

CCA-101: Fundamentals of IT & Programming

Assignment

Q1: What are the four fundamental parts of computer? Explain it with the help of diagram.

Ans. Block Diagram of Computer

Computer Block Diagram

Mainly computer system consists of three parts, that are central processing unit (CPU), Input Devices, and Output Devices. The Central Processing Unit (CPU) is divided into two parts again: arithmetic logic unit (ALU) and the control unit (CU). The set of instruction is in the form of raw data.

A large amount of data is stored in the computer memory with the help of primary and secondary storage devices. The CPU is like the heart/brain of the computer. The user does not get the desired output, without the necessary option taken by the CPU. The Central processing unit (CPU) is responsible for the processing of all the instructions which are given by the user to the computer system.

Block diagram of Computer

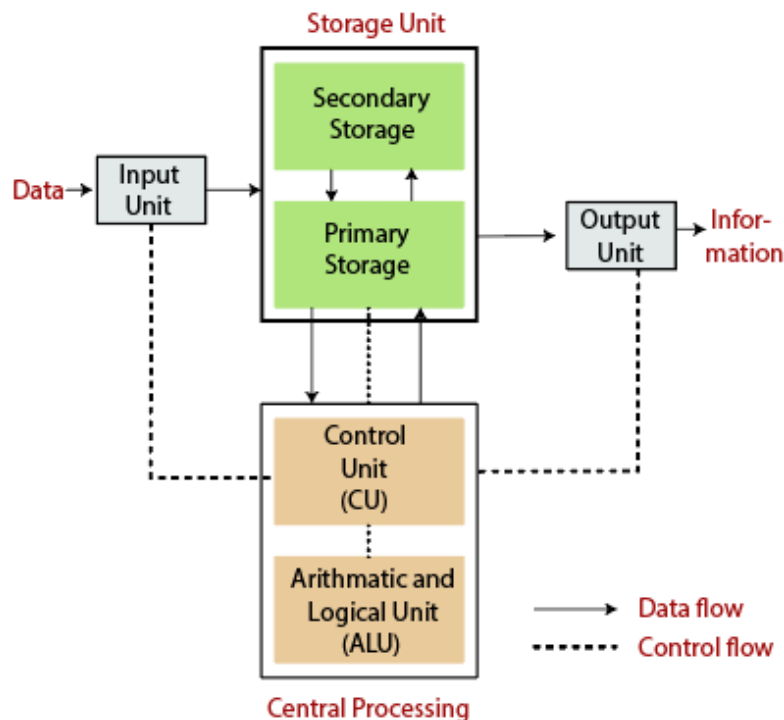


Fig: Block Diagram of the computer.

The data is entered through input devices such as the keyboard, mouse, etc. This set of instruction is processed by the CPU after getting the input by the user, and then the computer system produces the output. The computer can show the output with the help of output devices to the user, such as monitor, printer, etc.

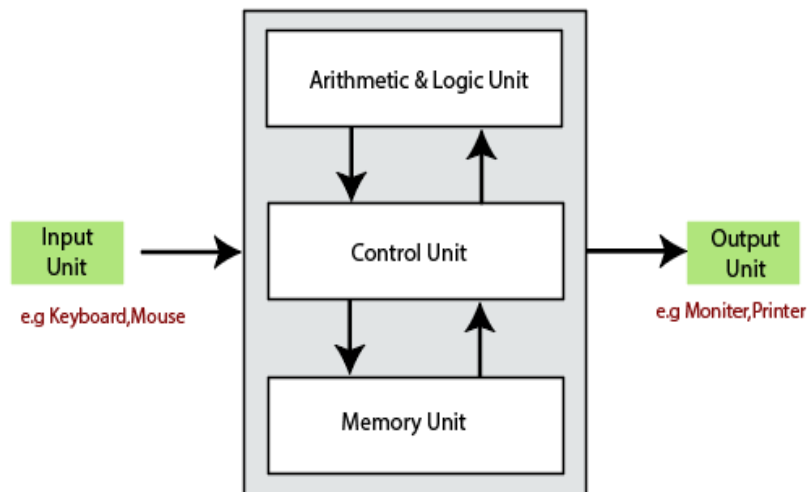
- CPU (Central Processing Unit)

- Storage Unit
- ALU(Arithmetic Logic Unit)
- Control Unit

Central Processing Unit (CPU)

The computer system is nothing without the [Central processing Unit](#) so, it is also known as the brain or heart of computer. The CPU is an electronic hardware device which can perform different types of operations such as arithmetic and logical operation.

Central Processing Unit (CPU)



The CPU contains two parts: the arithmetic logic unit and control unit. We have discussed briefly the arithmetic unit, logical unit, and control unit which are given below:

Control Unit

The control unit (CU) controls all the activities or operations which are performed inside the computer system. It receives instructions or information directly from the main memory of the computer.

When the control unit receives an instruction set or information, it converts the instruction set to control signals then; these signals are sent to the central processor for further processing. The control unit understands which operation to execute, accurately, and in which order.

Arithmetic and Logical Unit

The arithmetic and logical unit is the combinational digital electronic circuit that can perform arithmetic operations on integer binary numbers. It presents the arithmetic and logical operation. The outputs of ALU will change asynchronously in response to the input. The basic arithmetic and bitwise logic functions are supported by ALU.

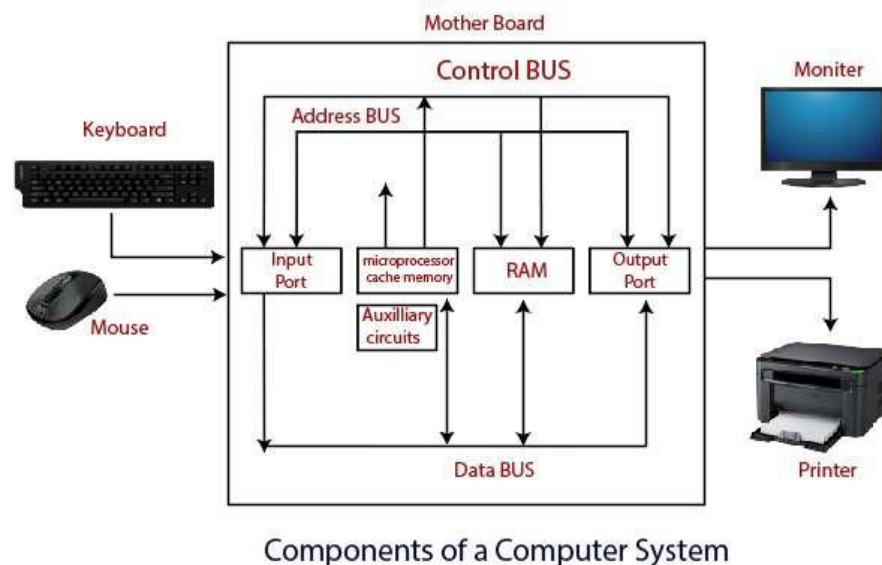
Storage Unit

The information or set of guidelines are stored in the storage unit of the computer system. The storage unit provides the space to store the data or instruction of processed data. The information or data is saved or hold in computer memory or storage device. The data storage is the core function and fundamental of the computer components.

Components of Computer System

The hardware and software exist on the computer. The information which is stored through the device is known as computer software. The hardware components of the computer system are related to electronic and mechanical parts, and the software

component is related to data and computer programs. Many elements are connected to the main circuit board of the computer system called a “motherboard.”



- Processor.
- Main Memory.
- Secondary Memory.
- Input Devices.
- Output Devices.

These are mainly five components of the computer system. The computer hardware, computer software, and liveware exist in the element of the computer system.

Processor

The processor is an electric circuitry within the computer system. The Central processing unit is the central processor or main processor of the computer system. The processor carries out the instructions of the computer program with the help of basic arithmetic and logic, input/output operations.

Main Memory

The Random Access Memory is the main memory of the computer system, which is known as RAM. The main memory can store the operating system software, application software, and other information. The Ram is one of the fastest memory, and it allows the data to be readable and writeable.

Secondary memory

We can store the data and programs on a long-term basis in the secondary memory. The hard disks and the optical disks are the common secondary devices. It is slow and cheap memory as compare to primary memory. This memory is not connected to the processor directly.

It has a large capacity to store the data. The hard disk has a capacity of 500 gigabytes. The data and programs on the hard disk are organized into files, and the file is the collection of data on the disk. The secondary storage is direct access by the CPU; that's why it is different from the primary storage

Q2: Discuss about the classification of computers based on size and capacity.

Ans.

Classification of Computer Based on Size and Capability

Introduction:-

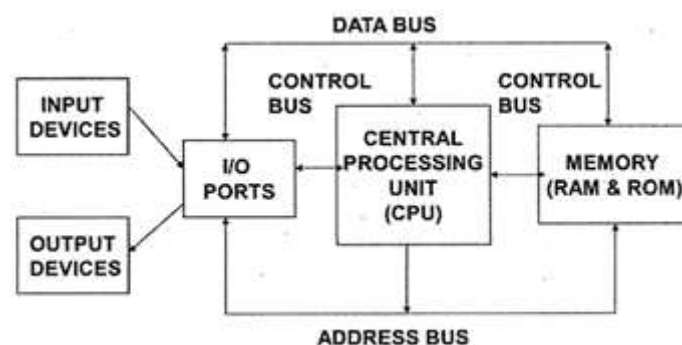
Classification of computers are based on their architecture, speed of executing commands or instructions, peripheral used and also their uses. Microcomputers are usually used in home and offices and only a single user can perform the task using a microcomputer. Its storage and data handling capacity are limited as per the requirement for home and office work. The another type of computer is called minicomputer which has usually larger storage and can handle multiuser at a time. This chapter includes the classification of computers.

Computer's Classification:-

Computers are classified on different parameters, such as, storage capacity, processing speed and component (CPU) used in computers. Depending upon the components used and features of different computers, they are classified into four groups, Microcomputers, Minicomputers, Mainframe computers and Supercomputers.

Micro Computers:-

Micro Computer is a computer whose CPU (Central Processing Unit) is a microprocessor. All the components of a microprocessor are on a single integrated circuit chip. Micro computer can be categorized as the desktop, programmable and workstation. The microprocessor based computers are called third generation computers. They are the backbone of the modern computer era. The first and second generation computers are based on vacuum tubes and bipolar junction transistors.



Desktop Computers

Desktop computer is a type of microcomputer. A desktop computer has a keyboard for input data, a LCD or CRT monitor to display information and Central processing unit tower contains storage, memory, different types of drives, such as, CD drive, hard drive, etc. A desktop computer is mainly used at home and office applications.

Programmable Computers (PDA)

Personal digital assistance is a type of hand held programmable digital computer. It is used as notepads, address books and can connect to world web wave to share information. A PDA is equipped with mobile phone hence, called smallest computer.

Workstation

A workstation computer has greater memory capability and more extensive mathematical abilities. It is connected with other workstation computers or personal computer to exchange data and mostly used for scientific applications. It also supports multitasking applications.

Mini Computers

Minicomputers were introduced in early 1960s. They were faster than micro computers. Basically these computers were mainly multi-user systems, where many users work on the systems. Generally these types of computers had larger memories and greater storage capacity. They had large instruction set and address field. These kinds of computers have efficient storage for handling of text, in comparison to lower bit machines. Due to more efficient processor, speed and memory size, minicomputer was used in variety of applications and could support business applications along with the scientific applications. Minicomputer was a multi-user system which means more than one user could use this system simultaneously.

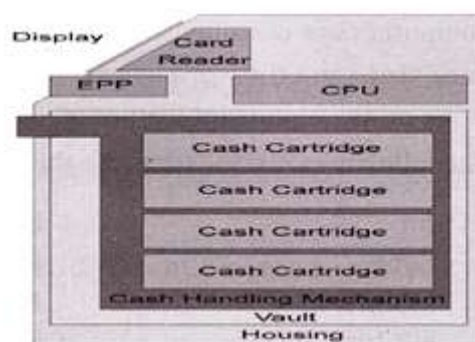
Comparison of Micro and Mini computers

Features	Microcomputer	Minicomputer
Primary memory	Shall memory	Larger memory
Word length	Small word length	Larger word length
Cost low	Low	High

Processor	Low	High
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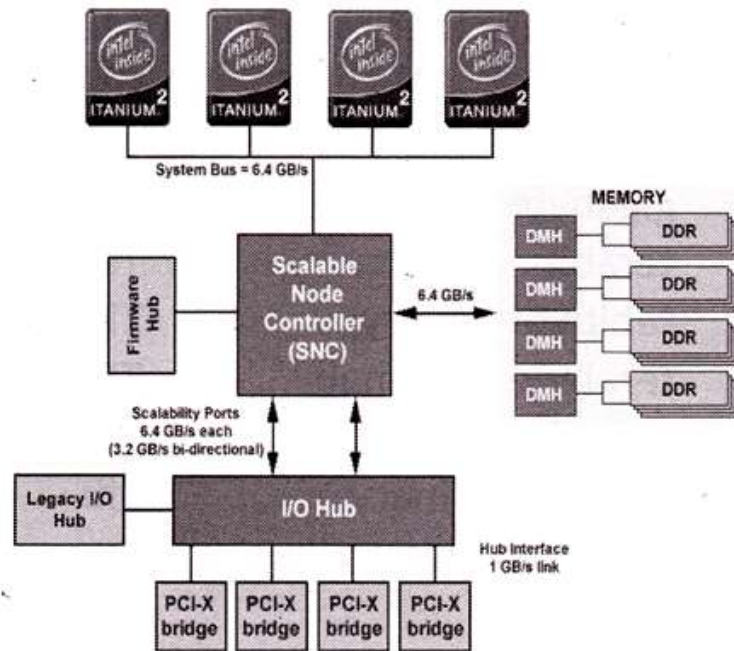
Mainframe Computers

Mainframe computers are large and expensive machines. The word length of mainframe computers may be 48, 60 or 64 bits, memory capacity being in some megabytes and storage capacity in some terabytes. Generally they handle huge volumes of information and data. In terms of speed, they are having significant processing capacity. They are used in research organizations, large industries, airlines reservation where a large database has to be maintained.



Super Computers

Super Computers are the fastest computer in current era. The processing capabilities of super computer lies in the range of GIPS2, word length 64-128 or may be in 256 or so. The memory capacity of super computer is in some gigabytes or in terabytes. The storage capacity of this type of computer is in exabytes.



The parallel processing of a super computer makes it very fast because it contains number of CPU that operates parallel. They are used at some research centers and government agencies involving sophisticated scientific and engineering tasks

Q3: What is the meaning of computer generation? How many Computer Generations are defined? What technologies were/are used?

ANS.

Introduction:

A computer is an electronic device that manipulates information or data. It has the ability to store, retrieve, and process data.

Nowadays, a computer can be used to type documents, send email, play games, and browse the Web. It can also be used to edit or create spreadsheets, presentations, and even videos. But the evolution of this complex system started around 1940 with the first Generation of Computer and evolving ever since.

There are five generations of computers.

1. FIRST GENERATION

• Introduction:

1. 1946-1959 is the period of first generation computer.
2. J.P.Eckert and J.W.Mauchly invented the first successful electronic computer called ENIAC, ENIAC stands for "Electronic Numeric Integrated And Calculator".

• Few Examples are:

1. ENIAC
2. EDVAC
3. UNIVAC

4. IBM-701
5. IBM-650

2. SECOND GENERATION

Introduction:

1959-1965 is the period of second-generation computer.
3. Second generation computers were based on Transistor instead of vacuum tubes.

Few Examples are:

Honeywell 400
IBM 7094
CDC 1604
CDC 3600
UNIVAC 1108

1. THIRD GENERATION

• ***Introduction:***

1. 1965-1971 is the period of third generation computer.
2. These computers were based on Integrated circuits.
3. IC was invented by Robert Noyce and Jack Kilby In 1958-1959.
4. IC was a single component containing number of transistors.

• ***Few Examples are:***

1. PDP-8
2. PDP-11
3. ICL 2900
4. IBM 360
5. IBM 370

2. FOURTH GENERATION

• ***Introduction:***

1. 1971-1980 is the period of fourth generation computer.
2. This technology is based on Microprocessor.
3. A microprocessor is used in a computer for any logical and arithmetic function to be performed in any program.
4. Graphics User Interface (GUI) technology was exploited to offer more comfort to users.

• ***Few Examples are:***

1. IBM 4341
2. DEC 10
3. STAR 1000
4. PUP 11

3. FIFTH GENERATION

• ***Introduction:***

1. The period of the fifth generation in 1980-onwards.
2. This generation is based on artificial intelligence.

3. The aim of the fifth generation is to make a device which could respond to natural language input and are capable of learning and self-organization.
4. This generation is based on ULSI(Ultra Large Scale Integration) technology resulting in the production of microprocessor chips having ten million electronic component.

- **Few Examples are:**

1. Desktop
2. Laptop
3. NoteBook
4. UltraBook
5. Chromebook

Q4: Differentiate between Volatile & Non- Volatile memories.

Ans;-Volatile and Non-Volatile Memory are both types of computer memory. Volatile Memory is used to store computer programs and data that CPU needs in real time and is erased once computer is switched off. RAM and Cache memory are volatile memory. Where as Non-volatile memory is static and remains in the computer even if computer is switched off. ROM and HDD are non-volatile memory.

Following are the important differences between Volatile and Non-Volatile Memory.

Sr. No.	Key	Volatile Memory	Non-Volatile Memory
1	Data Retention	Data is present till power supply is present.	Data remains even after power supply is not present.
2	Persistence	Volatile memory data is not permanent.	Non-volatile memory data is permanent.
3	Speed	Volatile memory is faster than non-volatile memory.	Non-volatile memory access is slower.
4	Example	RAM is an example of Volatile Memory.	ROM is an example of Non-Volatile Memory.
5	Data Transfer	Data Transfer is easy in Volatile Memory.	Data Transfer is difficult in Non-Volatile Memory.
6	CPU	CPU can access data stored	Data to be copied from Non-Volatile memory to Volatile memory so that

Sr. No.	Key	Volatile Memory	Non-Volatile Memory
	Access	on Volatile memory.	CPU can access its data.
7	Storage	Volatile memory less storage capacity.	Non-Volatile memory like HDD has very high storage capacity.
8	Impact	Volatile memory such as RAM is high impact on system's performance.	Non-volatile memory has no impact on system's performance.
9	Cost	Volatile memory is costly per unit size.	Non-volatile memory is cheap per unit size.

Q5: Distinguish among system software, application software and open source basis of their features software on the

Sr. No.	Key	System Software.	Application Software.
1	Definition	System Software is the type of software which is the interface between application software and system.	On other hand Application Software is the type of software which runs as per user request. It runs on the platform which is provide by system software.
2	Development Language	In general System software are developed in low level language which is more compatible with the system hardware in order to interact with.	While in case of Application software high level language is used for their development as they are developed as some specific purpose software.
3	Usage	System software is used for operating computer hardware.	On other hand Application software is used by user to

Sr. No.	Key	System Software.	Application Software.
			perform specific task.
4	Installation	System software are installed on the computer when operating system is installed.	On other hand Application software are installed according to user's requirements.
5	User interaction	As mentioned in above points system software are specific to system hardware so less or no user interaction available in case of system software.	On other hand in application software user can interacts with it as user interface is available in this case.
6	Dependency	System software can run independently. It provides platform for running application software.	On other hand in application software can't run independently. They can't run without the presence of system software..
7	Examples	Some examples of system software's are compiler, assembler, debugger, driver, etc.	On other hand some examples of application software's are word processor, web browser, media player, etc.

open source software:-

What is open source software?

Open source software is software with source code that anyone can inspect, modify, and enhance.

"Source code" is the part of software that most computer users don't ever see; it's the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly.

Some software has source code that only the person, team, or organization who created it—and maintains exclusive control over it—can modify. People call this kind of software "proprietary" or "closed source" software.

Only the original authors of proprietary software can legally copy, inspect, and alter that software. And in order to use proprietary software, computer users must agree (usually by signing a license displayed the first time they run this software) that they will not do anything with the software that the software's authors have not expressly permitted. Microsoft Office and Adobe Photoshop are examples of proprietary software

Open source licenses affect the way people can use, study, modify, and distribute software. In general, open source licenses grant computer users permission to use open source software for any purpose they wish. Some open source licenses—what some people call "copyleft" licenses—stipulate that anyone who releases a modified open source program must also release the source code for that program alongside it. Moreover, some open source licenses stipulate that anyone who alters and shares a program with others must also share that program's source code without charging a licensing fee for it.

Q6. a) Create a file in MS-word to insert a paragraph about yourself and save it with file name“yourself”. Describe all steps involved in it.

Ans;- Creating, Opening, and Saving Documents

Every Word project you create—whether it's a personal letter, a TV sitcom script, or a thesis in microbiology—begins and ends the same way. You start by creating a document, and you end by saving your work. Sounds simple, but to manage your Word documents effectively, you need to know these basics and beyond. This chapter shows you all the different ways to create a new Word document—like starting from an existing document or adding text to a predesigned template—and how to choose the best one for your particular project.

You'll also learn how to work faster and smarter by changing your view of your document. If you want, you can use Word's Outline view when you're brainstorming, and then switch to Print view when you're ready for hard copy. This chapter gets you up and running with these fundamental tools so you can focus on the important stuff—your words.

Creating a New Document

When you start Word without opening an existing document, the program gives you an empty one to work in. If you're eager to put words to page, then type away. Sooner or later, though, you'll want to start *another* new document. Word gives you three ways to do so:

Figure 1-1. When you start Word 2007 for the first time, it may look a little top-heavy. The ribbon takes up more real estate than the old menus and toolbars. This change may not matter if you have a nice big monitor. But if you want to reclaim some of that space, you can hide the ribbon by

double-clicking the active tab. Later, when you need to see the ribbon commands, just click a tab.

- **Creating a new blank document.** When you're preparing a simple document—like a two-page essay, a note for the babysitter, or a press release—a plain, unadorned page is fine. Or, when you're just brainstorming and you're not sure what you want the final document to look like, you probably want to start with a blank slate or use one of Word's templates (more on that in a moment) to provide structure for your text.
- **Creating a document from an existing document.** For letters, resumes, and other documents that require more formatting, why reinvent the wheel? You can save time by using an existing document as a starting point (Section 1.2.2). When you have a letter format that you like, you can use it over and over by editing the contents.
- **Creating a document from a template (Section 1.2.3).** Use a template when you need a professional design for a complex document, like a newsletter, a contract, or meeting minutes. Templates are a lot like forms—the margins, formatting, and graphics are already in place. All you do is fill in your text.

Q6 b) Write steps regarding followings

☐ To change the font style

☐ To change the font size

☐ To change the font color

☐ To highlight (in yellow) the line that reads “need to get IMS’s address”.

1). To change the font style

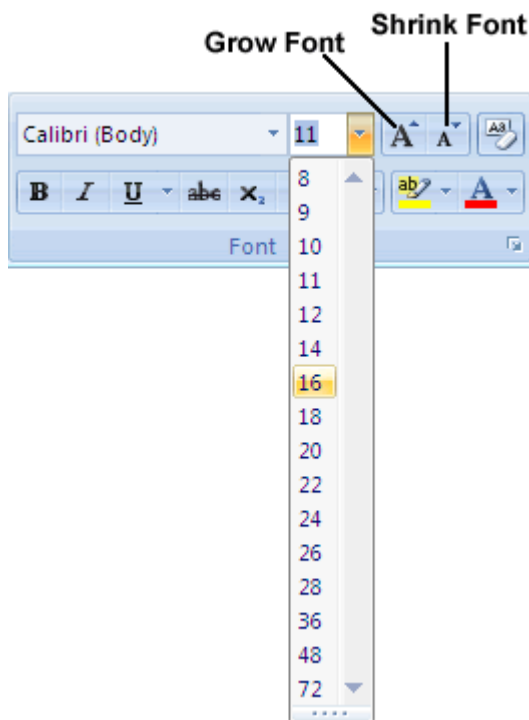
ANS;- **Changing the Font Size**

The font changes the appearance of text, but the font size defines how big (or small) the text may look. To change the font size, you have two choices:

- Select a numeric size from the Font Size list box.
- Choose the Grow Font/Shrink Font commands.

You can use both methods to change the font size of text. For example, you may use the Font Size list box to choose an approximate size for your text, and then use the Grow Font/Shrink Font commands to fine-tune the font size. To change the font size, follow these steps:

1. Click the Home tab and then select the text you want to change.
2. Choose one of the following:
 - Click the Font Size list box and then click a number, such as 12 or 16.
 - Click the Grow Font or Shrink Font icon.



Changing the Text Style

The text style defines the appearance of text in one or more of the following ways:

Bold:

Press Ctrl+B.

