F11 (or Fn+F11 if needed) creates a chart sheet, a dedicated worksheet that stores a single chart within your workbook.

You can delete a worksheet in two ways:

- » Choose Home ⇨ Delete drop-down ⇨ Delete Sheet.
- » Right-click on a worksheet tab, and then choose Delete.

Blank worksheets that haven't been edited vanish instantly upon deletion, no questions asked. However, if a worksheet contains any edits, Excel puts on the

brakes and warns you that it is about to be permanently deleted, asking if you're sure you wish to proceed.



WARNING

Deleting a worksheet is irreversible — you can't undo it or any actions taken before its deletion. Once it's gone, it's truly gone.

Hiding or unhiding worksheets

If your workbook contains two or more worksheets, you can hide all but one. Formulas and features that reference hidden worksheets keep working as usual, since hiding a sheet doesn't impact its functionality. Here's how to hide a worksheet:

1. **Right-click on a worksheet tab (or the first worksheet within a group) and select Hide, or choose Home ⇨ Format ⇨ Hide & Unhide ⇨ Hide Sheet.**

The selected worksheet vanishes from view, and you can no longer navigate to it — but don't worry, it's just hiding, not gone for good.



REMEMBER

You cannot undo hiding or unhiding a worksheet — but you can manually reverse the action by unhiding a hidden sheet or hiding it again.

Use the following steps to unhide a worksheet within a workbook:

1. **Right-click on a worksheet tab (or the first worksheet within a group) and select Unhide, or choose Home ⇨ Format ⇨ Hide & Unhide ⇨ Unhide Sheet.**

The Unhide dialog box opens.



REMEMBER

The Unhide command stays grayed out if there are no hidden worksheets lurking in the workbook.

2. **Select a worksheet from the list and then click OK.**

To unhide two or more worksheets, hold down Ctrl (Windows) or Cmd (macOS) and then select the sheet names. To display all hidden worksheets, hold down the Shift key while you click on the last worksheet.



TIP

In Chapter 11, I discuss how you can hide and unhide worksheets via the Navigation task pane.

Grouping worksheets

The Group Sheets technique lets you boss around multiple worksheets at once, applying changes across all selected sheets in one go. It's a huge time-saver when you need to make identical updates to several worksheets, whether it's entering

the same data, applying formatting, or crunching sets of numbers. You can also use this technique to hide multiple worksheets at once — because sometimes data is better left in the shadows. Here's how:

» **All worksheets:** Right-click any tab and choose Select All Sheets.

» **Selected worksheets:**

- **Adjacent worksheets:** Select the first worksheet you wish to group, then hold down the Shift key and click the last sheet in the group.
- **Non-adjacent worksheets:** Hold down the Ctrl (Windows) or Cmd (macOS) key while clicking individual worksheet tabs.

When worksheets are grouped, the word Group appears in Excel's Title Bar, signaling that any changes you make apply to all selected sheets — proceed with caution!

After completing your task, right-click on any worksheet and choose Ungroup Sheets, or simply click on a worksheet tab that isn't part of the group to break up the band, er, selection.



WARNING

Editing grouping worksheets comes with a considerable risk of accidental data loss. Any action performed on one sheet is applied to all sheets in the group, which means you could unknowingly overwrite data in worksheets you're not even looking at. Always double-check that you are working on the intended sheets before making edits while the worksheets are grouped.

Collaborating with Others

Your spreadsheets don't have to be solitary, as Excel makes sharing and collaborating easy. You can email versions back and forth like it's 1999, or you can embrace co-authoring — inviting anyone around the globe to work on your spreadsheet in real time, without the endless email attachments.

Sharing static copies of workbooks

To send a non-collaborative copy of a workbook, choose File ⇨ Share and then choose between the Workbook or PDF options. Workbooks can still be edited in Excel, and changes won't affect your copy. You cannot directly edit PDF files in Microsoft Excel, though. However, in the bonus chapter “Streamlining Data Transformation (available at www.dummies.com/go/excelfd), I discuss how you can extract data from PDF files with Power Query.

Co-authoring simultaneously

Simultaneous co-authoring allows multiple users to work on the same workbook at the same time, making collaboration easy. However, not every workbook is a good candidate. Workbooks containing any of the following features cannot be co-authored:

- » Workbooks saved locally (as opposed to OneDrive or SharePoint)
- » Macros (see Chapter 16)
- » Worksheet or workbook protection (Chapter 14)
- » Legacy data connections (OLAP, Query Tables, Linked Tables)
- » Data Model/PowerPivot

In addition, AutoSave must be enabled. Here's how to get started in Excel for Windows:

1. **In Excel for Windows, open the workbook you wish to share.**
2. **Choose File ⇨ Share or Share ⇨ Share...**

The Share command appears in the upper right-hand corner of the Excel window.