Italic:

Press Ctrl+I.

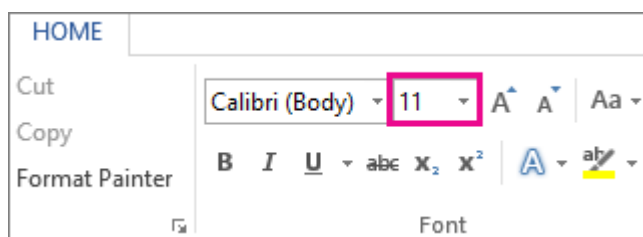
Underline:

Press Ctrl+U.

To change the font size

To change the font size of selected text in desktop Excel, PowerPoint, or Word:

1. Select the text or cells with text you want to change. To select all text in a Word document, press Ctrl + A.
2. On the **Home** tab, click the font size in the **Font Size** box.



You can also type in any size you want, within the following limits:

- Excel: between 1 and 409, in multiples of .5 (such as 10.5 or 105.5)
- PowerPoint: between 1 and 3600, in multiples of .1 (such as 10.3 or 105.7)
- Word: between 1 and 1638, in multiples of .5 (such as 10.5 or 105.5)

2). ▪ To change the font color

Change the font color;-

You can change the color of text in your Word document.

1. Select the text that you want to change.

2. On the **Home** tab, in the **Font** group, choose the arrow next to **Font Color**, and then select a color.



You can also use the formatting options on the Mini toolbar to quickly format text. The Mini toolbar appears automatically when you select

Q7. Create a file in MS-Word for the following document and save it with file name 'ms_word'. Describe all steps involved in it.

Ans. Every Word project you create—whether it's a personal letter, a TV sitcom script, or a thesis in microbiology—begins and ends the same way. You start by creating a document, and you end by saving your work. Sounds simple, but to manage your Word documents effectively, you need to know these basics and beyond. This chapter shows you all the different ways to create a new Word document—like starting from an existing document or adding text to a predesigned template—and how to choose the best one for your particular project.

You'll also learn how to work faster and smarter by changing your view of your document. If you want, you can use Word's Outline view when you're brainstorming, and then switch to Print view when you're ready for hard copy. This chapter gets you up and running with these fundamental tools so you can focus on the important stuff—your words.

TIP

If you've used Word before, then you're probably familiar with opening and saving documents. Still, you may want to skim this chapter to catch up on the differences between this version of Word and the ghosts of Word past. You'll grasp some of the big changes just by examining the figures. For more detail, check out the gray boxes and the notes and tips—like this one!

Launching Word

The first time you launch Word after installation, the program asks you to confirm your name and initials. This isn't Microsoft's nefarious plan to pin you down: Word uses this information to identify documents that you create and modify. Word uses your initials to mark your edits when you review and add comments to Word documents that other people send to you ([Section 16.3](#)).

You have three primary ways to fire up Word, so use whichever method you find quickest:

- **Start menu.** The Start button in the lower-left corner of your screen gives you access to all programs on your PC—Word included. To start Word, choose Start → All Programs → Microsoft Office → Microsoft Office Word.
- **Quick Launch toolbar.** The Quick Launch toolbar at the bottom of your screen (just to the right of the Start menu) is a great place to start programs you use frequently. Microsoft modestly assumes that you'll be using Word a lot, so it usually installs the Word icon in the Quick Launch toolbar. To start using Word, just click the W icon, and voilà!

TIP

When you don't see the Quick Launch toolbar, here's how to display it: On the bar at the bottom of your screen, right-click an empty spot. From the menu that pops up, choose Toolbars → Quick Launch. When you're done, icons for some of your programs appear in the bottom bar. A single click fires up the program.

- **Opening a Word document.** Once you've created some Word documents, this method is fastest of all, since you don't have

to start Word as a separate step. Just open an existing Word document, and Word starts itself. Try going to Start → My Recent Documents, and then, from the list of files, choose a Word document. You can also double-click the document's icon on the desktop or wherever it lives on your PC.

TIP

If you need to get familiar with the Start menu, Quick Launch toolbar, and other Windows features, then pick up a copy of *Windows XP: The Missing Manual*, Second Edition or *Windows Vista: The Missing Manual*.

So, what happens once you've got Word's motor running? If you're a newcomer, you're probably just staring with curiosity. If you're familiar with previous versions of Word, though, you may be doing a double take ([Figure 1-1](#)). In Word 2007, Microsoft combined all the old menus and toolbars into a new feature called the ribbon. Click one of the tabs above the ribbon, and you see the command buttons change below. The ribbon commands are organized into groups, with the name of each group listed at the bottom. (See [Figure 1-1](#) for more detail on the ribbon.)

Creating a New Document

When you start Word without opening an existing document, the program gives you an empty one to work in. If you're eager to put words to page, then type away. Sooner or later, though, you'll want to start *another* new document. Word gives you three ways to do so:

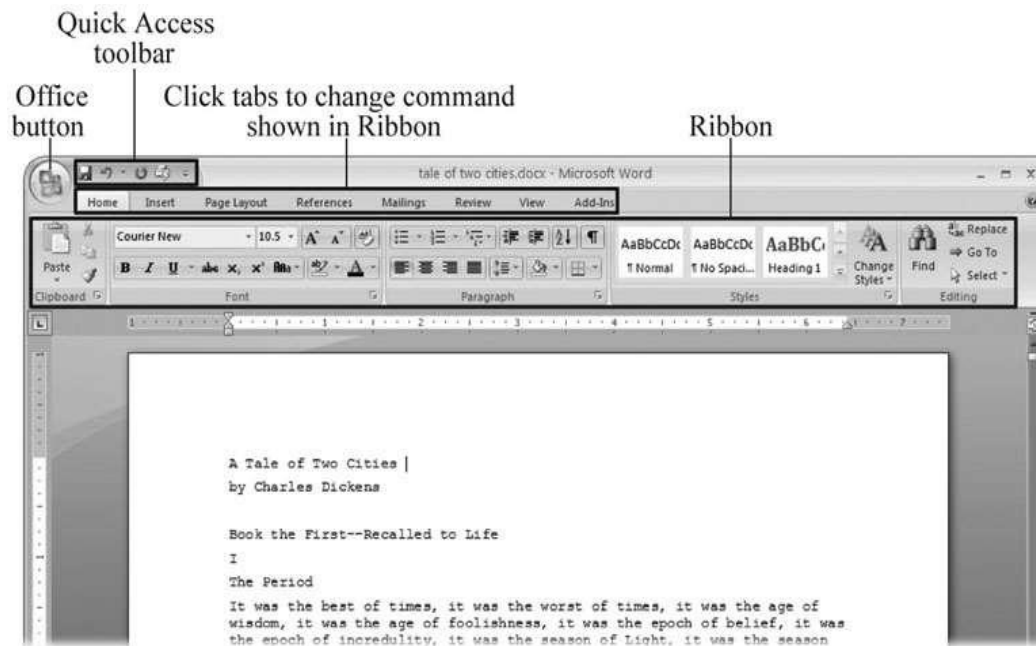


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- **Creating a new blank document.** When you're preparing a simple document—like a two-page essay, a note for the babysitter, or a press release—a plain, unadorned page is fine. Or, when you're just brainstorming and you're not sure what you want the final document to look like, you probably want to start with a blank slate or use one of Word's templates (more on that in a moment) to provide structure for your text.
- **Creating a document from an existing document.** For letters, resumes, and other documents that require more formatting, why reinvent the wheel? You can save time by using an existing document as a starting point ([Section 1.2.2](#)). When you have a letter format that you like, you can use it over and over by editing the contents.
- **Creating a document from a template ([Section 1.2.3](#)).** Use a template when you need a professional design for a complex

document, like a newsletter, a contract, or meeting minutes. Templates are a lot like forms—the margins, formatting, and graphics are already in place. All you do is fill in your text.

TIP

Microsoft provides a mind-boggling number of templates with Word, but they're not the only source. You can find loads more on the Internet, as described in [Section 5.2.1](#). Your employer may even provide official templates for company documents.

To start your document in any of the above ways, click the Windows logo in the upper-left corner of the screen. That's Office 2007's new *Office button*. Click it, and a drop-down menu opens, revealing commands for creating, opening, and saving documents. Next to these commands, you see a list of your Word documents. This list includes documents that are open, as well as those that you've recently opened.

The Office button is also where you go to print and email your documents ([Figure 1-2](#)).

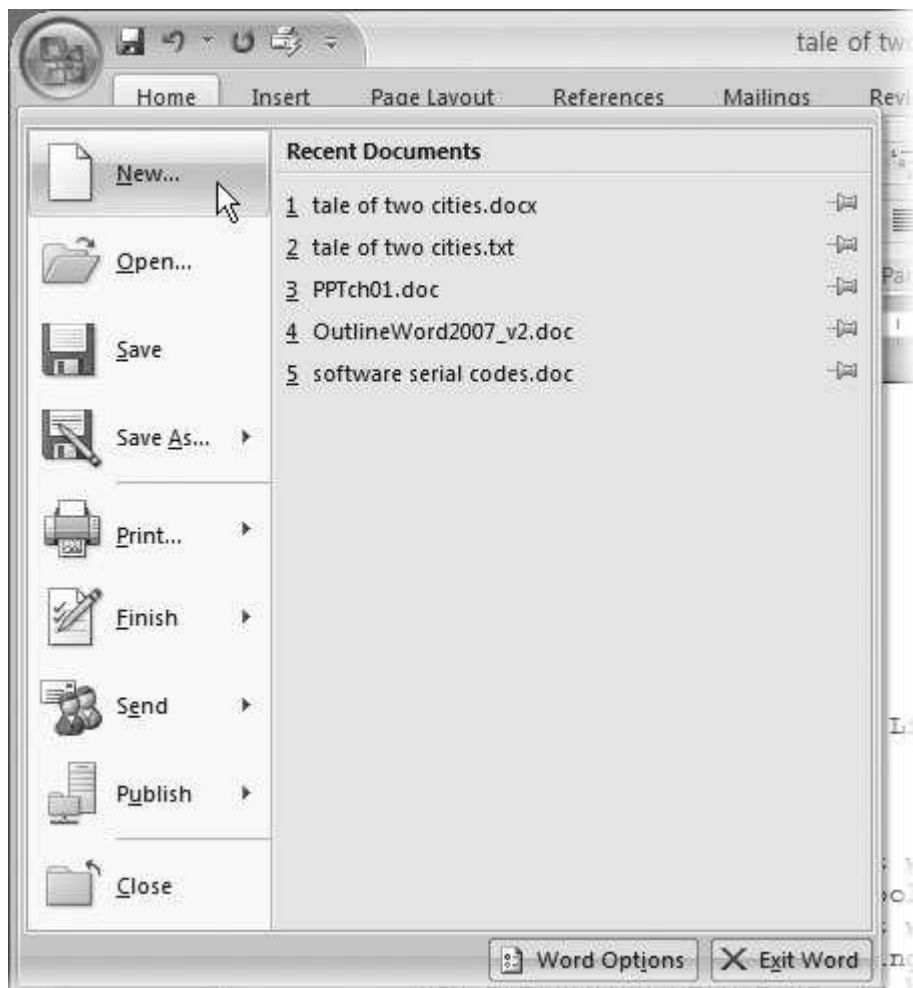


Figure 1-2. The phrase most frequently uttered by experienced Word fans the first time they start Word 2007 is, “Okay, where’s my File menu?” Never fear, the equivalent of the File menu is still there—it’s just camouflaged a bit. Clicking the Office button (the one that looks like a Windows logo) reveals the commands you use to create, open, and save Word documents.

Creating a New Blank Document

Say you want a new blank document, just like the one Word shows you when you start the program. No problem—here are the steps:

1. **Choose Office button → New.**

The New Document dialog box appears.

2. In the upper-left corner of the large “Create a new Word document” panel, click “Blank document” (**Figure 1-3**).

The New Document box presents a seemingly endless number of options, but don’t panic. The “Blank document” option you want is on the left side of the first line.

3. At the bottom of the New Document dialog box, click **Create**.

The dialog box disappears, and you’re gazing at the blank page of a new Word document.

Better get to work.



Figure 1-3. Open the New Document box (Office button → New, or Alt+F, N), and Word gives you several ways to create a new document. Click “Blank document” to open an empty document, similar to the one Word shows when you first start the program. Or you can click “New from existing” to open a document that you previously created under a new name.

Creating a New Document from an Existing Document

A blank Word document is sort of like a shapeless lump of clay. With some work, you can mold it to become just about anything. Often,

however, you can save time by opening an existing document that's similar to the one you want to create. Imagine that you write the minutes for the monthly meetings of the Chief Executive Officer's Surfing Association (CEOSA). When it's time to write up the June minutes, it's a lot faster to open the minutes from May. You keep the boilerplate text and all the formatting, but you delete the text that's specific to the previous month. Now all you have to do is enter the text for June and save the document with a new name: *JuneMinutes.docx*.

NOTE

The .docx extension on the end of the filename is Word 2007's new version of .doc. The switch from three-letter to four-letter filename extensions indicates a change in the way Word stores documents. (If you need to share documents with folks using earlier versions of Word, choose Office button → Save As → Word 97-2003 document when you save the file. See the box in [Section 1.2.3](#) for details.)

Word gives you a “New from existing” document-creation option to satisfy your desire to spend more time surfing and less time writing meeting minutes. Here's how to create a new document from an existing document:

1. **Choose Office button → New (Alt+F, N) to open the New Document window. Then click “New from existing...” (it sits directly below the “Blank document” button).**

The three dots at the end of the button's title tell you that there's another dialog box to come. And sure enough, when you click “New from existing...”, it opens another box, appropriately titled New from Existing Document ([Figure 1-4](#)). This box looks—and works—like a standard Windows Open File box. It lets you navigate to a specific folder and open a file.

2. **On your computer, find the existing document you're using for a model.**

You can use the bar on the left to change the folder view. Word starts you in your My Documents folder, but you can switch to your desktop or your My Computer icon by clicking the icons on the left. Double-click folder icons in the large window to open them and see their contents.

3. Click to select the file, and then click Create New (in the lower-right corner). (Alternatively, just double-click the file's icon to open it. This trick works in all Open File boxes.)

Instead of the usual Open button at the bottom of the box, the button in the New from Existing Document box reads Create New—your clue that this box behaves differently in one important respect: Instead of opening an existing file, you're making a *copy* of an existing file. Once open, the file's name is something like *Document2.docx* instead of the original name. This way, when you save the file, you don't overwrite the original document. (Still, it's best to save it with a new descriptive name right away.)

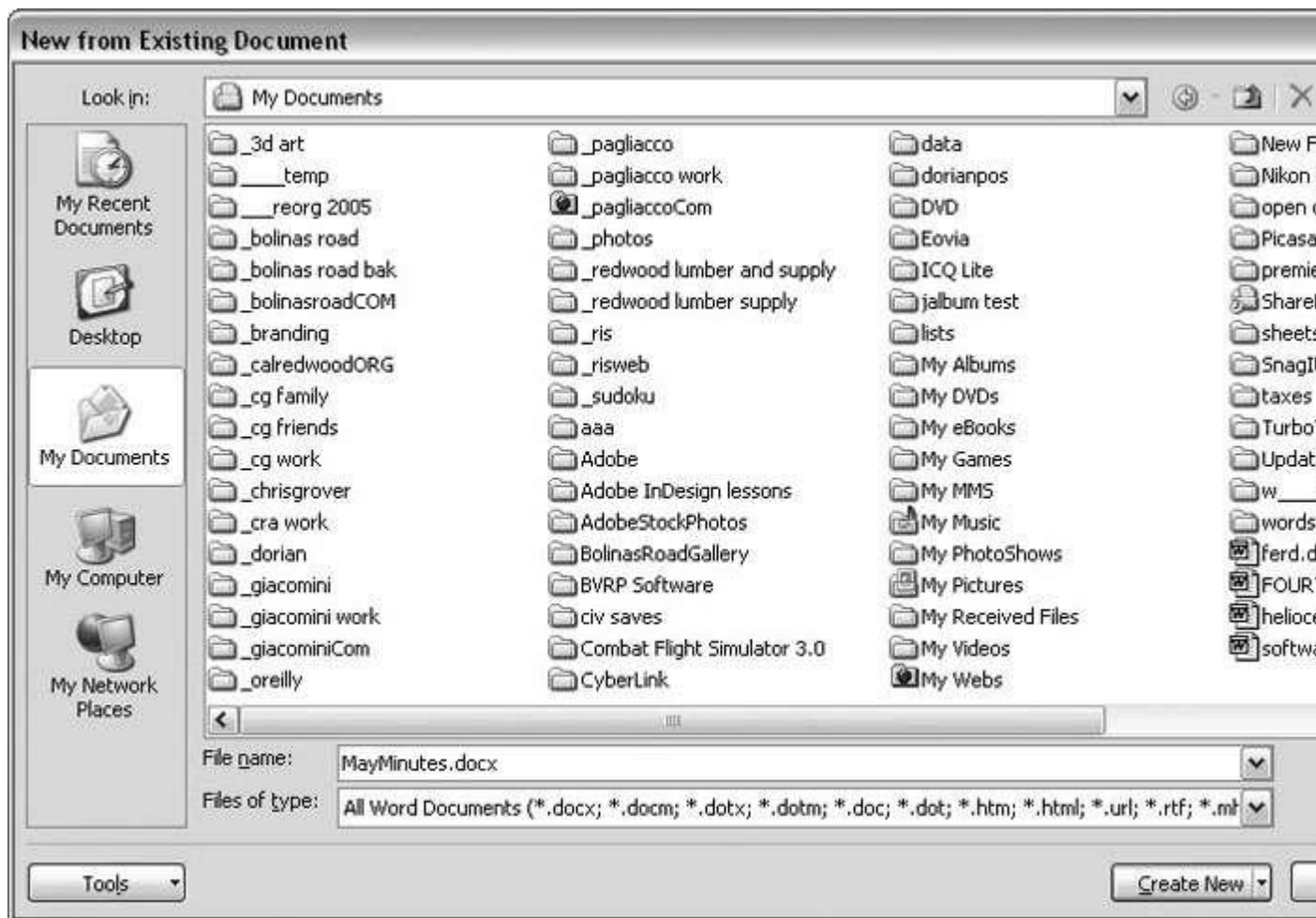


Figure 1-4. Use the New from Existing Document box to find an existing Word document that you'd like to open as a model for your new document. When you click Create New at bottom-right, Word opens a new copy of the document, leaving the original untouched. You can modify the copy to your heart's content and save it under a different file name.

TIP

Windows' Open File boxes, like New from Existing Document, let you do a lot more than just find files. In fact, they let you do just about anything you can do in Windows Explorer. Using keyboard shortcuts, you can cut (Ctrl+X), copy (Ctrl+C), and paste (Ctrl+V) files. A right-click displays a shortcut menu with even more commands, letting you rename files, view Properties dialog boxes, and much more. You can even drag and drop to move files and folders.

POWER USERS' CLINIC: WORD'S NEW FILE FORMATS: .DOCX AND .DOCM

With Office 2007, Microsoft took the drastic step of changing its file formats in hopes of improving your computer's security. Malicious programmers were using Office's macros to do nasty things to unsuspecting computers. The *.docx* format, the new standard for Word files, doesn't permit macros, making it safe from those threats. The *.docm* format indicates that a document contains macros or other bits of programming code. When opening one of these files, play it safe: If you don't know who created the *.docm* file, then don't open it.

The downside of the new file formats is that older versions of Word don't know how to open these *.docx* and *.docm* documents. To open Word 2007 files with an older version (even Word 2003), you need to install the Microsoft Office Compatibility Pack.

This software fix gives pre-2007 versions of Word the power to open documents in the new formats. Even then, you may not be able to use or edit parts of the file that use new Word features (like themes, equations, and content controls). To download the free compatibility pack, go to www.office.microsoft.com and type *office 2007 compatibility* into the search box at the top of the page.

Also, if you're preparing a Word document for someone who's using an older Word version, then you have to save it in a compatible format, as described in the tip in [Section 1.2.2](#). (Fortunately, the compatibility issue doesn't go both ways: Word 2007 can open old *.doc* docs just fine.)

Creating a New Document from a Template

Say you're creating meeting minutes for the first time. You don't have an existing document to give you a leg up, but you do want to end up with handsome, properly formatted minutes. Word is at your service—with *templates*. Microsoft provides dozens upon dozens of prebuilt templates for everything from newsletters to postcards. Remember all the busy stuff in the New Document box in [Figure 1-3](#)? About 90 percent of the items in there are templates.

In the previous example, where you use an existing document to create the meeting minutes for the Chief Executive Officer's Surfing Association (CEOSA), each month you open the minutes from the previous month. You delete the information that pertains to the previous month and enter the current month's minutes. A template works pretty much the same way, except it's a generic document, designed to be adaptable to lots of different situations. You just open it and add your text. The structure, formatting, graphics, colors, and other doodads are already in place.

NOTE

The subject of Word templates is a lengthy one, especially when it comes to creating your own, so there's a whole chapter devoted to that topic—[Chapter 20](#).

Here's how to get some help from one of Microsoft's templates for meeting minutes:

1. **Choose Office button → New (Alt+F, N) to open the New Document window.**

On the left of the New Document box is a Template Categories list. The top entry on this list is Installed Templates—the ones Word has installed on your computer.

You could use any of these, but you also have a world of choice waiting for you online. On its Web site, Microsoft offers hundreds of templates for all sorts of documents, and you can access them right from the New Document box. If you have a fast Internet connection, then it's just as quick and easy to use an online template as it is using the ones stored on your computer. In fact, you'll use an online template for this example.

NOTE

If you can't connect to the Internet right now, then simply choose one of the installed templates instead. Click Create, and then skip to step 4.

2. Scroll down the Template Categories list to the Microsoft Office Online heading. Under this heading, select Minutes.

In the center pane, you'll see all different types of minutes templates, from PTA minutes to Annual shareholder's meeting minutes ([Figure 1-5](#)). When you click a template's icon, a preview appears in the pane on the right.

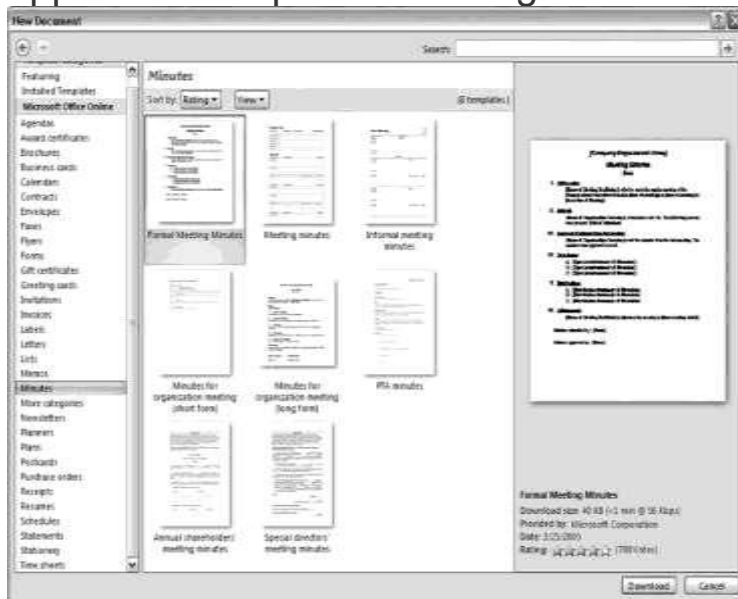


Figure 1-5. The New Document box lists prebuilt templates that live at Microsoft Office Online in categories like Agendas, Brochures, Calendars, and Minutes. Below the thumbnail you see an estimate of how long it takes to download the template from the Microsoft Office Online Web site. A rating, from 0 to 5 stars, tells you what other people think of the template (the rating system is kind of like the one at Amazon.com).

3. When you're done perusing the various styles, click the Formal Meeting Minutes icon. (After all, CEOSA is a very formal organization.) Then click Download.

Word downloads and opens the document.

4. Start writing up the minutes for the CEO Surfers.

To follow the template's structure, replace all the words in square brackets ([]) with text relevant to CEOSA.

TIP

If you'd rather not download the Formal Meeting Minutes template every time you use it, then you can save the file on your computer as a Word template. The steps for saving files are just around the corner in [Section 1.5](#).

Opening an Existing Document

If you've mastered creating a document from an existing document and creating a document from a template, you'll find that opening an existing document is a snap. The steps are nearly identical.

1. Choose Office button → Open (Alt+F, O). In the Open window ([Figure 1-6](#)), navigate to the folder and file you want to open.

The Open window starts out showing your My Documents folder, since that's where Word suggests you save your files. When your document's in a more exotic location, click the My Computer icon, and then navigate to the proper folder from there.

TIP

When you open a document you've used recently, you may see its name right on the Office button → Recent Documents menu. If so, simply click to open it without a trip to the Open dialog box.

2. With the file selected, click Open in the lower-right corner.

The Open box goes away and your document opens in Word. You're all set to get to work. Just remember, when you save this document (Alt+F, S or Ctrl+S), you write over the previous file. Essentially, you create a new, improved, and only copy of the file you just opened. If you don't want to write over the existing document, use the Save As command (Alt+F, A), and then type a new name in the File Name text box.

on your screen at once (or on each of your two monitors, you lucky dog), to make it easy to cut and paste text from one to the other.

The key to working with Word's different view options is to match the view to the job at hand. Once you get used to switching views, you'll find lots of reasons to change your point of view. Find the tools you need on the View tab ([Figure 1-7](#)). To get there, click the View tab (Alt+W) on the ribbon (near the top of Word's window).

The tab divides the view commands into four groups:

- **Document Views.** These commands change the big picture. For the most part, use these when you want to view a document in a dramatically different way: two pages side by side, Outline view, Web layout view, and so on.
- **Show/Hide.** The Show/Hide commands display and conceal Word tools like rulers and gridlines. These tools don't show when you print your document; they're just visual aids that help you when you're working in Word.
- **Zoom.** As you can guess, the Zoom tools let you choose between a close-up and a long shot of your document. Getting in close makes your words easier to read and helps prevent eyestrain. But zooming out makes scrolling faster and helps you keep your eye on the big picture.

TIP

In addition to the Zoom tools on the ribbon, handy Zoom tools are available in the window's lower-right corner. Check out the + (Zoom In) and – (Zoom Out) buttons and the slider in between them. See [Section 1.4.3](#) for the details on using them.

- **Window.** In the Window group, you'll find creative ways to organize document windows on your screen—like split views of a single document or side-by-side views of two different documents.

All the commands in the View tab's four groups are covered in the following pages.

NOTE

This section provides the short course on viewing your Word documents. For even more details and options for customizing your Word environment, see [Chapter 17](#).



Figure 1-7. The View tab is your document-viewing control center. Look closely, and you see it's divided into four groups with names at the bottom of the ribbon: Document Views, Show/Hide, Zoom, and Window. To apply a view command, just click the button or label.

Document Views: Five Ways to Look at Your Manuscript

Word gives you five basic document views. To select a view, go to the View tab (Alt+W) and choose one of the Document Views on the left side of the ribbon ([Figure 1-8](#)). You have another great option for switching from one view to another that's always available in the lower-right corner of Word's window. Click one of the five small buttons to the left of the slider to jump between Print Layout, Full Screen Reading, Web Layout, Outline, and Draft views. Each view has a special purpose, and you can modify them even more using the other commands on the View tab.



Figure 1-8. On the left side of the View tab, you find the five basic document views: Print Layout, Full Screen Reading, Web Layout, Outline, and Draft. You can edit your document in any of the views, although they come with different tools for different purposes. For example, Outline view provides a menu that lets you show or hide headings at different outline levels.

NOTE

Changing your view in no way affects the document itself—you're just looking at the same document from a different perspective.

- **Print Layout (Alt+W, P).** The most frequently used view in Word, Print Layout, is the one you see when you first start the program or create a new blank document. In this view, the page you see on your computer screen looks much as it does when you print it. This view's handy for letters, reports, and most documents headed for the printer.
- **Full Screen Reading (Alt+W, F).** If you'd like to get rid of the clutter of menus, ribbons, and all the rest of the word-processing gadgetry, then use Full Screen Reading view. As the name implies, this view's designed primarily for reading documents. It includes options you don't find in the other views, like a command that temporarily decreases or increases the text size. In the upper-right corner you see some document-proofing tools (like a text highlighter and an insert comment command), but when you want to change or edit your document, you must first use the View Options → Allow Typing command. For more details on using Word for reviewing and proofing, see [Chapter 16](#).
- **Web Layout (Alt+W, L).** This view shows your document as if it were a single Web page loaded in a browser. You don't see any page breaks in this view. Along with your text, you see any photos or videos that you've placed in the document—just like a Web page. [Section 13.2](#) has more details on creating Web pages with Word.

- **Outline (Alt+W, U).** For lots of writers, an outline is the first step in creating a manuscript. Once they've created a framework of chapters and headings, they dive in and fill out the document with text. If you like to work this way, then you'll love Outline view. It's easy to jump back and forth between Outline view and Print Layout view or Draft view, so you can bounce back and forth between a macro and a micro view of your epic. (For more details on using Word's Outline view, see [Section 8.1.](#))
- **Draft (Alt+W, V).** Here's the no-nonsense, roll-up-your-sleeves view of your work ([Figure 1-9](#)). You see most formatting as it appears on the printed page, except for headers and footers. Page breaks are indicated by a thin dotted line. In this view, it's as if your document is on one single roll of paper that scrolls through your computer screen. This view's a good choice for longer documents and those moments when you want to focus on the words without being distracted by page breaks and other formatting niceties.

Show and Hide Window Tools

Word gives you some visual aids that make it easier to work with your documents. Tools like rulers and gridlines don't show up when you print your document, but they help you line up the elements on the page. Use the ruler to set page margins and to create tabs for your documents. Checkboxes on the View tab let you show or hide tools, but some tools aren't available in all the views, so they're grayed out. You can't, for example, display page rulers in Outline or Full Screen Reading views.

Use the checkboxes in the Show/Hide group of the View tab ([Figure 1-10](#)) to turn these tools on and off:

- **Ruler.** Use the ruler to adjust margins, set tabs, and position items on your page. For more detail on formatting text and paragraphs, see [Chapter 4](#).
- **Gridlines.** When you click the Gridlines box, it looks like you created your document on a piece of graph paper. This effect isn't

too helpful for an all-text document, but it sure comes in handy if you're trying to line up photos on a page.

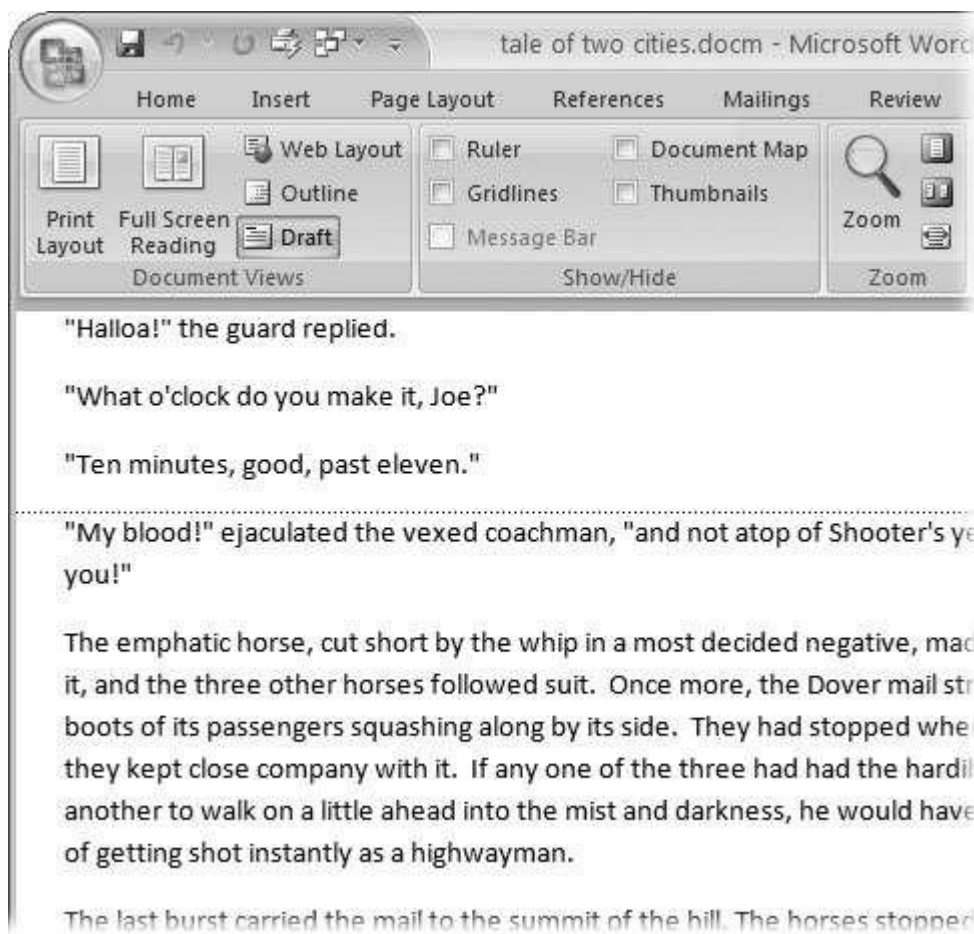


Figure 1-9. In Draft view, you see most text and paragraph formatting, but headers, footers, and other distracting page formatting features are hidden. Your text appears as a continuous scroll, with the margins hidden. Page breaks appear as dotted lines.

- **Message Bar.** The Message Bar resides directly under the ribbon, and it's where you see alerts about a document's behavior. For example, when a document is trying to run a macro and your Word settings prohibit macros, an alert appears in the Message Bar. Click the checkbox to show or hide the Message Bar.
- **Document Map.** If you work with long documents, you'll like the Document Map. This useful tool appears to the left of your text (you can see it in [Figure 1-10](#)), showing the document's headings at various levels. Click the little + and – buttons next to a heading to

expand or collapse the outline. Click a heading, and you jump to that location in your document.

- **Thumbnails.** Select the Thumbnails option, and you see little icons of your document's pages in the bar on the left. Click a thumbnail to go to that page. In general, thumbnails are more useful for shorter documents and for pages that are visually distinctive. For longer documents, you'll find the Document Map easier to use for navigation.

Zooming Your View In and Out

When you're working, do you ever find that you sometimes hold pages at arm's length to get a complete view, and then, at other times, you stick your nose close to the page to examine the details? Word's Zoom options (Figure 1-11) let you do the same thing with your screen—but without looking nearly as silly.

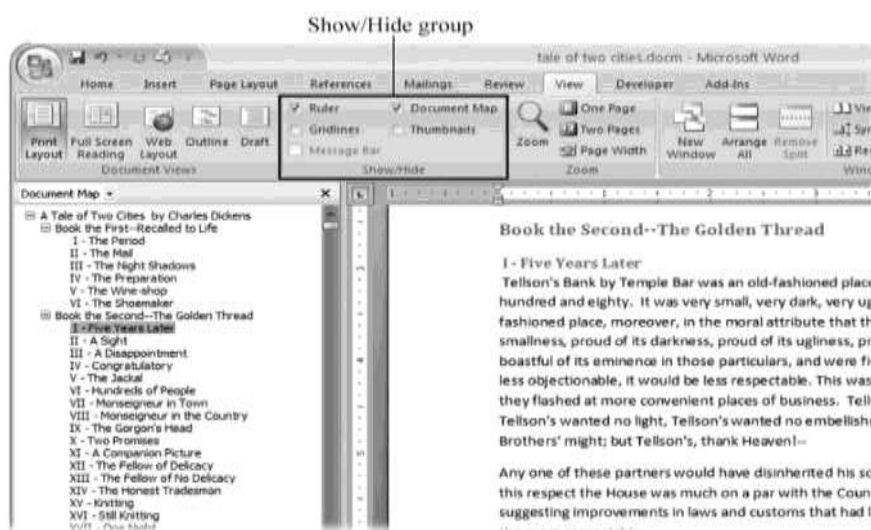


Figure 1-10. Use the Show/Hide group on the View tab to display or conceal Word tools. The Ruler gives you a quick and easy way to set tabs and margins. The Document Map is particularly helpful when you work with longer documents because it displays headings in the bar on the left of the screen. In the left pane, you can see that Mr. Dickens wrote more than his fair share of chapters.

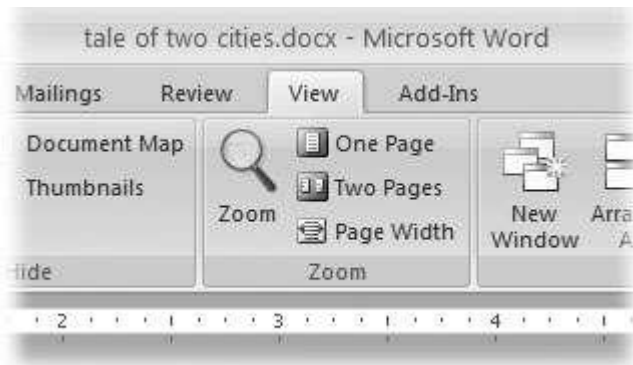


Figure 1-11. The Zoom group of options lets you view your document close up or at a distance. The big magnifying glass opens the Zoom dialog box with more controls for fine-tuning your zoom level. For quick changes, click one of the three buttons on the right: One Page, Two Pages, or Page Width.

NOTE

Even though the text appears to get bigger and smaller when you zoom, you're not actually changing the document in any way. Zoom is similar to bringing a page closer so you can read the fine print. If you want to actually change the font size, then use the formatting options on the Home tab (Alt+H, FS).

On the View tab, click the big magnifying glass to open the Zoom dialog box (Figure 1-12). Depending on your current Document View (see [Section 1.4](#)), you can adjust your view by percentage or relative to the page and text (more on that in a moment). The options change slightly depending on which Document View you're using. The Page options don't really apply to Web layouts, so they're grayed out and inactive if you're in the Web Layout view.

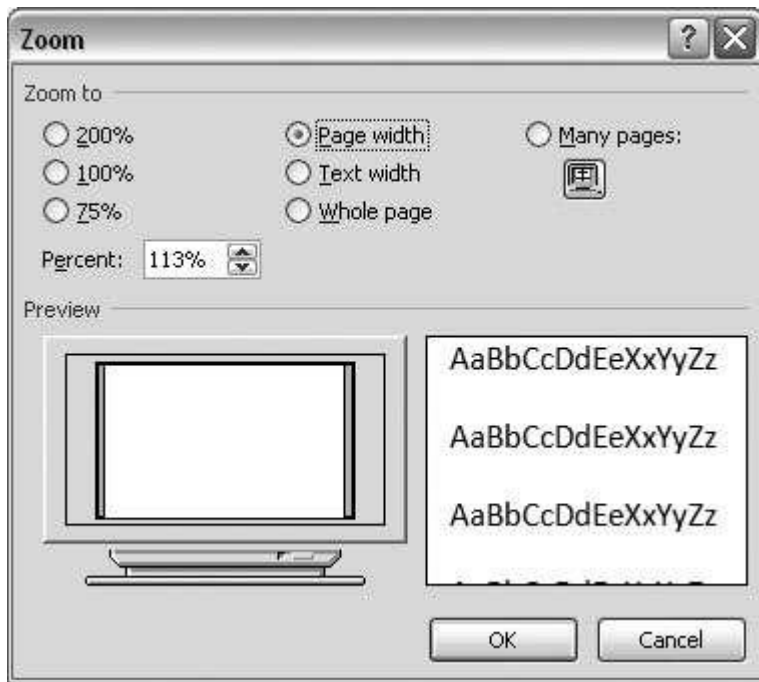


Figure 1-12. The Zoom dialog box lets you choose from a variety of views. Just click one of the option buttons, and then click OK. The monitor and text sample at the bottom of the Zoom box provide visual clues as you change the settings.

Zooming by percentage

In the box's upper-left corner, you find controls to zoom in and out of your document by percentage. The view varies depending on your computer screen and settings, but in general, 100% is a respectable, middle-of-the-road view of your document. The higher the percentage, the more zoomed in you are, and the bigger everything looks—vice versa with a lower percentage.

The three radio buttons (200%, 100%, and 75%) give you quick access to some standard settings. For in-between percentages (like 145%), type a number in the box below the buttons, or use the up-down arrows to change the value. For a quick way to zoom in and out without opening a dialog box, use the Zoom slider ([Figure 1-13](#)) in the lower-right corner of your window. Drag the slider to the right to zoom in on your document, and drag it to the left to zoom out. The percentage changes as you drag.

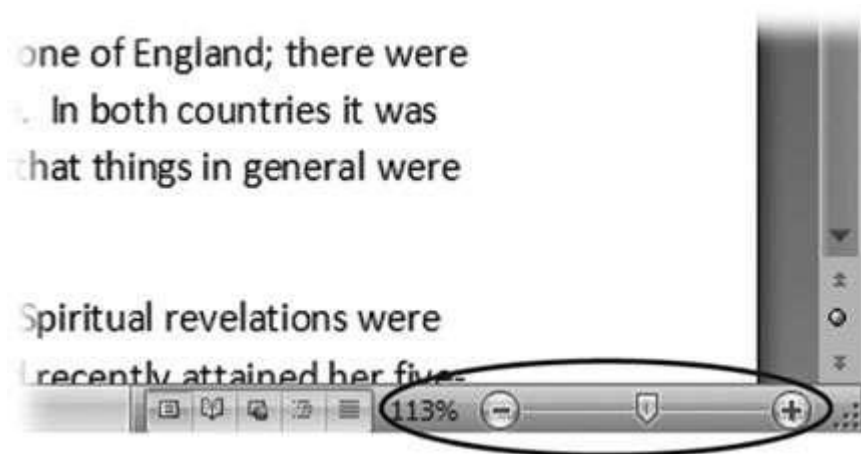


Figure 1-13. The Zoom slider at the bottom of the document window gives you a quick and easy way to change your perspective. Drag the slider to the right to zoom in on your document, and drag it to the left to zoom out. To the left of the slider are five View buttons: Print Layout, Full Screen Reading, Web Layout, Outline, and Draft ([Section 1.4.2](#)). Since the first button is selected, this document is in Print Layout view.

Zooming relative to page or text

Not everyone's a number person. (That's especially true of writers.) So you may prefer to zoom without worrying about percentage figures. The Zoom dialog box (on the View tab, click the magnifying-glass icon) gives you four radio buttons with plain-English zoom settings:

Page width. Click this button, and the page resizes to fill the screen from one side to the other. It's the fastest way to zoom to a text size that most people find comfortable to read. (You may have to scroll, though, to read the page from top to bottom.)

Text width. This button zooms in even farther, because it ignores the margins of your page. Use this one if you have a high-resolution monitor (or you've misplaced your reading glasses).

Whole page. When you want to see an entire page from top to bottom and left to right, click this button. It's great for getting an overview of how your headings and paragraphs look on the page.

Many pages. This view is the equivalent of spreading your document out on the floor, and then viewing it from the top of a ladder. You can use it to see how close you are to finishing that five-page paper, or to inspect the layout of a multi-page newsletter.

WARNING

When you're zoomed out to Whole or "Many pages" view, watch those fingers on the keyboard. You can still make changes to your text in these views, even though you can't see what you're doing.

Changing page view from the ribbon

The ribbon offers radio buttons for three popular page views. (You can see them back in [Figure 1-11](#), to the Zoom tool's right.) They're a quick and dirty way to change the number of pages you see onscreen without fiddling with zoom controls.

- **One Page.** This view shows the entire page in Word's document window. If your screen is large enough, you can read and edit text in this view.
- **Two Pages.** In this view, you see two pages side by side. This view's handy when you're working with documents that have two-page spreads, like booklets.
- **Page Width.** This button does the exact same thing as the Page Width button in the Zoom dialog box ([Section 1.4.3](#)). It's more readable than the One Page and Two Page options, because the page fills the screen from edge to edge, making the text appear larger.

The Window Group: Doing the Splits

Back when dinosaurs roamed the earth and people used typewriters (or very early word processors), you could work on only one document at a time—the one right in front of you. Although Word 2007 has more options for viewing multiple documents and multiple windows than ever, some folks forget to use them. Big mistake. If you ever find yourself comparing

two documents or borrowing extensively from some other text, then having two or more documents visible on your screen can double or triple your work speed.

The commands for managing multiple documents, views, and windows are in the View tab's Window group (Figure 1-14).

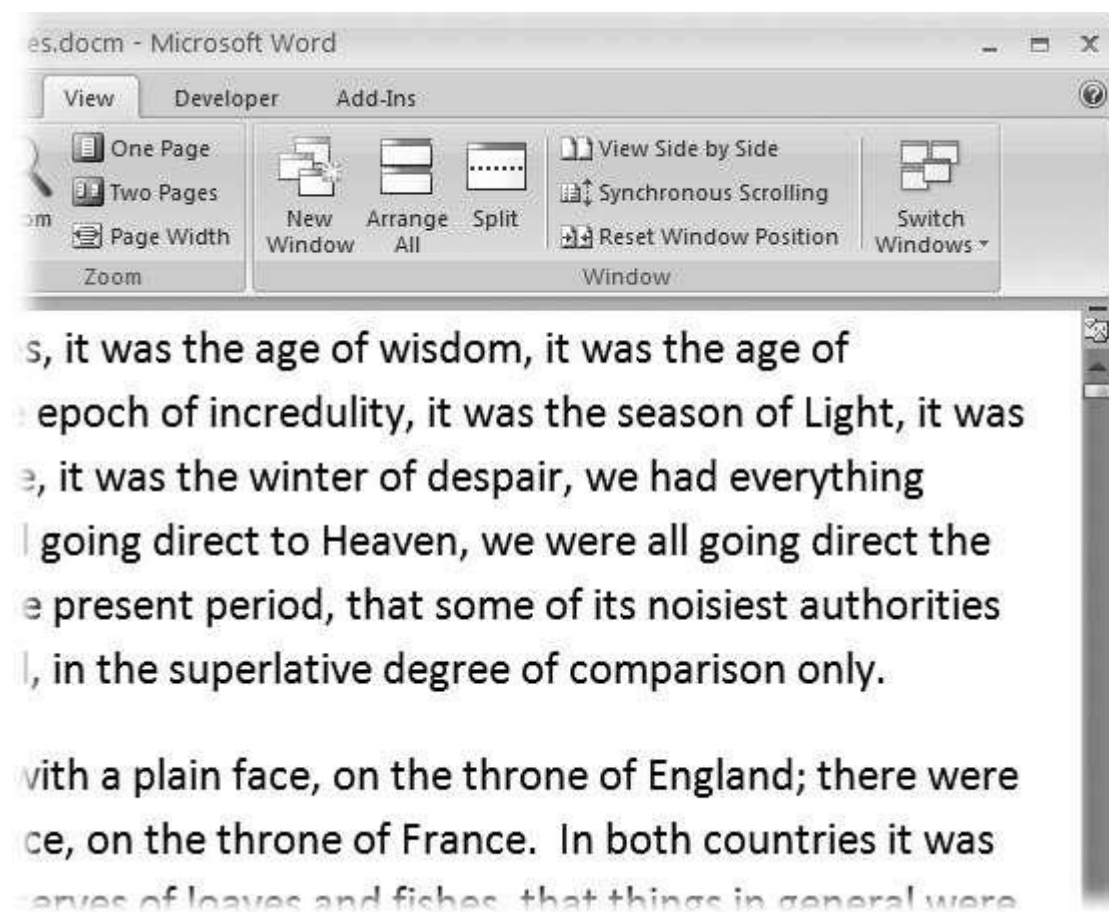


Figure 1-14. In the Window group, the three commands on the left—New Window, Arrange All, and Split—let you open and view your work from multiple vantage points. The commands in the middle—View Side by Side, Synchronous Scrolling, and Reset Window Position—are helpful when reviewing and comparing documents. The big Switch Windows button lets you hop from one document to another.

- **New Window (Alt+W, N).** When you're working on a long document, sometimes you want to see two different parts of the document at the same time, as if they were two separate documents. You may want to keep referring to what you said in the

Introduction while you're working in Chapter 5. Or perhaps you want to keep an Outline view open while editing in Draft view. That's where the New Window command comes in. When you click this button (or hit this keystroke), you've got your document open in two windows that you can scroll independently. Make a change to one window, and it immediately appears in the other.

- **Arrange All (Alt+W, A).** Great—now you've got documents open in two or more windows, but it takes a heck of a lot of mousing around and window resizing to get them lined up on your screen at the same time. Click Arrange All and, like magic, your open Word document windows are sharing the screen, making it easy to work on one and then the other. Word takes an egalitarian approach to screen real estate, giving all windows an equal amount of property (Figure 1-15).
- **Split (Alt+W, S).** The Split button divides a single window so you can see two different parts of the same document—particularly handy if you're copying text from one part of a document to another. The other advantage of the Split command is that it gives you more room to work than using Arrange All for multiple windows because it doesn't duplicate the ribbon, ruler, and other Word tools (Figure 1-16).