One or two dialog boxes appear. Choose the option you prefer:

- » **Share:** This dialog prompts you to save the workbook to a Microsoft cloud platform, like OneDrive or SharePoint. After you select a platform and name the workbook, the Send Link dialog box appears.

- » **Send Link:** This dialog box contains three sections:

- **Send Link:** Enter email addresses, draft a message, and control access. Use the Can Edit icon to toggle sharing permissions or click Sharing Settings to limit sharing to specific people, set an expiration date, or add a password.

The password that you set here applies only to users with whom you share the workbook and is separate from the workbook passwords that I discuss in Chapter 18. Type this password carefully because you won't be prompted to confirm it.

- **Copy Link:** Click Copy to generate a link to the workbook. Use the Anyone With The Link Can Edit option to manage permissions.
- **Send a Copy:** Choose Excel workbook to share a noncollaborative copy or send the workbook as a PDF.



REMEMBER

If you're on a Mac, choose **File ⇨ Share ⇨ Share** or click **Share**. If necessary, you are prompted to save your workbook to the cloud. After you've done so, choose **File ⇨ Share** or **Share** again, and then choose a sharing option.



REMEMBER

You can spy on changes made by others in real time. Excel highlights the cells being edited and shows the name of the editor. If you want to take control later, in Windows choose **File ⇨ Info ⇨ Manage Workbook ⇨ Manage Access** to update permissions or stop sharing. In macOS, a **Manage Access** command may appear on the **Share** menu, or you may have to manage access via OneDrive.

Commenting collectively

Comments let you leave your brilliant thoughts in a spreadsheet and even invite others to chime in. Here's how to add one:

1. Use one of these methods:

- Right-click on a cell and select **New Comment**.
- Choose **Review ⇨ New Comment**.
- Click **New** in the **Comments** task pane (choose **Review ⇨ Show Comments** if needed).

A comment box appears on the worksheet grid, or in the **Comments** task pane.

2. Type your message and then click **Post Comment** or press **Ctrl+Enter**.

To bring someone into the discussion, use an @mention by typing @ followed by their name. If they do not have access, Excel prompts you to share the workbook with them.



REMEMBER

Your workbook must be saved to OneDrive or SharePoint for @mentions to work.

When a comment is added, a purple indicator appears in the top-right corner of the cell. Hover over or click the cell to display the comment. Any user can add a reply to an existing comment. Replies are threaded, and each comment or reply is tagged with the author's name, helping collaborators track who said what and when.

To view all comments in a workbook, choose **Review ⇨ Show Comments** or click the **Comments** button in the upper right-hand corner of Excel. The **Comments** task pane appears, listing all comments and replies. Click a comment to activate the corresponding cell.

Use any of the following methods to edit a comment:



- » Hover over the cell that contains a comment, and then click Edit Comment.
- » Select a comment from the Comments task pane, and then click Edit Comment.
- » Right-click the underlying cell, and then choose Edit Comment from the context menu.



To mark a comment as resolved, click More Thread Options within the comment or Comments task pane, and then choose Resolve Thread. The in-cell comment indicator turns gray, and the comment is marked as Resolved in the Comment task pane. This keeps the discussion history intact while distinguishing it from active conversations. Click Reopen (which looks like the Undo command) to reactivate a comment.

To delete a comment:



- » Hover over the cell that contains a comment, click More Thread Options then choose Delete Comment.



- » Select a comment from the Comments task pane, choose More Thread Options, and then click Delete Comment.
- » Right-click on the underlying cell, and then choose Delete Comment.



- » Click Delete Thread on a resolved comment in the Comments task pane



TIP

You can filter comments by @mentions, active threads, or resolved threads using the Filter button at the top of the Comments task pane.

NOTES VERSUS COMMENTS

In the good old days of Excel, what's now known as Notes used to be Comments. But here's the catch — Notes are one-way messages, like a sticky note that can't argue back, while Comments let you actually have a conversation. You can tell them apart by their indicators: Active Comments have a purple flag in the top-right corner of the cell, while Notes sport a red triangle in the top-left. Resolved Comments have a gray flag.

To manage your Comments and Notes, head to the Review tab on the ribbon. To upgrade your Notes to Comments, choose Review ⇄ Notes ⇄ Convert To Comments. To print all Comments and Notes, choose Page Layout ⇄ Print Titles, select from the Comments and Notes field of the Sheet tab of the Page Setup dialog box, and then click Print.