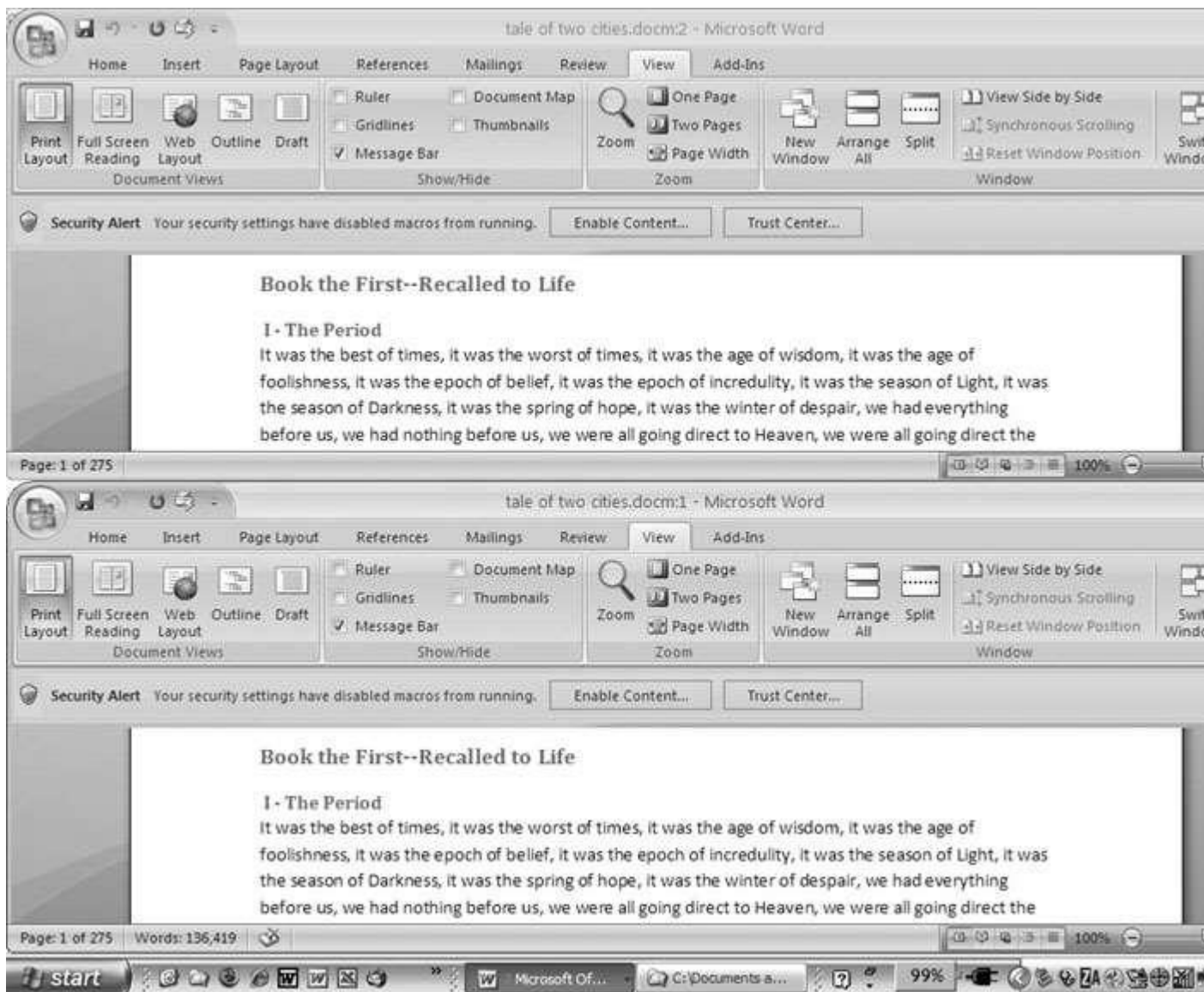


Figure 1-15. One downside of Office 2007's ribbon: It takes up more space on your computer's screen than menus or even the older button bars. When you open a couple of windows, you're not left with much space to do your work, especially when you're working on an ultra-portable laptop or a computer with a small screen. You can double-click the active tab to hide the ribbon, but in most cases, you're better off working with a split screen, as shown in [Figure 1-16](#).

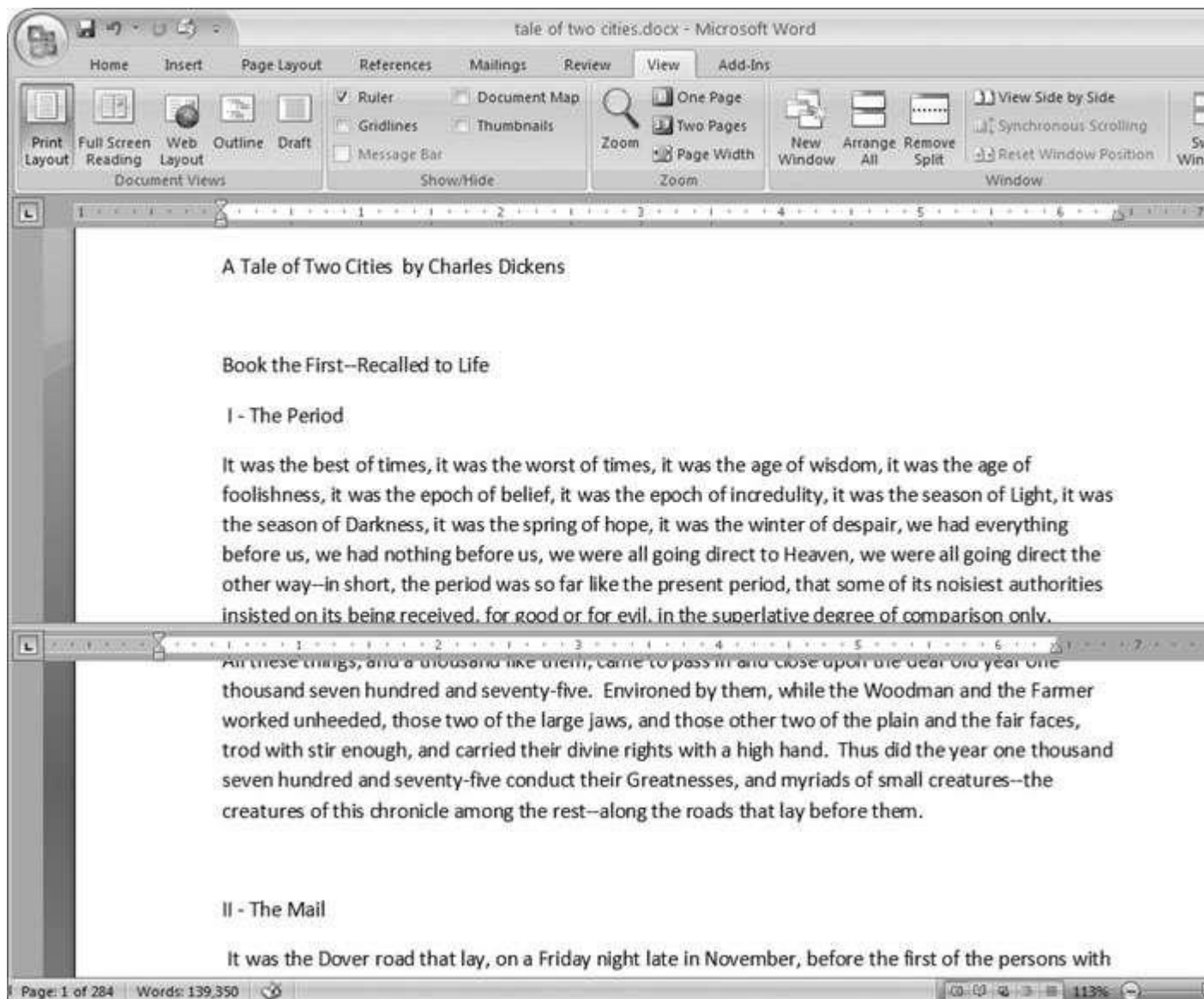


Figure 1-16. When you're viewing two different parts of a single document, use the Split command; it leaves you more room to work than two separate windows, as shown in [Figure 1-15](#). Each section of the split window has a scroll bar, so you can independently control different parts of your document. If you want to fine-tune your split, just drag the middle bar exactly where you want it. When you're done, click Remove Split to return to a single screen view.

Viewing multiple windows

One common reason for wanting to see two documents or more on your screen at once is so you can make line-by-line comparisons. Imagine you have two Word documents that are almost identical, but you have to find

the spots where there are differences. A great way to make those differences jump out is to put both versions on your screen side by side and scroll through them. As you scroll, you can see differences in the paragraph lengths and the line lengths. Here are the commands to help you with the process:

- **View Side by Side (Alt+W, B).** Click the View Side by Side command and Word arranges two windows vertically side by side. As you work with side-by-side documents, you can rearrange windows on your screen by dragging the very top of the Window frame. You can resize the windows by pointing to any edge of the frame. When you see a double arrow, just drag to resize the window. Synchronous Scrolling (described next) is automatically turned on.
- **Synchronous Scrolling (Alt+W, Y).** The Synchronous Scrolling feature keeps multiple document windows in lock step. When you scroll one window, the other windows automatically scroll too. Using the same button or keystroke, you can toggle Synchronous Scrolling on and off as you work with your documents.
- **Reset Windows Position (Alt+W, T).** If you've moved or resized your document windows as described earlier under View Side by Side, then you can click this button to reset your view so the windows share the screen equally.

Saving and Closing Documents

From the earliest days of personal computing, the watchword has been “save early, save often.” There’s nothing more frustrating than working half the day and then having the Great American Novel evaporate into the digital ether because your power goes out. So, here are some tips to protect your work from disasters human-made and natural:

- Name and save your document shortly after you first create it. You’ll see the steps to do so later in this section.

- Get in the habit of doing a quick save with Alt+F, S (think *File Save*) when you pause to think or get up to go to the kitchen for a snack. (Note for old-timers: Ctrl+S still works for a quick save too.)
- If you're leaving your computer for an extended period of time, save and close your document with Alt+F, C (think *File Close*).

UP TO SPEED: WHERE ARE MY KEYBOARD SHORTCUTS?

Ribbons, buttons, and menus are all well and good when you're doing something new or complicated. But when you know where you're going, a good keyboard shortcut can save time. Word 2007 has dozens of keyboard shortcuts. If you don't have your favorites memorized, use the Alt key to reveal them.

Press the Alt key, and you see small badges with letters and numbers pop up next to menus and buttons. These are your shortcuts. If you're looking for the keyboard shortcut to close your document, follow these steps:

1. Press and release the Alt key to show the keyboard shortcut badges.

When you do this, the badges appear over menu items and ribbon buttons. (The Alt key acts as a toggle. If you change your mind and don't want to use a shortcut, then press the Alt key again and you're back in normal typing mode.)

2. Press F to open the Office menu.

Pressing F (which used to stand for File menu) does the same thing as clicking the button with your mouse, except that now it sports little keyboard shortcut badges.

3. Press C to close your document.

Looking at the bottom of the Office menu, you see the Close command. A small C badge indicates that pressing C closes your document.

As you can guess, most keyboard shortcuts are based on the initial letter of the actual command words. This doesn't always work out for popular letters. As a result, you have cases like the References tab, which has the keyboard shortcut S.

Even if you don't deliberately work to memorize the keyboard shortcuts, you'll find that you begin to learn your favorites as you use them. Before long, your fingers will tap them out automatically.

If a substantial portion of your brain is occupied by keyboard shortcuts from previous versions of Word, never fear. Most of those old commands still work—including Ctrl+B for Bold, Ctrl+N for new document, and F7 for spell checking.

The Many Ways to Save Documents

It's the Microsoft Way to give you multiple ways to do most everything. Whether that's because the company's programmers believe in giving you lots of choices, or because they can't make up their minds about the best way to do something is a question best left to the philosophers. But the point is, you do have a choice. You don't have to memorize every keystroke, button, and command. Especially with saving, the important thing is to find a way you like and stick with it. Here's a list of some ways you can save the document you're working on:

Saving by keyboard shortcut

- **Ctrl+S.** If you're an old hand at Word, this keyboard shortcut may already be burned in your brain. It still works with Word and other Office programs. This command quickly saves the document and lets you get back to work.
- **Alt+F, S.** This keyboard shortcut does the exact same thing as Ctrl+S. Unlike Ctrl+S, though, you get visual reminders of which keys to press when you press the Alt key. See the box above.

Saving by menu command

- **Office button → Save.** If you don't want to use keyboard shortcuts, you can mouse your way to the same place using menus. Like the options above, this command saves your file with its current name.
- **Office button → Save As.** The Save As option lets you save your file with a new name ([Figure 1-17](#)). When you use this

command, you create a new document with a new name that includes any changes you've made. (The individual steps are described in the next section.)

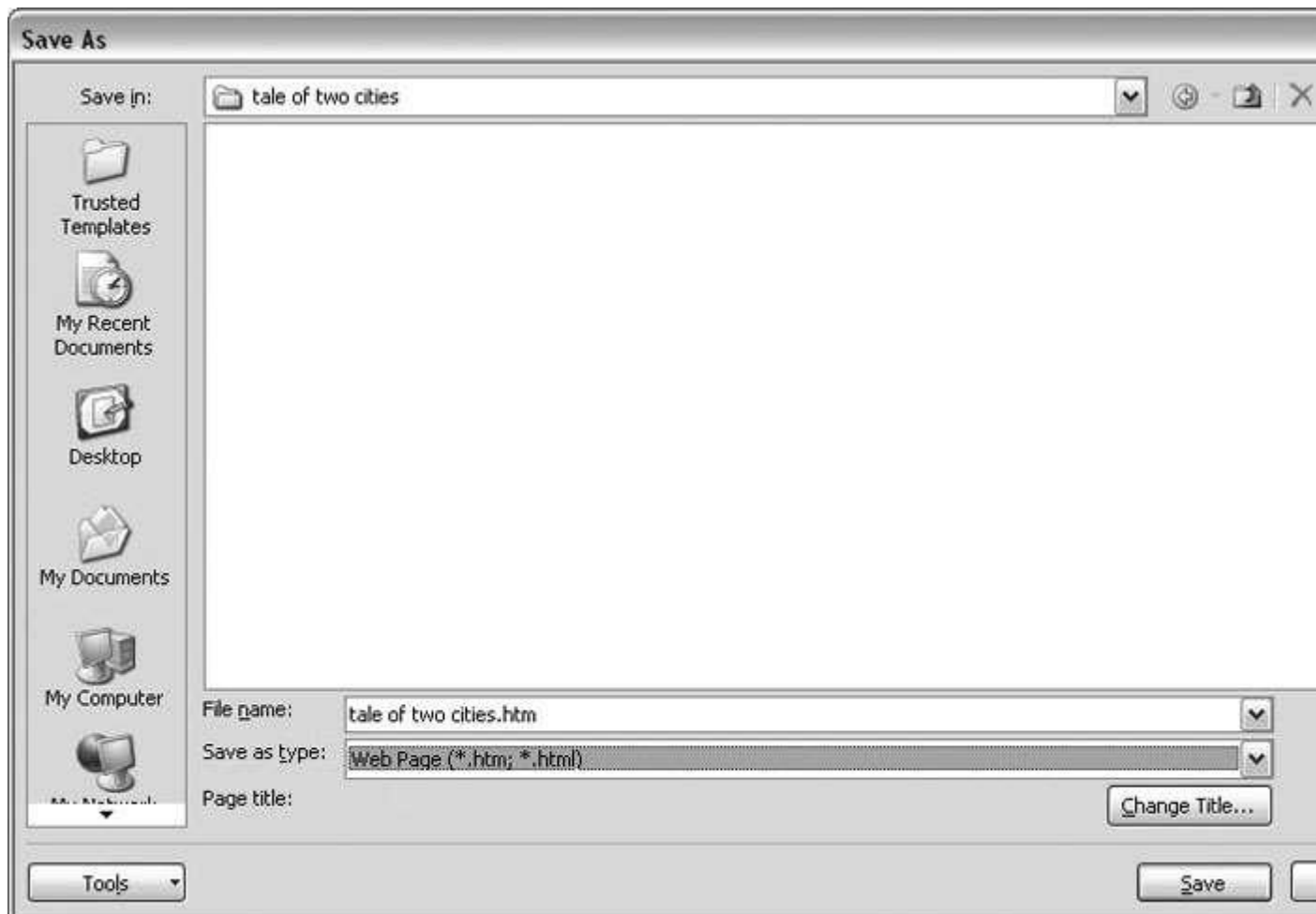


Figure 1-17. Use Office button → Save As to save your file with a new name or in a different file format. In this example, the Word file tale of two cities is being saved as an HTML type file—a format used for Web pages.

- **Office button → Close.** When you close a document, Word checks to see if you've made any changes to the file. When you've made changes, Word always asks whether you'd like to save the document ([Figure 1-18](#)).



Figure 1-18. When you see this message box, you have three choices: Yes saves your document before closing it; No closes your document without saving it; Cancel leaves your document open without saving it.

Saving with a new name

When you save a new document or save a document with a new name (Save As), you've got three things to consider: a filename, a file location, and a file format.

POWER USERS' CLINIC: PREVENTING AND RECOVERING FROM DISASTER

Lightning strikes. Children trip over power cords. Computers crash. Saving your work frequently and keeping backup copies of your documents are important safeguards. You can have Word save backup copies every time you save a document, so you always have the last two versions of your work stored on your computer. Word doesn't automatically save backup copies of your files, but it's easy enough to change this setting. Click the Office button, and then click Word Options at the bottom of the box.

After the Word Options dialog box opens, scroll down to the Save group, and turn on the "Always create backup copy" checkbox. Choose Office button → Open to find and open your backup file ([Figure 1-19](#)).

When disaster strikes in spite of your meticulous preventive measures, Word can help too. Word's new file formats have been designed to be easier to recover and repair. In many cases, if a picture or a table is corrupted in the file, you can still retrieve everything else ([Figure 1-20](#)).

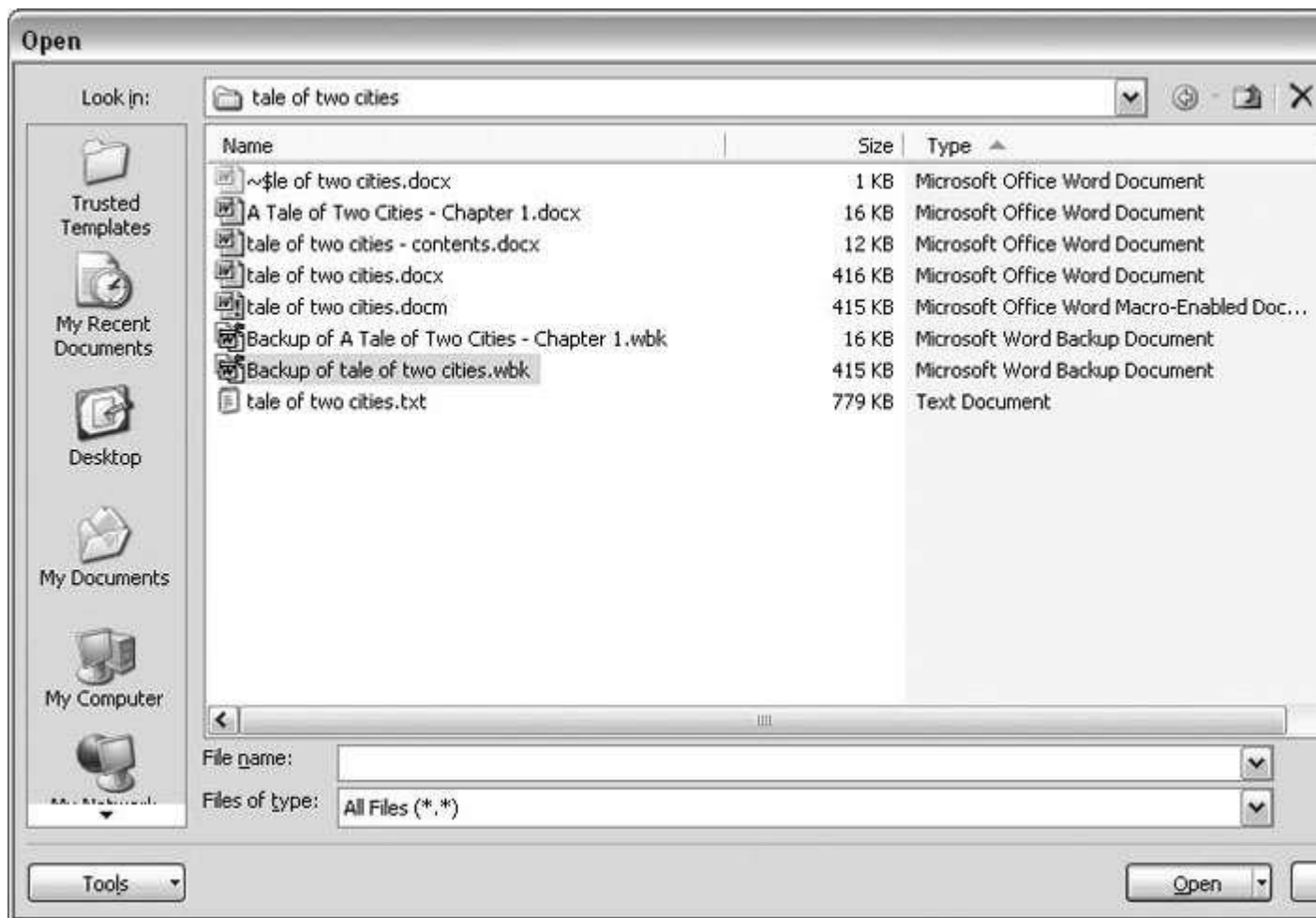


Figure 1-19. To open a backup file, choose All Files (.*) in the “Files of type” drop-down menu at the bottom of the Open dialog box. Look for a file that begins with the words “Backup of.” Double-click to open the file.*

Here are the steps for saving a file, complete with a new name:

1. **Choose Office button → Save As to open the Save As box.**

You use the Save As command when you’re saving a file with a new name. Word also displays the Save As box the first time you save a new document.

2. **Use the “Save in” drop-down list or double-click to open folders in the window to find a location to store your file.**

The buttons in the upper-right corner can also help you navigate. See the details in [Figure 1-21](#). Word doesn't care where you save your files, so you can choose your desktop or any folder on your computer.

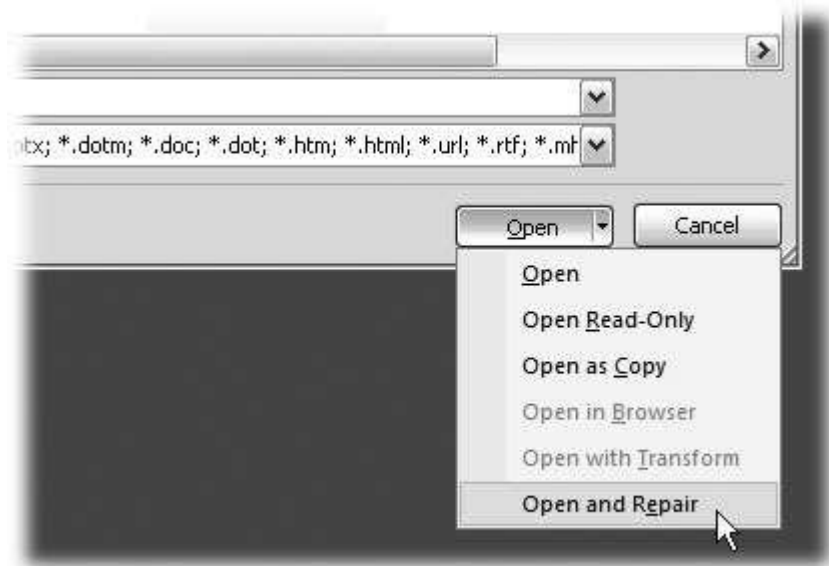


Figure 1-20. When you can't open a file with a normal Open command, click the arrow to the right of the Open button, and choose Open and Repair from the drop-down menu. Some parts of your file may still be damaged, but you can usually recover most of your work.

TIP

The more files you save on your computer, the more helpful it is to have a logical folder and file system. If you keep hundreds of Word documents, you may want to have different folders named: letters, memos, reports, and newsletters.

3. At the bottom of the Save As dialog box, type a name in the File name box.

Word accepts long names, so you don't need to skimp. Use a descriptive name that will help you identify the file two weeks or two years from now. A good name saves you time in the long run.

4. Use the "Save as type" box to choose a file type.

In most cases you don't need to change the file type. Word automatically selects either *.docx* or *.docm* depending on the contents of your file, but Word can save files in over a dozen different formats. If you're sharing the file with someone who's using an older version of Word, then choose Word 97-2003 Document to save the document in *.doc* format. If you're sharing with someone who uses a Mac or Linux computer, then you may want to use the more universal Rich Text Format (*.rtf*).

TIP

If you want to use your document as a template in the future, then choose Word Template (*.dotx*). Use the Word Macro-Enabled format (*.dotm*) if you've created any macros ([Section 19.2](#)).

Unless you're sharing your file with someone using an older version of Word or a different operating system or making a template, stick with the new standard Word file types *.docx* (for normal Word files) and *.docm* (for files that run macros). See the box in [Section 1.2.3](#) for a complete rundown.

5. Click Save.

Word does the rest. All you need to do is remember where you saved your work.

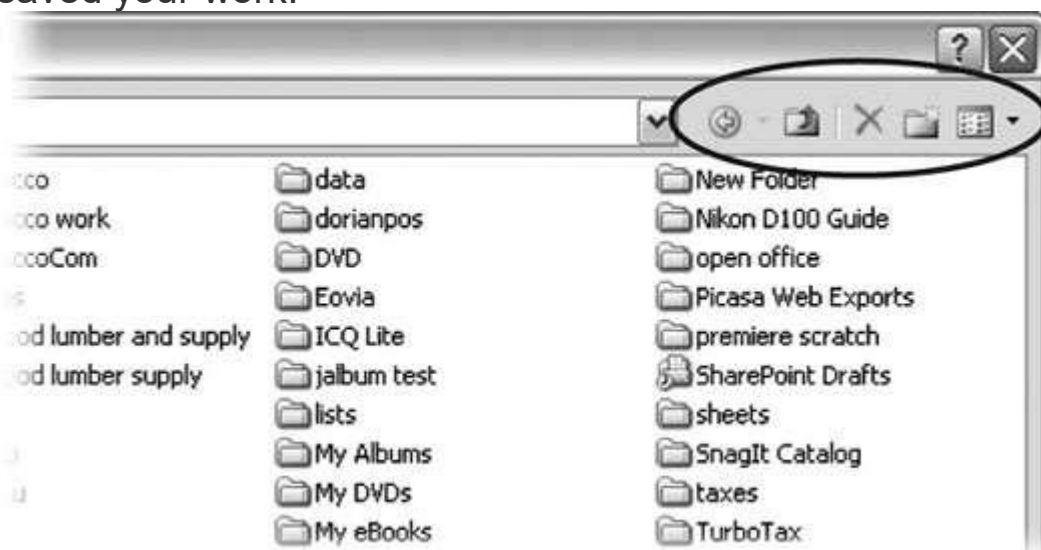


Figure 1-21. The Save As dialog box has all the controls you need to navigate to any location on your computer—including five nifty buttons in the upper-right corner. From left to right: The left arrow button steps you backward through your past locations (just like the back button in a Web browser). The up arrow takes you out to the folder enclosing the one you’re in now. The X button deletes folders and files—be careful with it. Click the folder with the star in the corner to create a new folder.

Q8. Create a file in MS-word for the following document and save it with file name ‘equations’. Describe

all steps involved in it.

Ans. Every Word project you create—whether it’s a personal letter, a TV sitcom script, or a thesis in microbiology—begins and ends the same way. You start by creating a document, and you end by saving your work. Sounds simple, but to manage your Word documents effectively, you need to know these basics and beyond. This chapter shows you all the different ways to create a new Word document—like starting from an existing document or adding text to a predesigned template—and how to choose the best one for your particular project.

You’ll also learn how to work faster and smarter by changing your view of your document. If you want, you can use Word’s Outline view when you’re brainstorming, and then switch to Print view when you’re ready for hard copy. This chapter gets you up and running with these fundamental tools so you can focus on the important stuff—your words.

TIP

If you’ve used Word before, then you’re probably familiar with opening and saving documents. Still, you may want to skim this chapter to catch up on the differences

between this version of Word and the ghosts of Word past. You'll grasp some of the big changes just by examining the figures. For more detail, check out the gray boxes and the notes and tips—like this one!

Launching Word

The first time you launch Word after installation, the program asks you to confirm your name and initials. This isn't Microsoft's nefarious plan to pin you down: Word uses this information to identify documents that you create and modify. Word uses your initials to mark your edits when you review and add comments to Word documents that other people send to you ([Section 16.3](#)).

You have three primary ways to fire up Word, so use whichever method you find quickest:

- **Start menu.** The Start button in the lower-left corner of your screen gives you access to all programs on your PC—Word included. To start Word, choose Start → All Programs → Microsoft Office → Microsoft Office Word.
- **Quick Launch toolbar.** The Quick Launch toolbar at the bottom of your screen (just to the right of the Start menu) is a great place to start programs you use frequently. Microsoft modestly assumes that you'll be using Word a lot, so it usually installs the Word icon in the Quick Launch toolbar. To start using Word, just click the W icon, and voilà!

TIP

When you don't see the Quick Launch toolbar, here's how to display it: On the bar at the bottom of your screen, right-click an empty spot. From the menu that pops up, choose Toolbars → Quick Launch. When you're done, icons for some of your programs appear in the bottom bar. A single click fires up the program.

- **Opening a Word document.** Once you've created some Word documents, this method is fastest of all, since you don't have to start Word as a separate step. Just open an existing Word document, and Word starts itself. Try going to Start → My Recent

Documents, and then, from the list of files, choose a Word document. You can also double-click the document's icon on the desktop or wherever it lives on your PC.

TIP

If you need to get familiar with the Start menu, Quick Launch toolbar, and other Windows features, then pick up a copy of *Windows XP: The Missing Manual*, Second Edition or *Windows Vista: The Missing Manual*.

So, what happens once you've got Word's motor running? If you're a newcomer, you're probably just staring with curiosity. If you're familiar with previous versions of Word, though, you may be doing a double take ([Figure 1-1](#)). In Word 2007, Microsoft combined all the old menus and toolbars into a new feature called the ribbon. Click one of the tabs above the ribbon, and you see the command buttons change below. The ribbon commands are organized into groups, with the name of each group listed at the bottom. (See [Figure 1-1](#) for more detail on the ribbon.)

Creating a New Document

When you start Word without opening an existing document, the program gives you an empty one to work in. If you're eager to put words to page, then type away. Sooner or later, though, you'll want to start *another* new document. Word gives you three ways to do so:

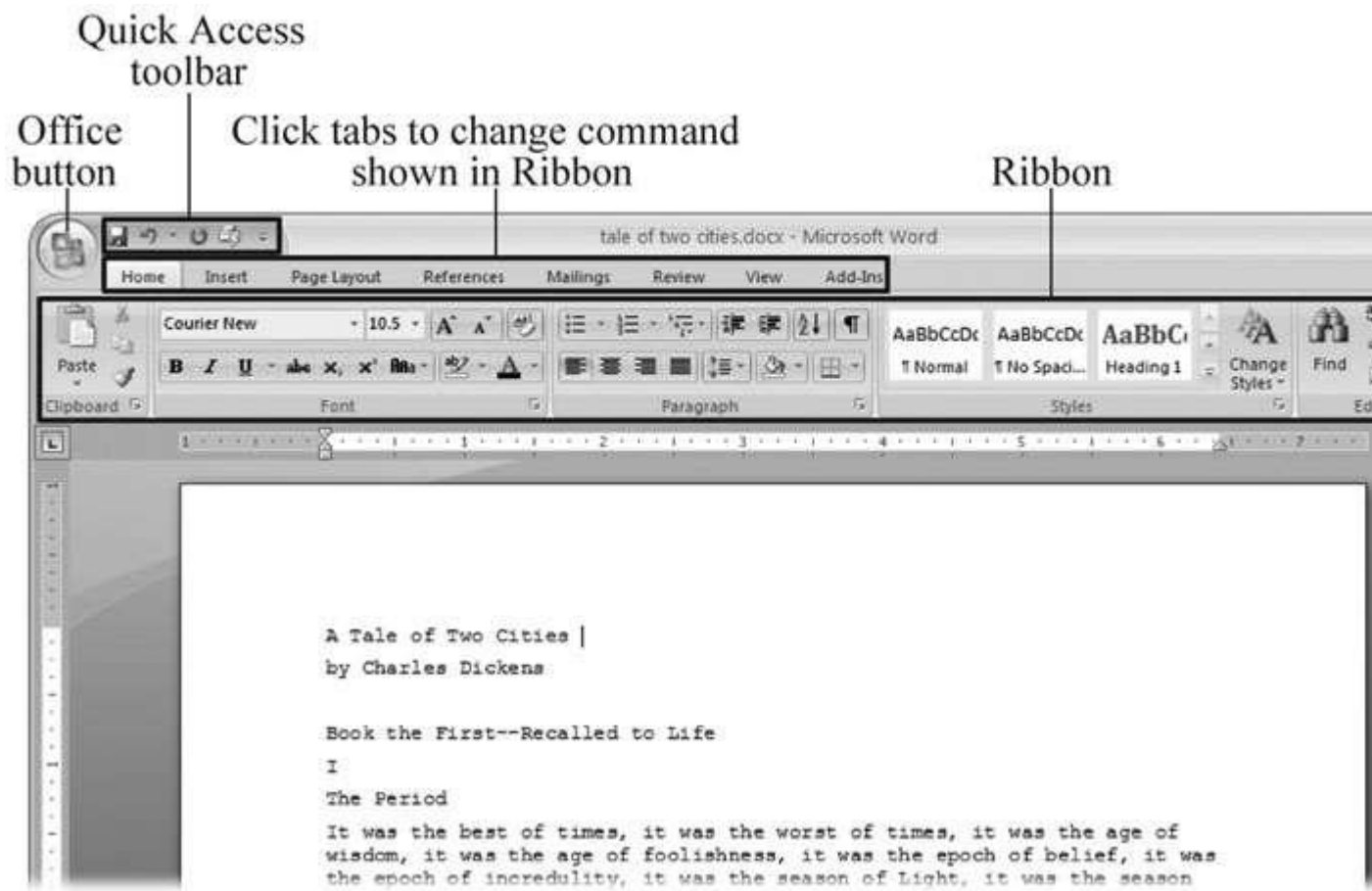


Figure 1-1. When you start Word 2007 for the first time, it may look a little top-heavy. The ribbon takes up more real estate than the old menus and toolbars. This change may not matter if you have a nice big monitor. But if you want to reclaim some of that space, you can hide the ribbon by double-clicking the active tab. Later, when you need to see the ribbon commands, just click a tab.

- **Creating a new blank document.** When you're preparing a simple document—like a two-page essay, a note for the babysitter, or a press release—a plain, unadorned page is fine. Or, when you're just brainstorming and you're not sure what you want the final document to look like, you probably want to start with a blank slate or use one of Word's templates (more on that in a moment) to provide structure for your text.
- **Creating a document from an existing document.** For letters, resumes, and other documents that require more formatting, why reinvent the wheel? You can save time by using an existing

document as a starting point ([Section 1.2.2](#)). When you have a letter format that you like, you can use it over and over by editing the contents.

- **Creating a document from a template ([Section 1.2.3](#)).** Use a template when you need a professional design for a complex document, like a newsletter, a contract, or meeting minutes. Templates are a lot like forms—the margins, formatting, and graphics are already in place. All you do is fill in your text.

TIP

Microsoft provides a mind-boggling number of templates with Word, but they're not the only source. You can find loads more on the Internet, as described in [Section 5.2.1](#). Your employer may even provide official templates for company documents.

To start your document in any of the above ways, click the Windows logo in the upper-left corner of the screen. That's Office 2007's new *Office button*. Click it, and a drop-down menu opens, revealing commands for creating, opening, and saving documents. Next to these commands, you see a list of your Word documents. This list includes documents that are open, as well as those that you've recently opened.

The Office button is also where you go to print and email your documents ([Figure 1-2](#)).

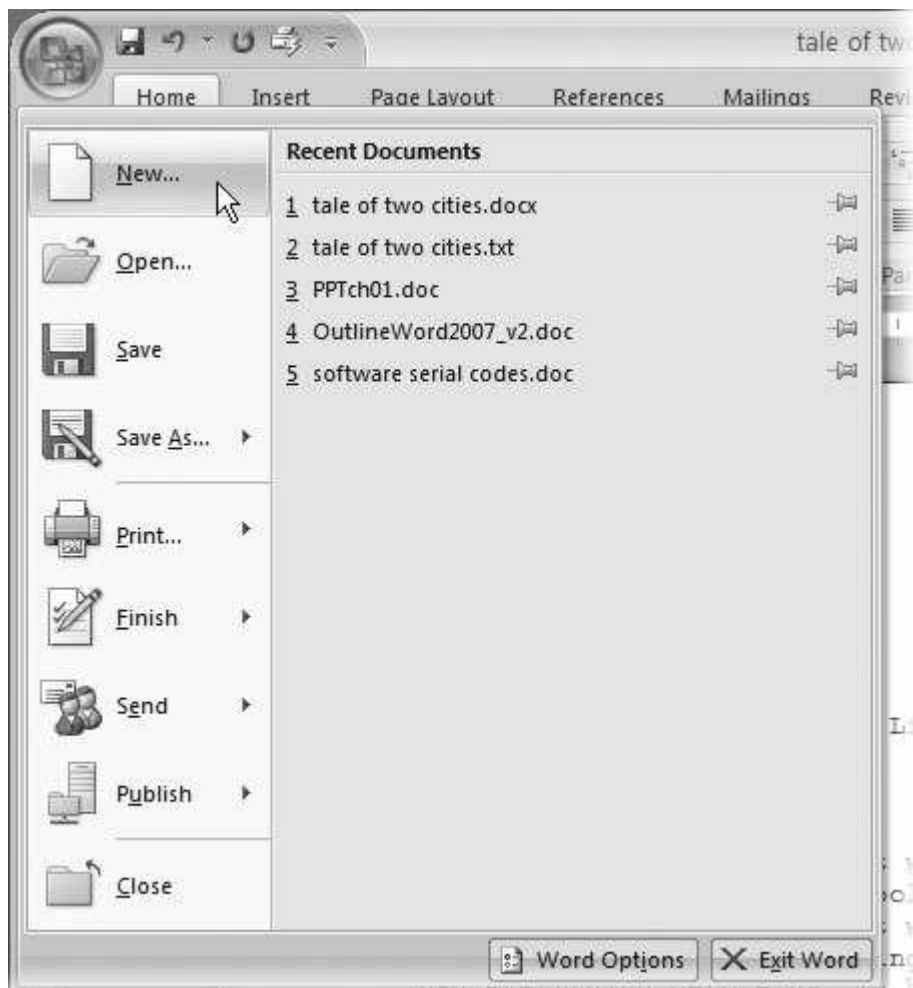


Figure 1-2. The phrase most frequently uttered by experienced Word fans the first time they start Word 2007 is, “Okay, where’s my File menu?” Never fear, the equivalent of the File menu is still there—it’s just camouflaged a bit. Clicking the Office button (the one that looks like a Windows logo) reveals the commands you use to create, open, and save Word documents.

Creating a New Blank Document

Say you want a new blank document, just like the one Word shows you when you start the program. No problem—here are the steps:

1. **Choose Office button → New.**

The New Document dialog box appears.

2. In the upper-left corner of the large “Create a new Word document” panel, click “Blank document” (**Figure 1-3**).

The New Document box presents a seemingly endless number of options, but don’t panic. The “Blank document” option you want is on the left side of the first line.

3. At the bottom of the New Document dialog box, click **Create**.

The dialog box disappears, and you’re gazing at the blank page of a new Word document.

Better get to work.



Figure 1-3. Open the New Document box (Office button → New, or Alt+F, N), and Word gives you several ways to create a new document. Click “Blank document” to open an empty document, similar to the one Word shows when you first start the program. Or you can click “New from existing” to open a document that you previously created under a new name.

Creating a New Document from an Existing Document

A blank Word document is sort of like a shapeless lump of clay. With some work, you can mold it to become just about anything. Often, however, you can save time by opening an existing document that's similar to the one you want to create. Imagine that you write the minutes for the monthly meetings of the Chief Executive Officer's Surfing Association (CEOSA). When it's time to write up the June minutes, it's a lot faster to open the minutes from May. You keep the boilerplate text and all the formatting, but you delete the text that's specific to the previous month. Now all you have to do is enter the text for June and save the document with a new name: *JuneMinutes.docx*.

NOTE

The .docx extension on the end of the filename is Word 2007's new version of .doc. The switch from three-letter to four-letter filename extensions indicates a change in the way Word stores documents. (If you need to share documents with folks using earlier versions of Word, choose Office button → Save As → Word 97-2003 document when you save the file. See the box in [Section 1.2.3](#) for details.)

Word gives you a “New from existing” document-creation option to satisfy your desire to spend more time surfing and less time writing meeting minutes. Here's how to create a new document from an existing document:

1. **Choose Office button → New (Alt+F, N) to open the New Document window. Then click “New from existing...” (it sits directly below the “Blank document” button).**

The three dots at the end of the button's title tell you that there's another dialog box to come. And sure enough, when you click “New from existing...”, it opens another box, appropriately titled New from Existing Document ([Figure 1-4](#)). This box looks—and works—like a standard Windows Open File box. It lets you navigate to a specific folder and open a file.

2. On your computer, find the existing document you're using for a model.

You can use the bar on the left to change the folder view. Word starts you in your My Documents folder, but you can switch to your desktop or your My Computer icon by clicking the icons on the left. Double-click folder icons in the large window to open them and see their contents.

3. Click to select the file, and then click Create New (in the lower-right corner). (Alternatively, just double-click the file's icon to open it. This trick works in all Open File boxes.)

Instead of the usual Open button at the bottom of the box, the button in the New from Existing Document box reads Create New—your clue that this box behaves differently in one important respect: Instead of opening an existing file, you're making a *copy* of an existing file. Once open, the file's name is something like *Document2.docx* instead of the original name. This way, when you save the file, you don't overwrite the original document. (Still, it's best to save it with a new descriptive name right away.)

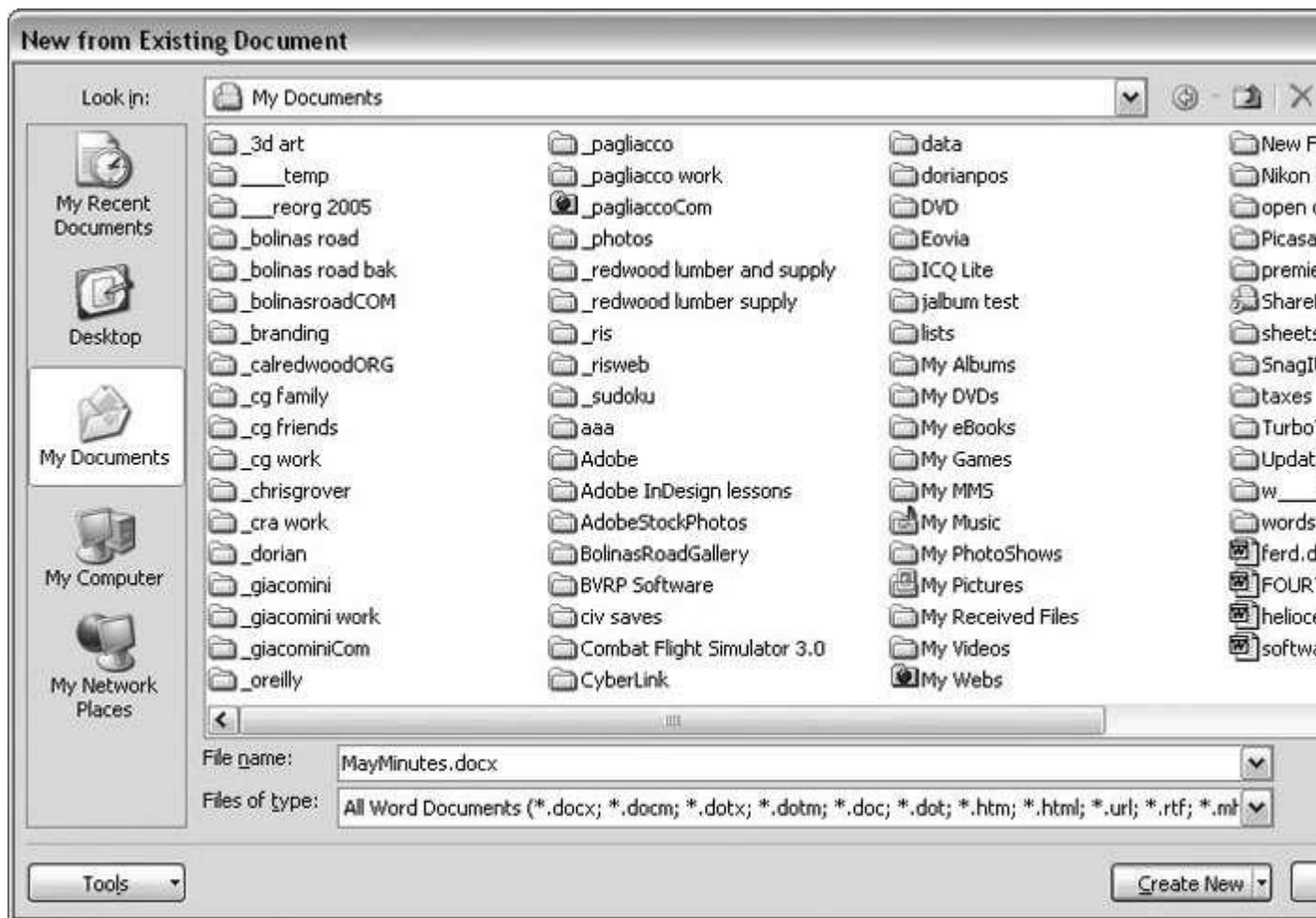


Figure 1-4. Use the New from Existing Document box to find an existing Word document that you'd like to open as a model for your new document. When you click Create New at bottom-right, Word opens a new copy of the document, leaving the original untouched. You can modify the copy to your heart's content and save it under a different file name.

TIP

Windows' Open File boxes, like New from Existing Document, let you do a lot more than just find files. In fact, they let you do just about anything you can do in Windows Explorer. Using keyboard shortcuts, you can cut (Ctrl+X), copy (Ctrl+C), and paste (Ctrl+V) files. A right-click displays a shortcut menu with even more commands, letting you rename files, view Properties dialog boxes, and much more. You can even drag and drop to move files and folders.

POWER USERS' CLINIC: WORD'S NEW FILE FORMATS: .DOCX AND .DOCM

With Office 2007, Microsoft took the drastic step of changing its file formats in hopes of improving your computer's security. Malicious programmers were using Office's macros to do nasty things to unsuspecting computers. The *.docx* format, the new standard for Word files, doesn't permit macros, making it safe from those threats. The *.docm* format indicates that a document contains macros or other bits of programming code. When opening one of these files, play it safe: If you don't know who created the *.docm* file, then don't open it.

The downside of the new file formats is that older versions of Word don't know how to open these *.docx* and *.docm* documents. To open Word 2007 files with an older version (even Word 2003), you need to install the Microsoft Office Compatibility Pack.

This software fix gives pre-2007 versions of Word the power to open documents in the new formats. Even then, you may not be able to use or edit parts of the file that use new Word features (like themes, equations, and content controls). To download the free compatibility pack, go to www.office.microsoft.com and type *office 2007 compatibility* into the search box at the top of the page.

Also, if you're preparing a Word document for someone who's using an older Word version, then you have to save it in a compatible format, as described in the tip in [Section 1.2.2](#). (Fortunately, the compatibility issue doesn't go both ways: Word 2007 can open old *.doc* docs just fine.)

Creating a New Document from a Template

Say you're creating meeting minutes for the first time. You don't have an existing document to give you a leg up, but you do want to end up with handsome, properly formatted minutes. Word is at your service—with *templates*. Microsoft provides dozens upon dozens of prebuilt templates for everything from newsletters to postcards. Remember all the busy stuff in the New Document box in [Figure 1-3](#)? About 90 percent of the items in there are templates.

In the previous example, where you use an existing document to create the meeting minutes for the Chief Executive Officer's Surfing Association (CEOSA), each month you open the minutes from the previous month. You delete the information that pertains to the previous month and enter the current month's minutes. A template works pretty much the same way, except it's a generic document, designed to be adaptable to lots of different situations. You just open it and add your text. The structure, formatting, graphics, colors, and other doodads are already in place.

NOTE

The subject of Word templates is a lengthy one, especially when it comes to creating your own, so there's a whole chapter devoted to that topic—[Chapter 20](#).

Here's how to get some help from one of Microsoft's templates for meeting minutes:

1. **Choose Office button → New (Alt+F, N) to open the New Document window.**

On the left of the New Document box is a Template Categories list. The top entry on this list is Installed Templates—the ones Word has installed on your computer.

You could use any of these, but you also have a world of choice waiting for you online. On its Web site, Microsoft offers hundreds of templates for all sorts of documents, and you can access them right from the New Document box. If you have a fast Internet connection, then it's just as quick and easy to use an online template as it is using the ones stored on your computer. In fact, you'll use an online template for this example.

NOTE

If you can't connect to the Internet right now, then simply choose one of the installed templates instead. Click Create, and then skip to step 4.

2. Scroll down the Template Categories list to the Microsoft Office Online heading. Under this heading, select Minutes.

In the center pane, you'll see all different types of minutes templates, from PTA minutes to Annual shareholder's meeting minutes ([Figure 1-5](#)). When you click a template's icon, a preview appears in the pane on the right.

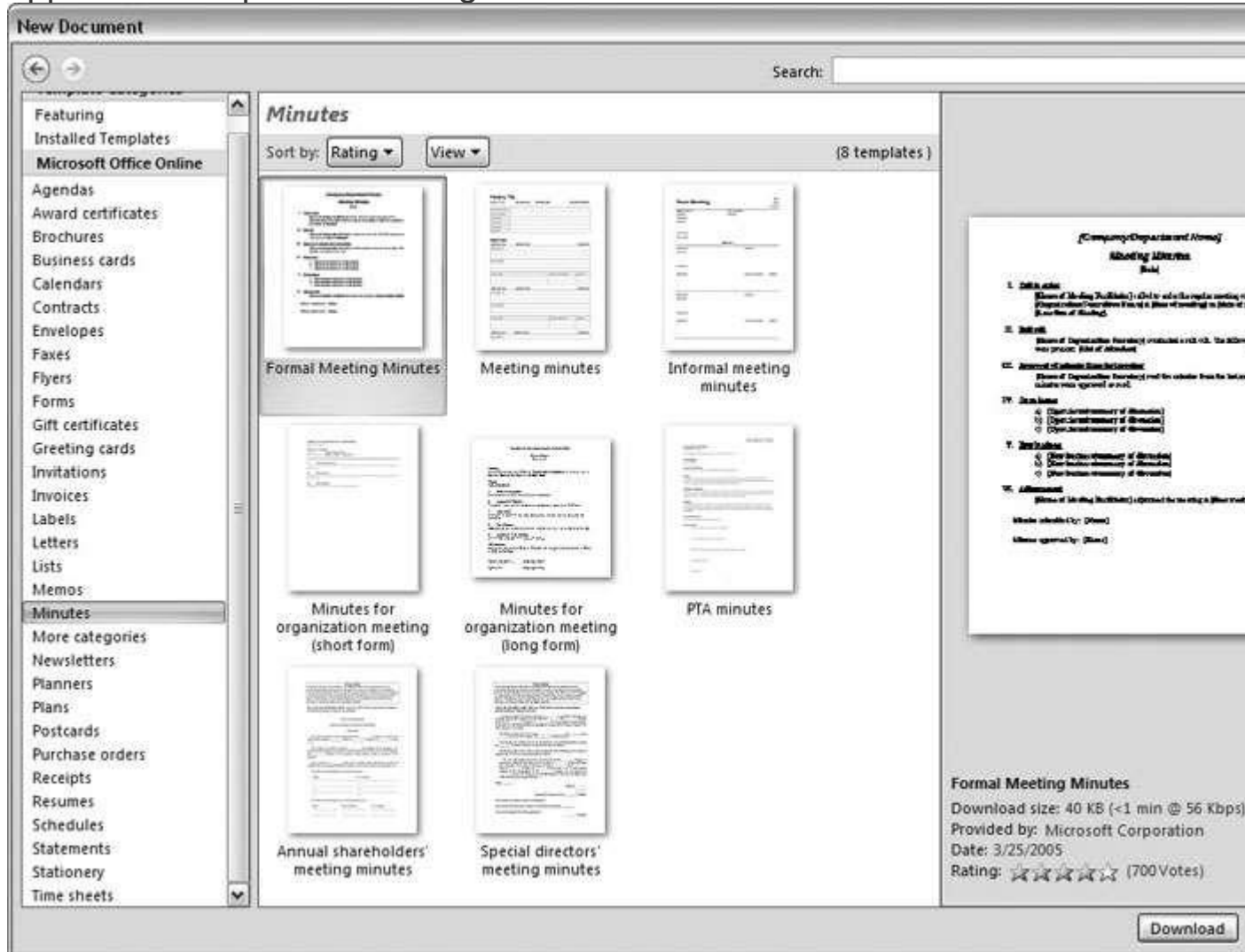


Figure 1-5. The New Document box lists prebuilt templates that live at Microsoft Office Online in categories like Agendas, Brochures, Calendars, and Minutes. Below the thumbnail you see an estimate of how long it takes to download the template from the Microsoft Office Online Web site. A rating, from 0 to 5 stars, tells you what other people think of the template (the rating system is kind of like the one at Amazon.com).

3. When you're done perusing the various styles, click the Formal Meeting Minutes icon. (After all, CEOSA is a very formal organization.) Then click Download.

Word downloads and opens the document.

4. Start writing up the minutes for the CEO Surfers.

To follow the template's structure, replace all the words in square brackets ([]) with text relevant to CEOSA.

TIP

If you'd rather not download the Formal Meeting Minutes template every time you use it, then you can save the file on your computer as a Word template. The steps for saving files are just around the corner in [Section 1.5](#).

Opening an Existing Document

If you've mastered creating a document from an existing document and creating a document from a template, you'll find that opening an existing document is a snap. The steps are nearly identical.

1. Choose Office button → Open (Alt+F, O). In the Open window ([Figure 1-6](#)), navigate to the folder and file you want to open.

The Open window starts out showing your My Documents folder, since that's where Word suggests you save your files. When your document's in a more exotic location, click the My Computer icon, and then navigate to the proper folder from there.

TIP

When you open a document you've used recently, you may see its name right on the Office button → Recent Documents menu. If so, simply click to open it without a trip to the Open dialog box.

2. With the file selected, click Open in the lower-right corner.

The Open box goes away and your document opens in Word. You're all set to get to work. Just remember, when you save this document (Alt+F, S or Ctrl+S), you write over the previous file. Essentially, you create a new, improved, and only copy of the file you just opened. If you don't want to write over the existing document, use the Save As command (Alt+F, A), and then type a new name in the File Name text box.

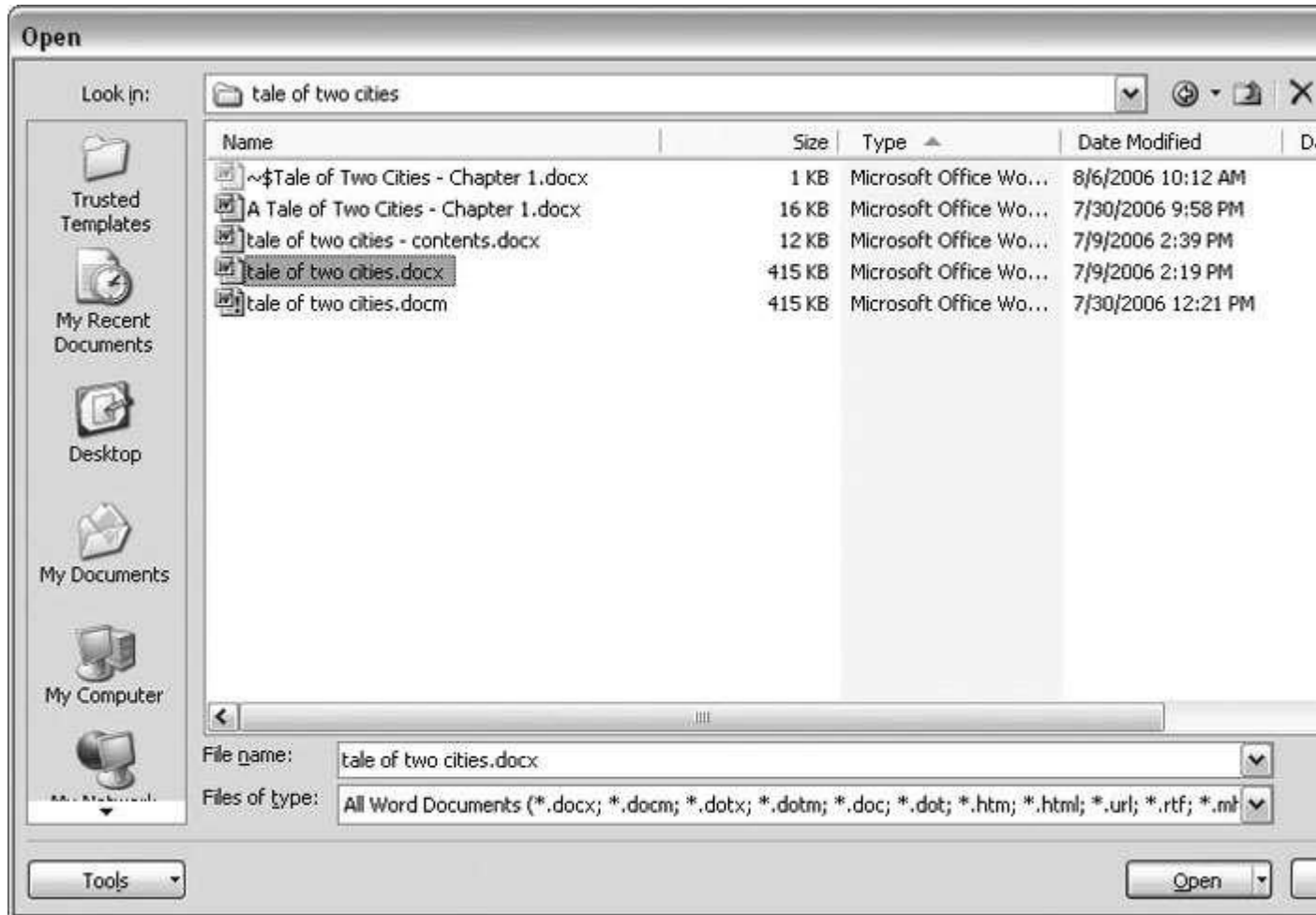


Figure 1-6. This Open dialog box shows the contents of the tale of two cities folder, according to the “Look in” box at the top. The file tale of two cities.docx is selected, as you can see in the “File name box” at the bottom of the window. By clicking Open, Mr. Dickens is ready to go to work.

TIP

Opening a file in Word doesn't mean you're limited to documents *created* in Word. You can choose documents created in other programs from the Files of Type drop-down

menu at the bottom of the Open dialog box. Word then shows you that type of document in the main part of the window. You can open Outlook messages (.msg), Web pages (.htm or .html), or files from other word processors (.rtf, .mcw, .wps).

Your Different Document Views

Now that you know a handful of ways to create and open Word documents, it's time to take a look around the establishment. You may think a document's a document—just look at it straight on and get your work done. It's surprising, though, how changing your view of the page can help you work faster and smarter. When you're working with a very long document, you can change to Outline view and peruse just your document's headlines without the paragraph text. In Outline view, you get a better feeling for the manuscript as a whole. Likewise, when you're working on a document that's headed for the Web, it makes sense to view the page as it will appear in a browser. Other times, you may want to have two documents open on your screen at once (or on each of your two monitors, you lucky dog), to make it easy to cut and paste text from one to the other.

The key to working with Word's different view options is to match the view to the job at hand. Once you get used to switching views, you'll find lots of reasons to change your point of view. Find the tools you need on the View tab ([Figure 1-7](#)). To get there, click the View tab (Alt+W) on the ribbon (near the top of Word's window). The tab divides the view commands into four groups:

- **Document Views.** These commands change the big picture. For the most part, use these when you want to view a document in a dramatically different way: two pages side by side, Outline view, Web layout view, and so on.
- **Show/Hide.** The Show/Hide commands display and conceal Word tools like rulers and gridlines. These tools don't show when you print your document; they're just visual aids that help you when you're working in Word.

- **Zoom.** As you can guess, the Zoom tools let you choose between a close-up and a long shot of your document. Getting in close makes your words easier to read and helps prevent eyestrain. But zooming out makes scrolling faster and helps you keep your eye on the big picture.

TIP

In addition to the Zoom tools on the ribbon, handy Zoom tools are available in the window's lower-right corner. Check out the + (Zoom In) and – (Zoom Out) buttons and the slider in between them. See [Section 1.4.3](#) for the details on using them.

- **Window.** In the Window group, you'll find creative ways to organize document windows on your screen—like split views of a single document or side-by-side views of two different documents.

All the commands in the View tab's four groups are covered in the following pages.

NOTE

This section provides the short course on viewing your Word documents. For even more details and options for customizing your Word environment, see [Chapter 17](#).

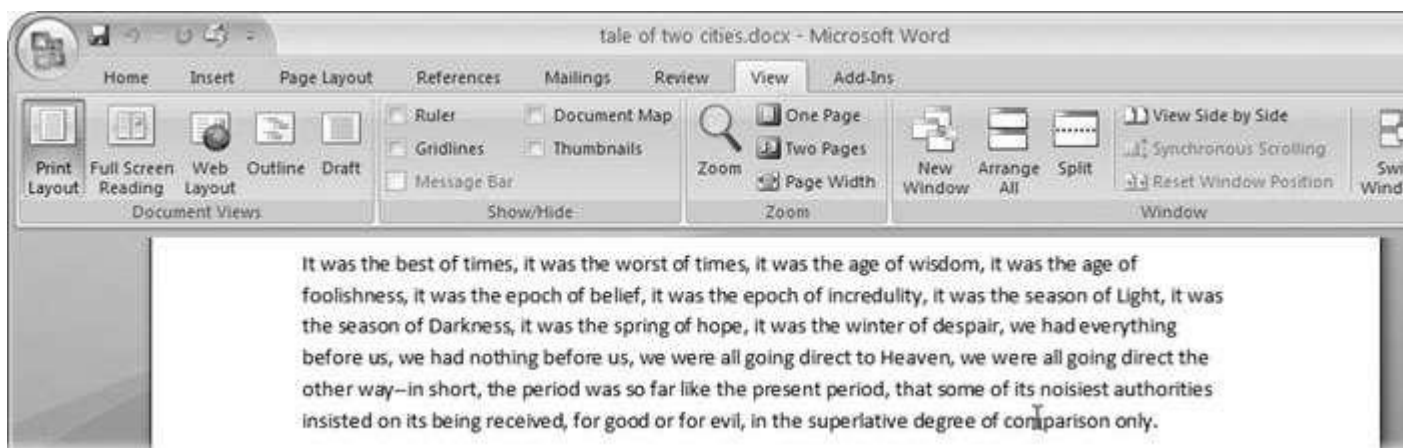


Figure 1-7. The View tab is your document-viewing control center. Look closely, and you see it's divided into four groups with names at the bottom of the ribbon: Document Views, Show/Hide, Zoom, and Window. To apply a view command, just click the button or label.

Document Views: Five Ways to Look at Your Manuscript

Word gives you five basic document views. To select a view, go to the View tab (Alt+W) and choose one of the Document Views on the left side of the ribbon ([Figure 1-8](#)). You have another great option for switching from one view to another that's always available in the lower-right corner of Word's window. Click one of the five small buttons to the left of the slider to jump between Print Layout, Full Screen Reading, Web Layout, Outline, and Draft views. Each view has a special purpose, and you can modify them even more using the other commands on the View tab.

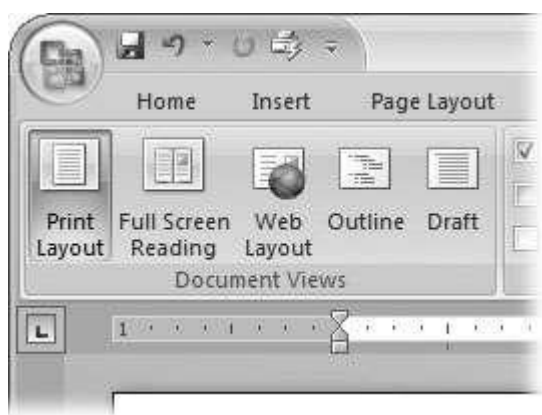


Figure 1-8. On the left side of the View tab, you find the five basic document views: Print Layout, Full Screen Reading, Web Layout, Outline, and Draft. You can edit your document in any of the views, although they come with different tools for different purposes. For example, Outline view provides a menu that lets you show or hide headings at different outline levels.

NOTE

Changing your view in no way affects the document itself—you're just looking at the same document from a different perspective.

- **Print Layout (Alt+W, P).** The most frequently used view in Word, Print Layout, is the one you see when you first start the program or create a new blank document. In this view, the page you see on your computer screen looks much as it does when you print

it. This view's handy for letters, reports, and most documents headed for the printer.

- **Full Screen Reading (Alt+W, F).** If you'd like to get rid of the clutter of menus, ribbons, and all the rest of the word-processing gadgetry, then use Full Screen Reading view. As the name implies, this view's designed primarily for reading documents. It includes options you don't find in the other views, like a command that temporarily decreases or increases the text size. In the upper-right corner you see some document-proofing tools (like a text highlighter and an insert comment command), but when you want to change or edit your document, you must first use the View Options → Allow Typing command. For more details on using Word for reviewing and proofing, see [Chapter 16](#).

- **Web Layout (Alt+W, L).** This view shows your document as if it were a single Web page loaded in a browser. You don't see any page breaks in this view. Along with your text, you see any photos or videos that you've placed in the document—just like a Web page. [Section 13.2](#) has more details on creating Web pages with Word.

- **Outline (Alt+W, U).** For lots of writers, an outline is the first step in creating a manuscript. Once they've created a framework of chapters and headings, they dive in and fill out the document with text. If you like to work this way, then you'll love Outline view. It's easy to jump back and forth between Outline view and Print Layout view or Draft view, so you can bounce back and forth between a macro and a micro view of your epic. (For more details on using Word's Outline view, see [Section 8.1](#).)

- **Draft (Alt+W, V).** Here's the no-nonsense, roll-up-your-sleeves view of your work ([Figure 1-9](#)). You see most formatting as it appears on the printed page, except for headers and footers. Page breaks are indicated by a thin dotted line. In this view, it's as if your document is on one single roll of paper that scrolls through your computer screen. This view's a good choice for longer documents and those moments when you want to focus on

the words without being distracted by page breaks and other formatting niceties.

Show and Hide Window Tools

Word gives you some visual aids that make it easier to work with your documents. Tools like rulers and gridlines don't show up when you print your document, but they help you line up the elements on the page. Use the ruler to set page margins and to create tabs for your documents.

Checkboxes on the View tab let you show or hide tools, but some tools aren't available in all the views, so they're grayed out. You can't, for example, display page rulers in Outline or Full Screen Reading views.

Use the checkboxes in the Show/Hide group of the View tab ([Figure 1-10](#)) to turn these tools on and off:

- **Ruler.** Use the ruler to adjust margins, set tabs, and position items on your page. For more detail on formatting text and paragraphs, see [Chapter 4](#).
- **Gridlines.** When you click the Gridlines box, it looks like you created your document on a piece of graph paper. This effect isn't too helpful for an all-text document, but it sure comes in handy if you're trying to line up photos on a page.

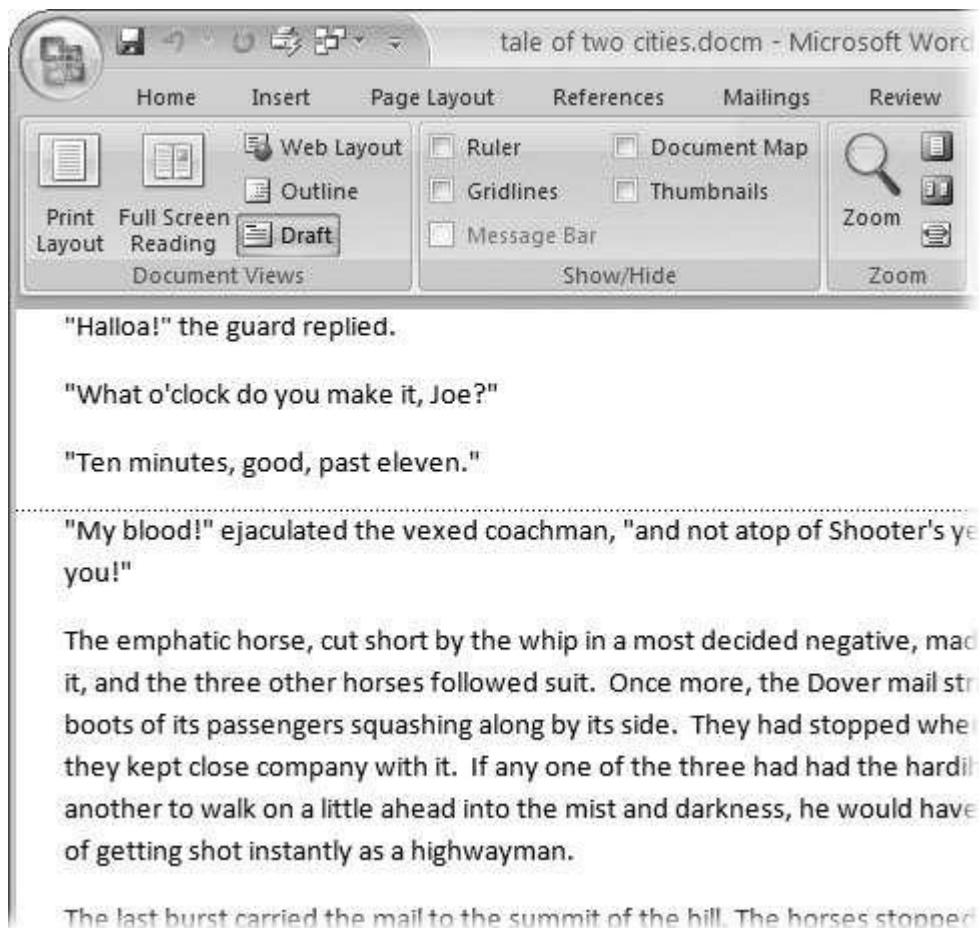


Figure 1-9. In Draft view, you see most text and paragraph formatting, but headers, footers, and other distracting page formatting features are hidden. Your text appears as a continuous scroll, with the margins hidden. Page breaks appear as dotted lines.

- **Message Bar.** The Message Bar resides directly under the ribbon, and it's where you see alerts about a document's behavior. For example, when a document is trying to run a macro and your Word settings prohibit macros, an alert appears in the Message Bar. Click the checkbox to show or hide the Message Bar.
- **Document Map.** If you work with long documents, you'll like the Document Map. This useful tool appears to the left of your text (you can see it in [Figure 1-10](#)), showing the document's headings at various levels. Click the little + and–buttons next to a heading to expand or collapse the outline. Click a heading, and you jump to that location in your document.

- **Thumbnails.** Select the Thumbnails option, and you see little icons of your document's pages in the bar on the left. Click a thumbnail to go to that page. In general, thumbnails are more useful for shorter documents and for pages that are visually distinctive. For longer documents, you'll find the Document Map easier to use for navigation.

Zooming Your View In and Out

When you're working, do you ever find that you sometimes hold pages at arm's length to get a complete view, and then, at other times, you stick your nose close to the page to examine the details? Word's Zoom options (Figure 1-11) let you do the same thing with your screen—but without looking nearly as silly.

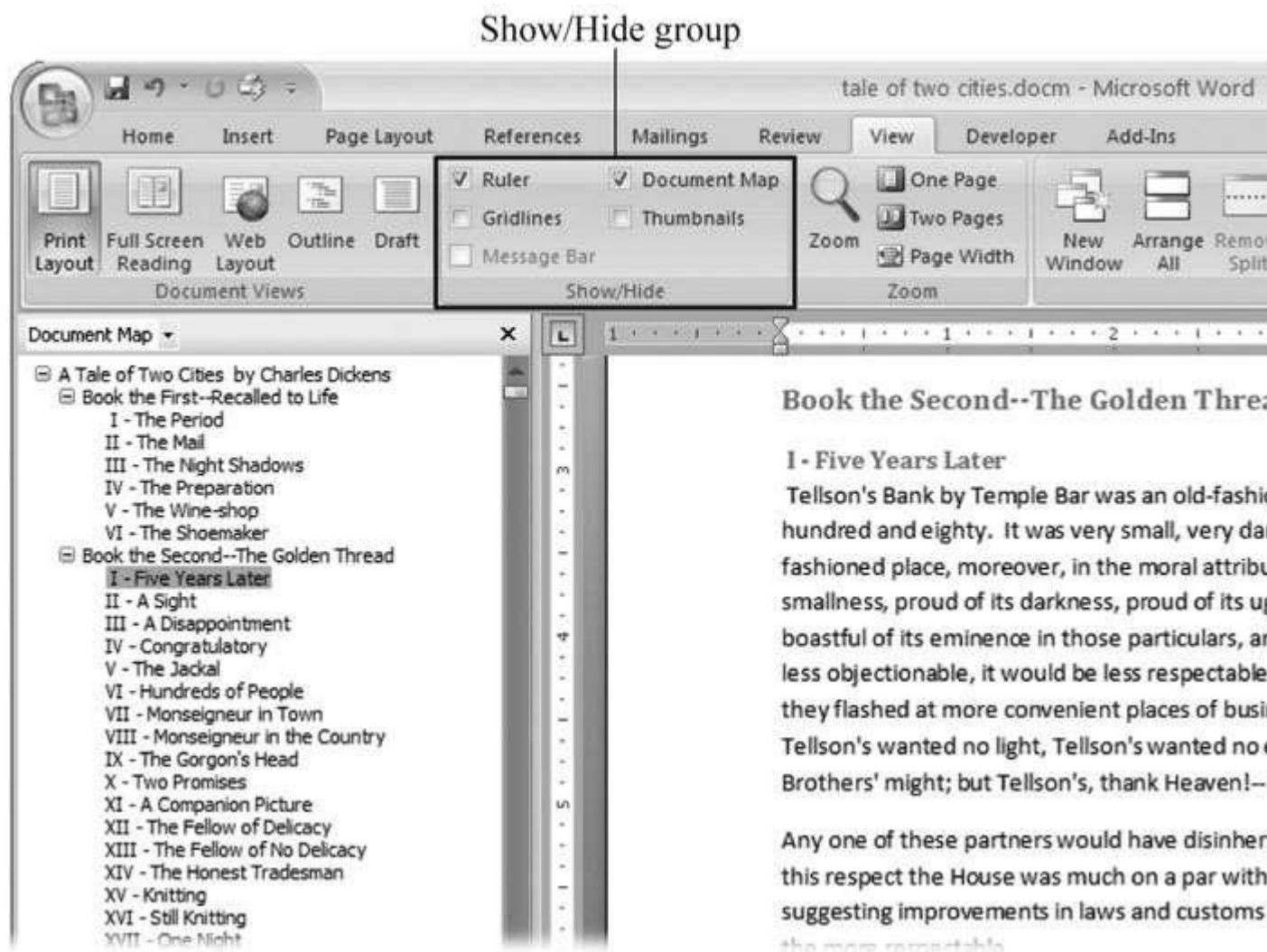


Figure 1-10. Use the Show/Hide group on the View tab to display or conceal Word tools. The Ruler gives you a quick and easy way to set tabs and margins. The Document Map is particularly helpful when you work with longer documents because it displays headings in the bar on the left of the screen. In the left pane, you can see that Mr. Dickens wrote more than his fair share of chapters.

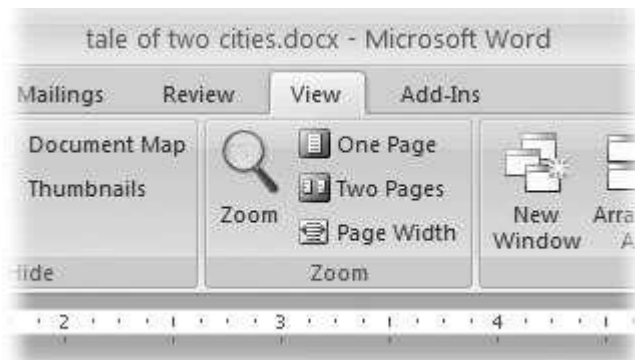


Figure 1-11. The Zoom group of options lets you view your document close up or at a distance. The big magnifying glass opens the Zoom dialog box with more controls for fine-tuning your zoom level. For quick changes, click one of the three buttons on the right: One Page, Two Pages, or Page Width.

NOTE

Even though the text appears to get bigger and smaller when you zoom, you're not actually changing the document in any way. Zoom is similar to bringing a page closer so you can read the fine print. If you want to actually change the font size, then use the formatting options on the Home tab (Alt+H, FS).

On the View tab, click the big magnifying glass to open the Zoom dialog box ([Figure 1-12](#)). Depending on your current Document View (see [Section 1.4](#)), you can adjust your view by percentage or relative to the page and text (more on that in a moment). The options change slightly depending on which Document View you're using. The Page options don't really apply to Web layouts, so they're grayed out and inactive if you're in the Web Layout view.

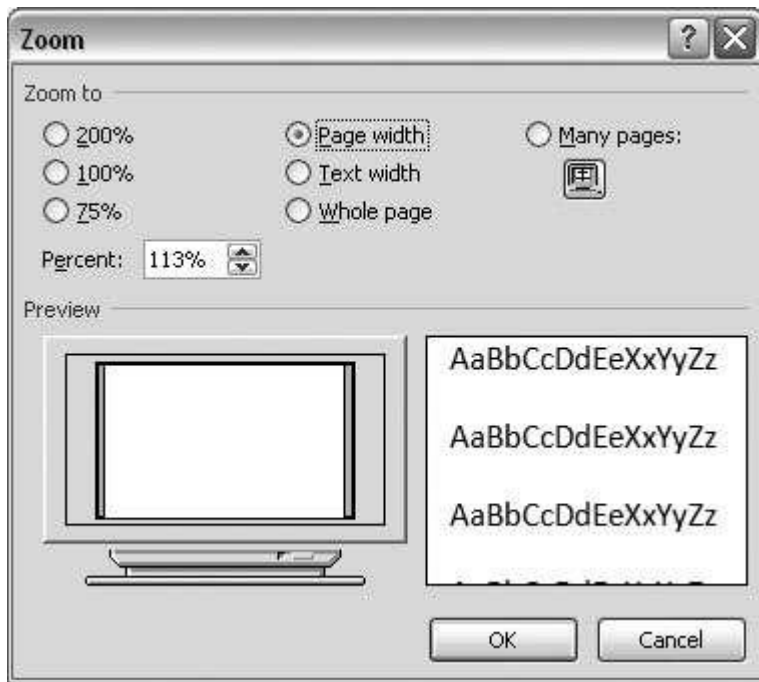


Figure 1-12. The Zoom dialog box lets you choose from a variety of views. Just click one of the option buttons, and then click OK. The monitor and text sample at the bottom of the Zoom box provide visual clues as you change the settings.

Zooming by percentage

In the box's upper-left corner, you find controls to zoom in and out of your document by percentage. The view varies depending on your computer screen and settings, but in general, 100% is a respectable, middle-of-the-road view of your document. The higher the percentage, the more zoomed in you are, and the bigger everything looks—vice versa with a lower percentage.

The three radio buttons (200%, 100%, and 75%) give you quick access to some standard settings. For in-between percentages (like 145%), type a number in the box below the buttons, or use the up-down arrows to change the value. For a quick way to zoom in and out without opening a dialog box, use the Zoom slider ([Figure 1-13](#)) in the lower-right corner of your window. Drag the slider to the right to zoom in on your document, and drag it to the left to zoom out. The percentage changes as you drag.

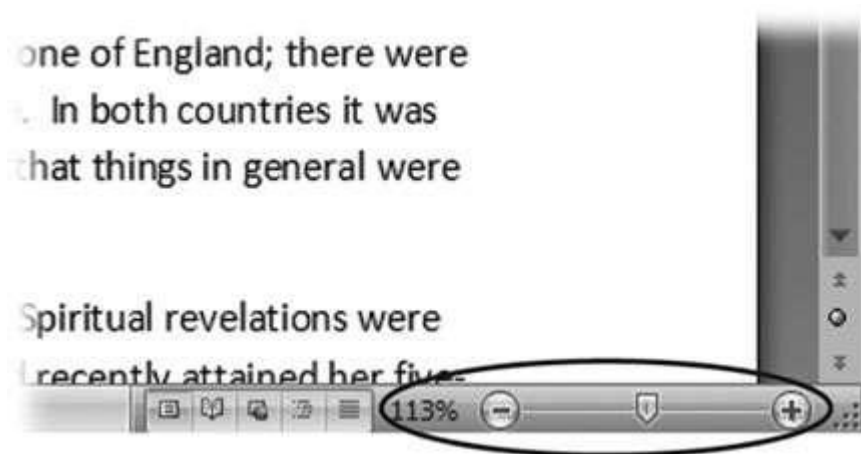


Figure 1-13. The Zoom slider at the bottom of the document window gives you a quick and easy way to change your perspective. Drag the slider to the right to zoom in on your document, and drag it to the left to zoom out. To the left of the slider are five View buttons: Print Layout, Full Screen Reading, Web Layout, Outline, and Draft ([Section 1.4.2](#)). Since the first button is selected, this document is in Print Layout view.

Zooming relative to page or text

Not everyone's a number person. (That's especially true of writers.) So you may prefer to zoom without worrying about percentage figures. The Zoom dialog box (on the View tab, click the magnifying-glass icon) gives you four radio buttons with plain-English zoom settings:

Page width. Click this button, and the page resizes to fill the screen from one side to the other. It's the fastest way to zoom to a text size that most people find comfortable to read. (You may have to scroll, though, to read the page from top to bottom.)

Text width. This button zooms in even farther, because it ignores the margins of your page. Use this one if you have a high-resolution monitor (or you've misplaced your reading glasses).

Whole page. When you want to see an entire page from top to bottom and left to right, click this button. It's great for getting an overview of how your headings and paragraphs look on the page.

Many pages. This view is the equivalent of spreading your document out on the floor, and then viewing it from the top of a ladder. You can use it to see how close you are to finishing that five-page paper, or to inspect the layout of a multi-page newsletter.

WARNING

When you're zoomed out to Whole or "Many pages" view, watch those fingers on the keyboard. You can still make changes to your text in these views, even though you can't see what you're doing.

Changing page view from the ribbon

The ribbon offers radio buttons for three popular page views. (You can see them back in [Figure 1-11](#), to the Zoom tool's right.) They're a quick and dirty way to change the number of pages you see onscreen without fiddling with zoom controls.

- **One Page.** This view shows the entire page in Word's document window. If your screen is large enough, you can read and edit text in this view.
- **Two Pages.** In this view, you see two pages side by side. This view's handy when you're working with documents that have two-page spreads, like booklets.
- **Page Width.** This button does the exact same thing as the Page Width button in the Zoom dialog box ([Section 1.4.3](#)). It's more readable than the One Page and Two Page options, because the page fills the screen from edge to edge, making the text appear larger.

The Window Group: Doing the Splits

Back when dinosaurs roamed the earth and people used typewriters (or very early word processors), you could work on only one document at a time—the one right in front of you. Although Word 2007 has more options for viewing multiple documents and multiple windows than ever, some folks forget to use them. Big mistake. If you ever find yourself comparing

two documents or borrowing extensively from some other text, then having two or more documents visible on your screen can double or triple your work speed.

The commands for managing multiple documents, views, and windows are in the View tab's Window group ([Figure 1-14](#)).

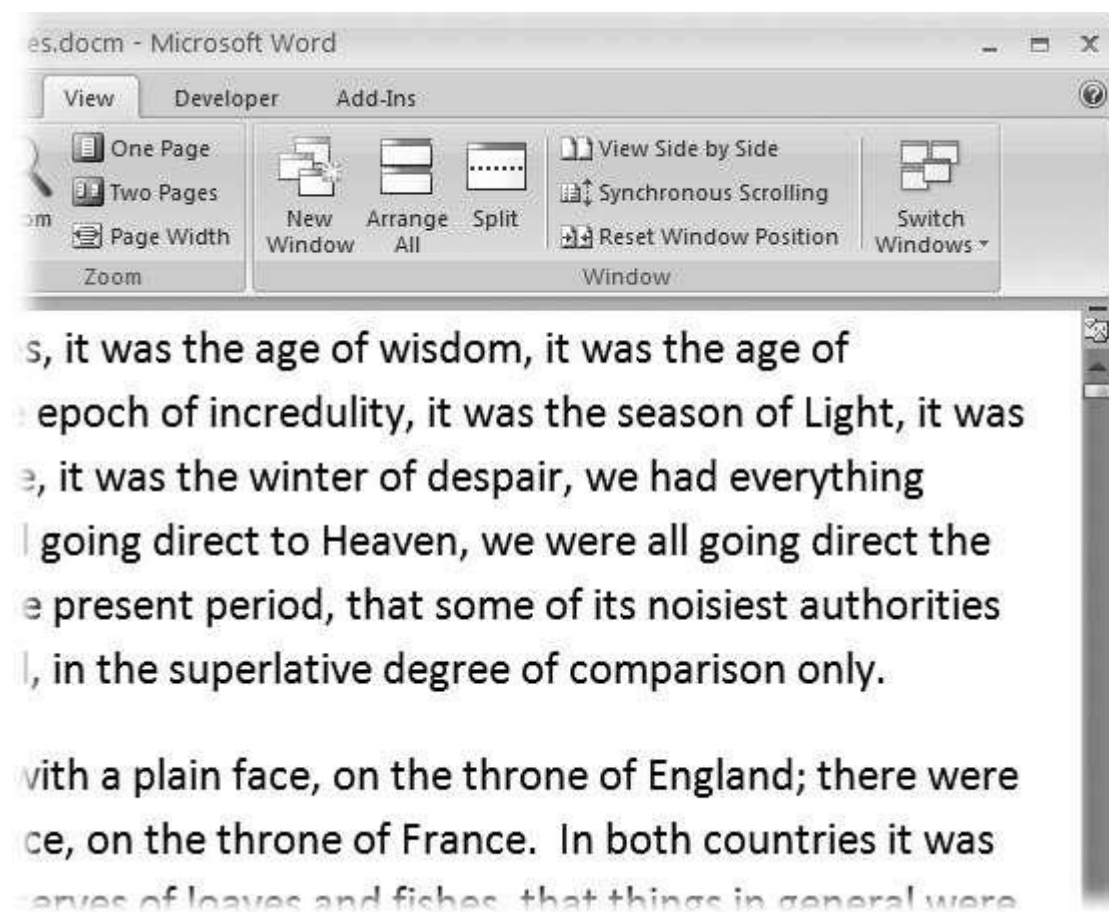


Figure 1-14. In the Window group, the three commands on the left—New Window, Arrange All, and Split—let you open and view your work from multiple vantage points. The commands in the middle—View Side by Side, Synchronous Scrolling, and Reset Window Position—are helpful when reviewing and comparing documents. The big Switch Windows button lets you hop from one document to another.

- **New Window (Alt+W, N).** When you're working on a long document, sometimes you want to see two different parts of the document at the same time, as if they were two separate documents. You may want to keep referring to what you said in the

Introduction while you're working in Chapter 5. Or perhaps you want to keep an Outline view open while editing in Draft view. That's where the New Window command comes in. When you click this button (or hit this keystroke), you've got your document open in two windows that you can scroll independently. Make a change to one window, and it immediately appears in the other.

- **Arrange All (Alt+W, A).** Great—now you've got documents open in two or more windows, but it takes a heck of a lot of mousing around and window resizing to get them lined up on your screen at the same time. Click Arrange All and, like magic, your open Word document windows are sharing the screen, making it easy to work on one and then the other. Word takes an egalitarian approach to screen real estate, giving all windows an equal amount of property (Figure 1-15).
- **Split (Alt+W, S).** The Split button divides a single window so you can see two different parts of the same document—particularly handy if you're copying text from one part of a document to another. The other advantage of the Split command is that it gives you more room to work than using Arrange All for multiple windows because it doesn't duplicate the ribbon, ruler, and other Word tools (Figure 1-16).

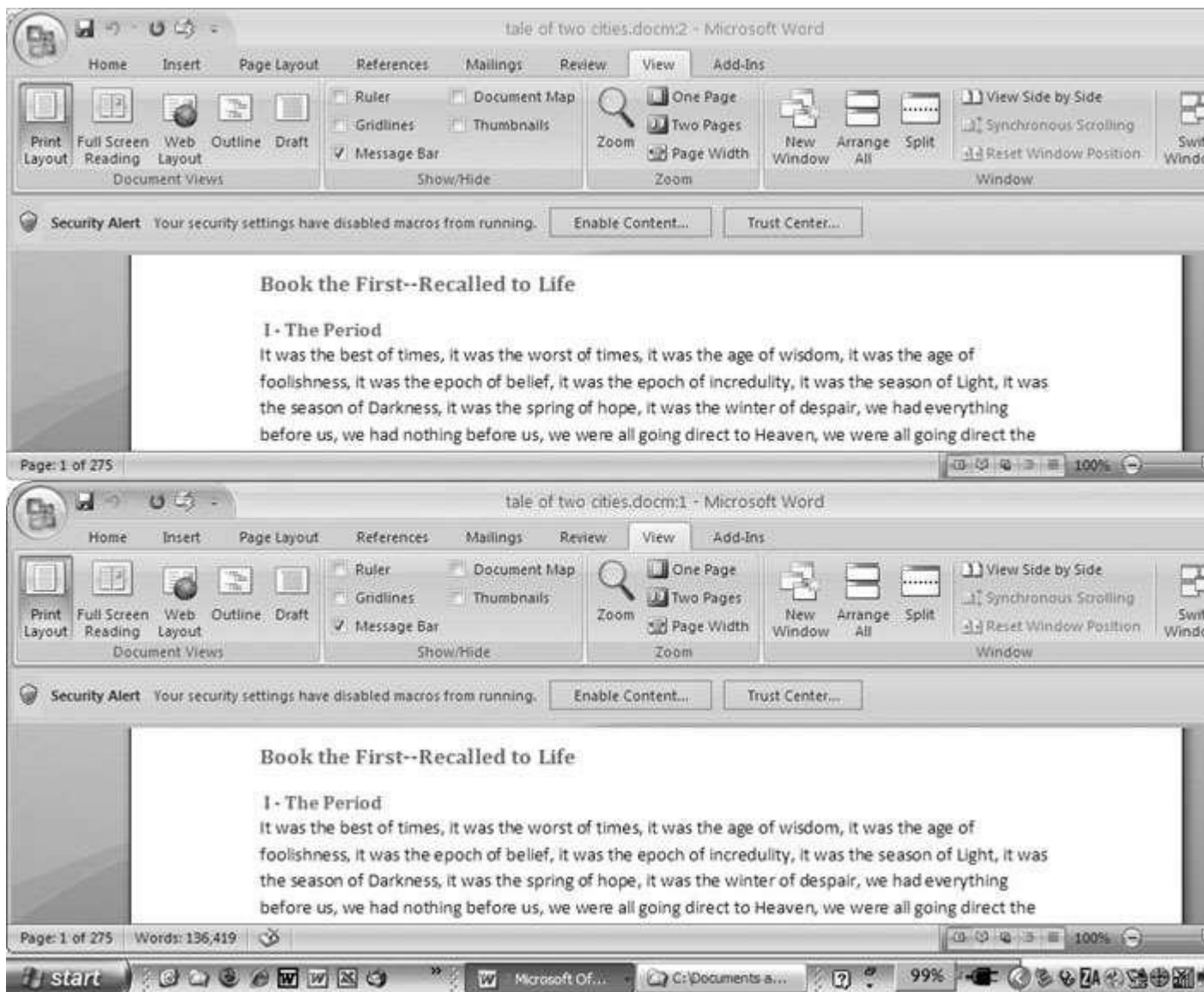


Figure 1-15. One downside of Office 2007's ribbon: It takes up more space on your computer's screen than menus or even the older button bars. When you open a couple of windows, you're not left with much space to do your work, especially when you're working on an ultra-portable laptop or a computer with a small screen. You can double-click the active tab to hide the ribbon, but in most cases, you're better off working with a split screen, as shown in [Figure 1-16](#).

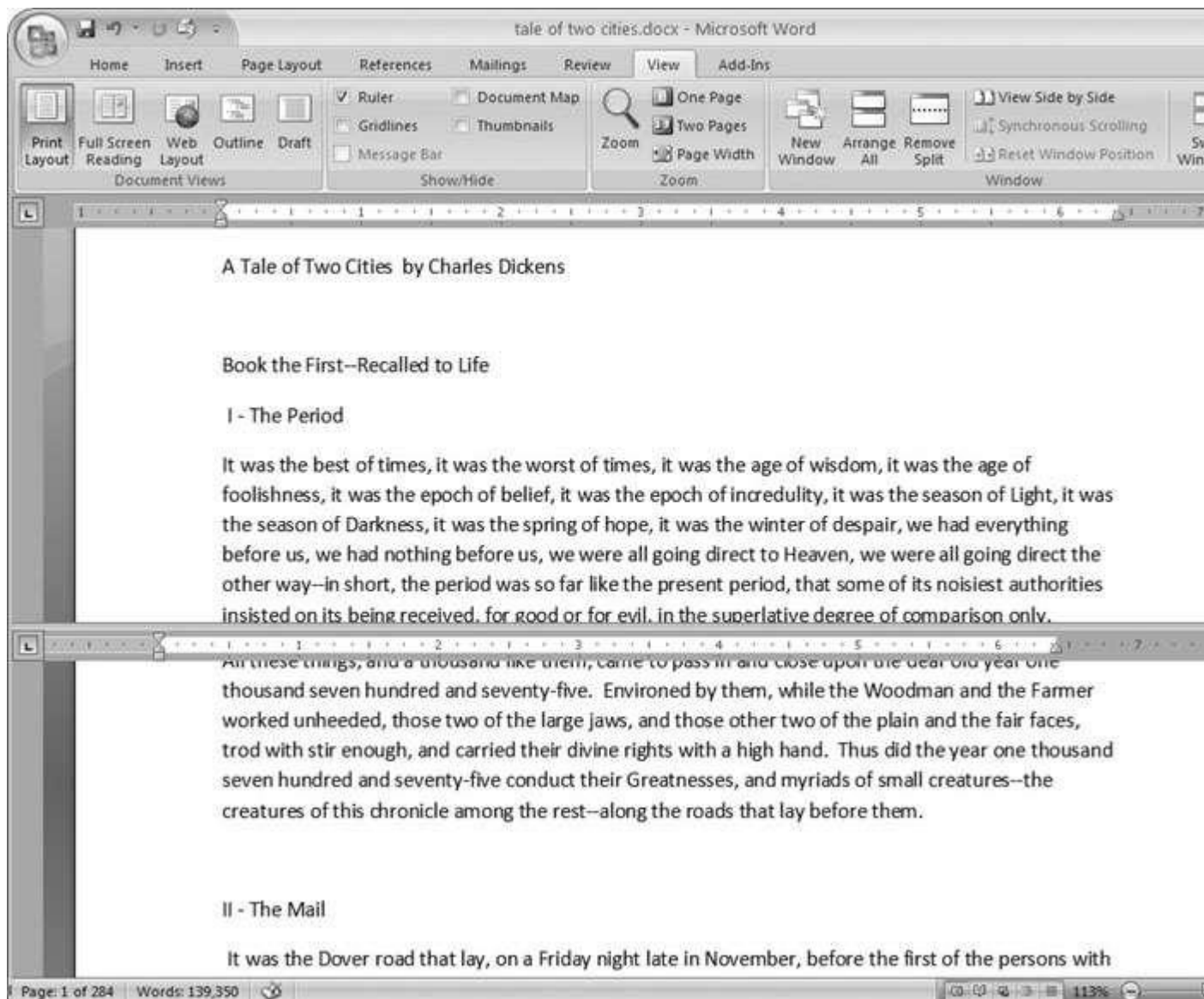


Figure 1-16. When you're viewing two different parts of a single document, use the Split command; it leaves you more room to work than two separate windows, as shown in [Figure 1-15](#). Each section of the split window has a scroll bar, so you can independently control different parts of your document. If you want to fine-tune your split, just drag the middle bar exactly where you want it. When you're done, click Remove Split to return to a single screen view.

Viewing multiple windows

One common reason for wanting to see two documents or more on your screen at once is so you can make line-by-line comparisons. Imagine you have two Word documents that are almost identical, but you have to find

the spots where there are differences. A great way to make those differences jump out is to put both versions on your screen side by side and scroll through them. As you scroll, you can see differences in the paragraph lengths and the line lengths. Here are the commands to help you with the process:

- **View Side by Side (Alt+W, B).** Click the View Side by Side command and Word arranges two windows vertically side by side. As you work with side-by-side documents, you can rearrange windows on your screen by dragging the very top of the Window frame. You can resize the windows by pointing to any edge of the frame. When you see a double arrow, just drag to resize the window. Synchronous Scrolling (described next) is automatically turned on.
- **Synchronous Scrolling (Alt+W, Y).** The Synchronous Scrolling feature keeps multiple document windows in lock step. When you scroll one window, the other windows automatically scroll too. Using the same button or keystroke, you can toggle Synchronous Scrolling on and off as you work with your documents.
- **Reset Windows Position (Alt+W, T).** If you've moved or resized your document windows as described earlier under View Side by Side, then you can click this button to reset your view so the windows share the screen equally.

Saving and Closing Documents

From the earliest days of personal computing, the watchword has been “save early, save often.” There’s nothing more frustrating than working half the day and then having the Great American Novel evaporate into the digital ether because your power goes out. So, here are some tips to protect your work from disasters human-made and natural:

- Name and save your document shortly after you first create it. You’ll see the steps to do so later in this section.

- Get in the habit of doing a quick save with Alt+F, S (think *File Save*) when you pause to think or get up to go to the kitchen for a snack. (Note for old-timers: Ctrl+S still works for a quick save too.)
- If you're leaving your computer for an extended period of time, save and close your document with Alt+F, C (think *File Close*).

UP TO SPEED: WHERE ARE MY KEYBOARD SHORTCUTS?

Ribbons, buttons, and menus are all well and good when you're doing something new or complicated. But when you know where you're going, a good keyboard shortcut can save time. Word 2007 has dozens of keyboard shortcuts. If you don't have your favorites memorized, use the Alt key to reveal them.

Press the Alt key, and you see small badges with letters and numbers pop up next to menus and buttons. These are your shortcuts. If you're looking for the keyboard shortcut to close your document, follow these steps:

1. Press and release the Alt key to show the keyboard shortcut badges.

When you do this, the badges appear over menu items and ribbon buttons. (The Alt key acts as a toggle. If you change your mind and don't want to use a shortcut, then press the Alt key again and you're back in normal typing mode.)

2. Press F to open the Office menu.

Pressing F (which used to stand for File menu) does the same thing as clicking the button with your mouse, except that now it sports little keyboard shortcut badges.

3. Press C to close your document.

Looking at the bottom of the Office menu, you see the Close command. A small C badge indicates that pressing C closes your document.

As you can guess, most keyboard shortcuts are based on the initial letter of the actual command words. This doesn't always work out for popular letters. As a result, you have cases like the References tab, which has the keyboard shortcut S.

Even if you don't deliberately work to memorize the keyboard shortcuts, you'll find that you begin to learn your favorites as you use them. Before long, your fingers will tap them out automatically.

If a substantial portion of your brain is occupied by keyboard shortcuts from previous versions of Word, never fear. Most of those old commands still work—including Ctrl+B for Bold, Ctrl+N for new document, and F7 for spell checking.

The Many Ways to Save Documents

It's the Microsoft Way to give you multiple ways to do most everything. Whether that's because the company's programmers believe in giving you lots of choices, or because they can't make up their minds about the best way to do something is a question best left to the philosophers. But the point is, you do have a choice. You don't have to memorize every keystroke, button, and command. Especially with saving, the important thing is to find a way you like and stick with it. Here's a list of some ways you can save the document you're working on:

Saving by keyboard shortcut

- **Ctrl+S.** If you're an old hand at Word, this keyboard shortcut may already be burned in your brain. It still works with Word and other Office programs. This command quickly saves the document and lets you get back to work.
- **Alt+F, S.** This keyboard shortcut does the exact same thing as Ctrl+S. Unlike Ctrl+S, though, you get visual reminders of which keys to press when you press the Alt key. See the box above.

Saving by menu command

- **Office button → Save.** If you don't want to use keyboard shortcuts, you can mouse your way to the same place using menus. Like the options above, this command saves your file with its current name.
- **Office button → Save As.** The Save As option lets you save your file with a new name ([Figure 1-17](#)). When you use this

command, you create a new document with a new name that includes any changes you've made. (The individual steps are described in the next section.)

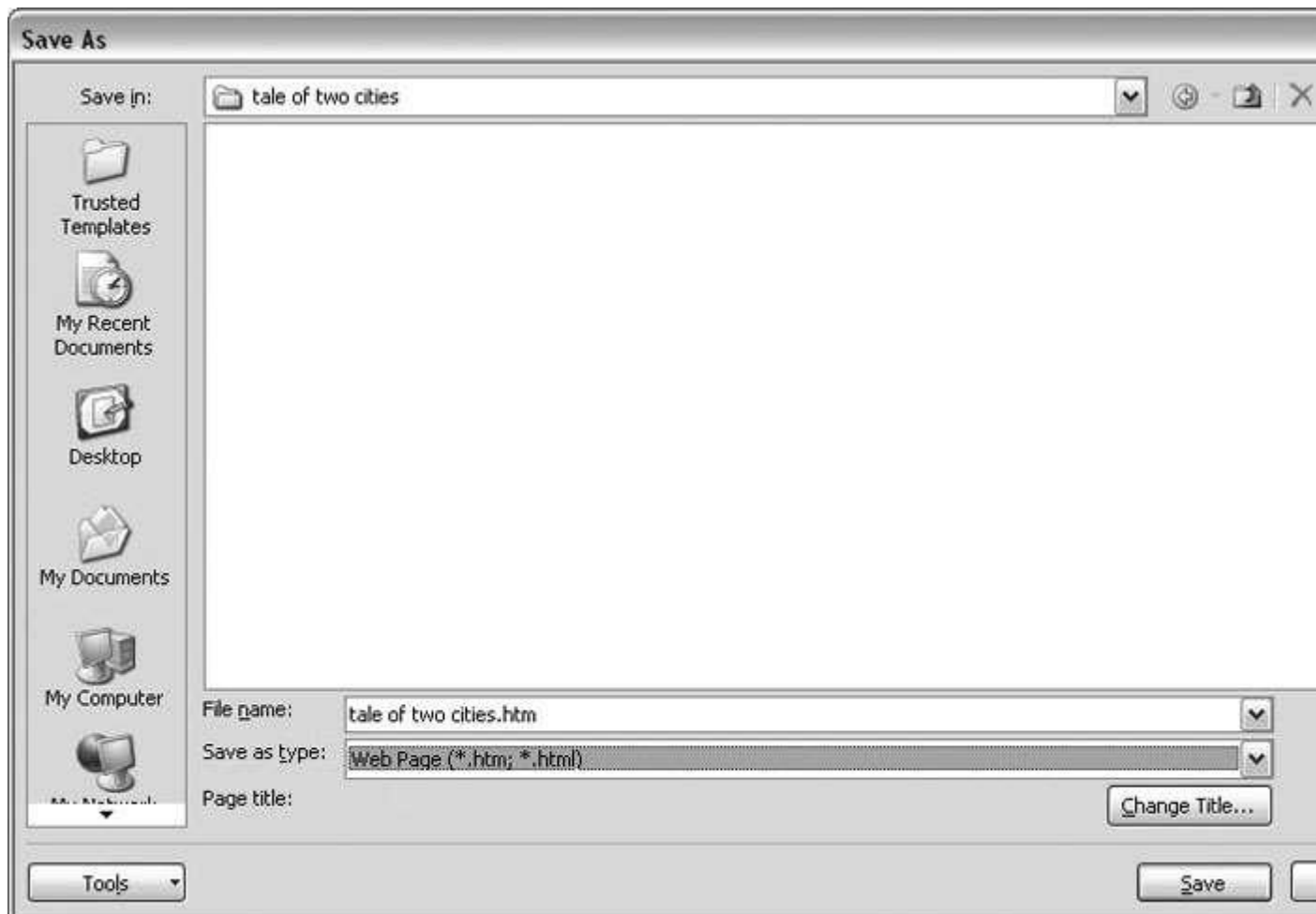


Figure 1-17. Use Office button → Save As to save your file with a new name or in a different file format. In this example, the Word file tale of two cities is being saved as an HTML type file—a format used for Web pages.

- **Office button → Close.** When you close a document, Word checks to see if you've made any changes to the file. When you've made changes, Word always asks whether you'd like to save the document ([Figure 1-18](#)).



Figure 1-18. When you see this message box, you have three choices: Yes saves your document before closing it; No closes your document without saving it; Cancel leaves your document open without saving it.

Saving with a new name

When you save a new document or save a document with a new name (Save As), you've got three things to consider: a filename, a file location, and a file format.

POWER USERS' CLINIC: PREVENTING AND RECOVERING FROM DISASTER

Lightning strikes. Children trip over power cords. Computers crash. Saving your work frequently and keeping backup copies of your documents are important safeguards. You can have Word save backup copies every time you save a document, so you always have the last two versions of your work stored on your computer. Word doesn't automatically save backup copies of your files, but it's easy enough to change this setting. Click the Office button, and then click Word Options at the bottom of the box.

After the Word Options dialog box opens, scroll down to the Save group, and turn on the "Always create backup copy" checkbox. Choose Office button → Open to find and open your backup file ([Figure 1-19](#)).

When disaster strikes in spite of your meticulous preventive measures, Word can help too. Word's new file formats have been designed to be easier to recover and repair. In many cases, if a picture or a table is corrupted in the file, you can still retrieve everything else ([Figure 1-20](#)).

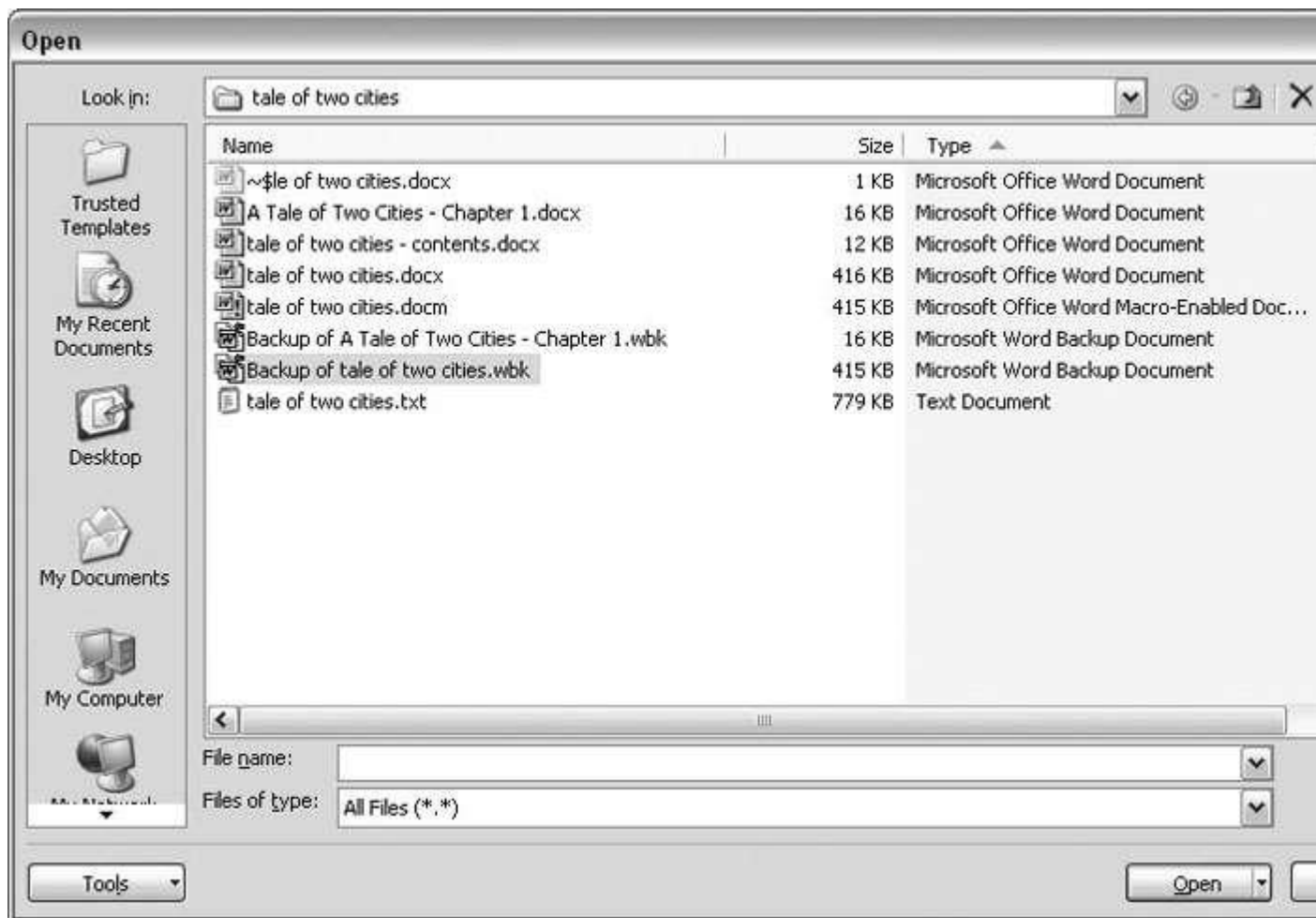


Figure 1-19. To open a backup file, choose All Files (.*) in the “Files of type” drop-down menu at the bottom of the Open dialog box. Look for a file that begins with the words “Backup of.” Double-click to open the file.*

Here are the steps for saving a file, complete with a new name:

1. **Choose Office button → Save As to open the Save As box.**

You use the Save As command when you’re saving a file with a new name. Word also displays the Save As box the first time you save a new document.

2. **Use the “Save in” drop-down list or double-click to open folders in the window to find a location to store your file.**

The buttons in the upper-right corner can also help you navigate. See the details in [Figure 1-21](#). Word doesn't care where you save your files, so you can choose your desktop or any folder on your computer.

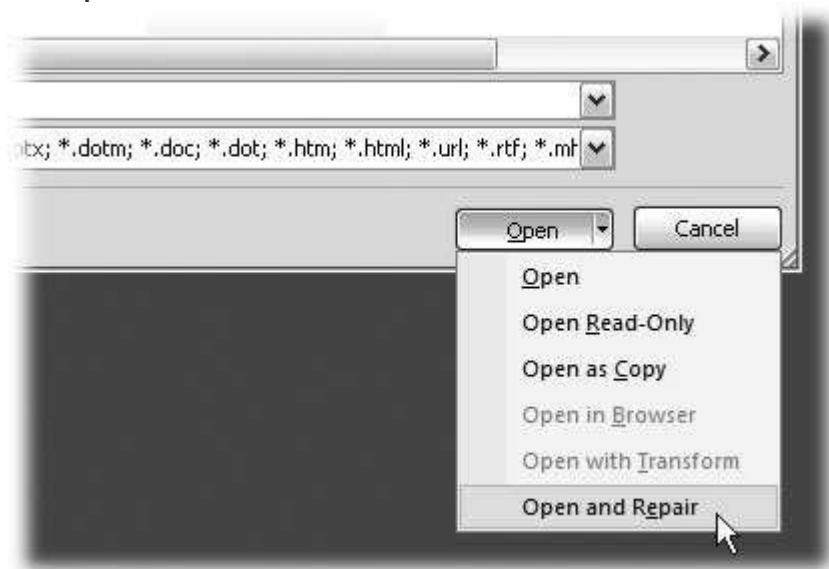


Figure 1-20. When you can't open a file with a normal Open command, click the arrow to the right of the Open button, and choose Open and Repair from the drop-down menu. Some parts of your file may still be damaged, but you can usually recover most of your work.

TIP

The more files you save on your computer, the more helpful it is to have a logical folder and file system. If you keep hundreds of Word documents, you may want to have different folders named: letters, memos, reports, and newsletters.

3. At the bottom of the Save As dialog box, type a name in the File name box.

Word accepts long names, so you don't need to skimp. Use a descriptive name that will help you identify the file two weeks or two years from now. A good name saves you time in the long run.

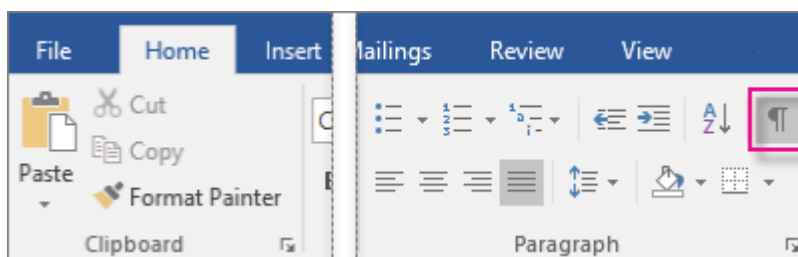
4. Use the "Save as type" box to choose a file type.

In most cases you don't need to change the file type. Word automatically selects either *.docx* or *.docm* depending on the contents of your file, but Word can save files in over a dozen different formats. If you're sharing the file with someone who's using an older version of Word, then choose Word 97-2003 Document to save the document in *.doc* format. If you're sharing with someone who uses a Mac or Linux computer, then you may want to use the more universal Rich Text Format (*.rtf*).

Q9. Create a file in MS-word that convert existing highlight text to table as shown below and save it as

file name 'text_to_table'. Describe all steps involved in it.

Ans. To convert text to a table or a table to text, start by clicking the **Show/Hide** paragraph mark on the **Home** tab so you can see how text is separated in your document.



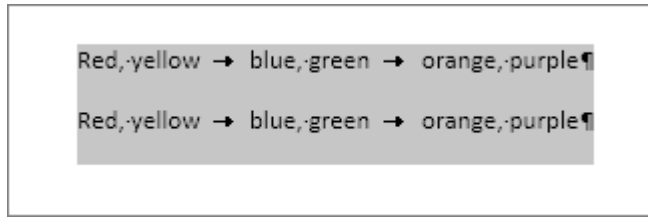
Convert text to a table

1. Insert separator characters—such as commas or tabs—to indicate where to divide the text into table columns.

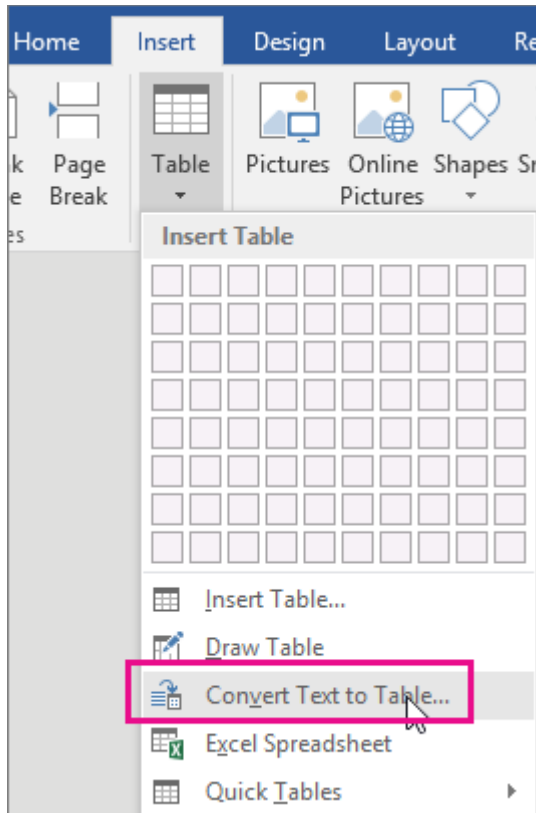
Note: If you have commas in your text, use tabs for your separator characters.

2. Use paragraph marks to indicate where you want to begin a new table row.

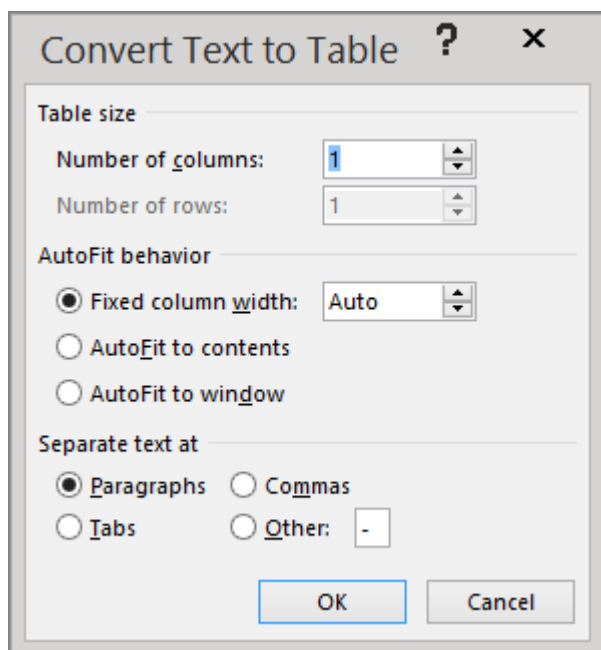
In this example, the tabs and paragraph marks will produce a table with 3 columns and 2 rows:



3. Select the text that you want to convert, and then click **Insert > Table > Convert Text to Table**.



4. In the **Convert Text to Table** box, choose the options you want.



Under **Table size**, make sure the numbers match the numbers of columns and rows you want.

Under **AutoFit behavior**, choose how you want your table to look. Word automatically chooses a width for the table columns. If you want a different column width, choose one of these options:

To do this	Choose this option
Specify a width for all the columns	In the Fixed column width box, type or select a value.
Resize the columns to fit the width of the text in each column	AutoFit to contents
Resize the table automatically in case the width of the available space changes (for example, web layout or landscape orientation)	AutoFit to window

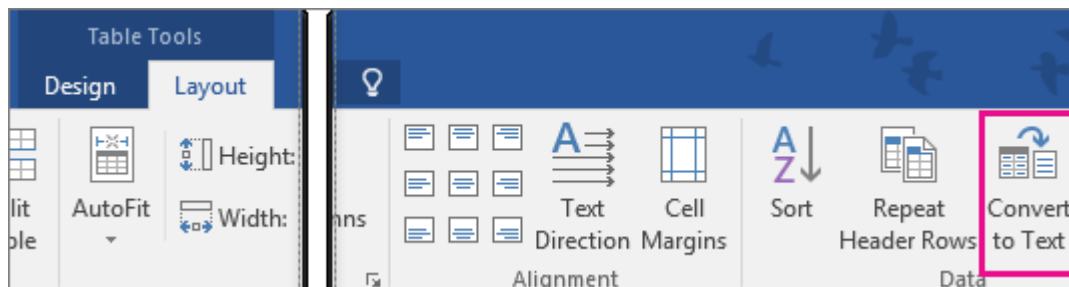
Under **Separate text at**, choose the separator character you used in the text.

- Click **OK**. The text converted to a table should look something like this:

Red, yellow	blue, green	orange, purple
Red, yellow	blue, green	orange, purple

Convert a table to text

1. Select the rows or table you want to convert to text.
2. Under **Table Tools**, on the **Layout** tab, click **Convert to Text**.



3. In the **Convert to Text** box, under **Separate text with**, click the separator character you want to use in place of the column boundaries. Rows will be separated by paragraph marks.

Q10. Create a file in MS-Word to insert a table in the document. Describe all steps involved in it.

Ans. Tables help you present information in a clear and organized way. There are three ways to add tables to your documents in [Microsoft](#) Word, each taking only a few easy steps. These instructions are based on Microsoft Word 2003, but the process is very similar in other versions of Word.

Here's how to make a table from the Tables and Borders toolbar:

Advertisement

1. Place the cursor where you want to place the table.
2. Click the **Insert Table** icon on the Tables and Borders toolbar at the top of the window. [[Microsoft](#)]
3. Drag the corner of the table until you have the desired number of columns and rows.
4. Click the mouse to insert the table.

Here's how to make a table from the **Insert Table** dialogue box:

1. Click on **Table** from the menu bar. Select **Insert**, and then **Table...** A dialogue box will open.
2. Enter the desired number of rows and columns.

3. Choose **AutoFit behavior** if you want the table's cells to automatically expand to fit the text inside them. Choose **AutoFormat** if you'd rather select a table with a specific format.
4. Click **OK** to insert your table.

Here's how to draw a table:

1. Select **Table** from the menu bar.
2. Select **Draw Table**.
3. Drag the pencil diagonally across the page to make a rectangle where you want to place your table.
4. Draw lines vertically and horizontally to create the columns and rows you need.

You can modify your table as follows:

1. Select your table, or a portion of it.
2. Right click your mouse. Choose **Table Properties**. You can also choose **Table Properties** from the **Table** menu in the menu bar. [[Home & Learn](#)]
3. Adjust the alignment, as well as the row and column settings. You can also make use of the text wrapping feature. Click **OK** when you've made the desired changes.

Adjust your table's colors and lines, as follows

Q11. Create a following worksheet in MS-excel and save it with name 'book1'.

Ans. Every Excel grandmaster needs to start somewhere. In this chapter, you'll learn how to create a basic spreadsheet. First, you'll find out how to move around Excel's grid of cells, typing in numbers and text as you go. Next, you'll take a quick tour of the Excel ribbon, the tabbed toolbar of commands that sits above your spreadsheet. You'll learn how to trigger the ribbon with a keyboard shortcut, and collapse it out of the way when you don't need it. Finally, you'll go to

Excel's *backstage view*, the file-management hub where you can save your work for posterity, open recent files, and tweak Excel options.

Starting a Workbook

When you first fire up Excel, you'll see a welcome page where you can choose to open an existing Excel spreadsheet or create a new one ([Figure 1-1](#)).

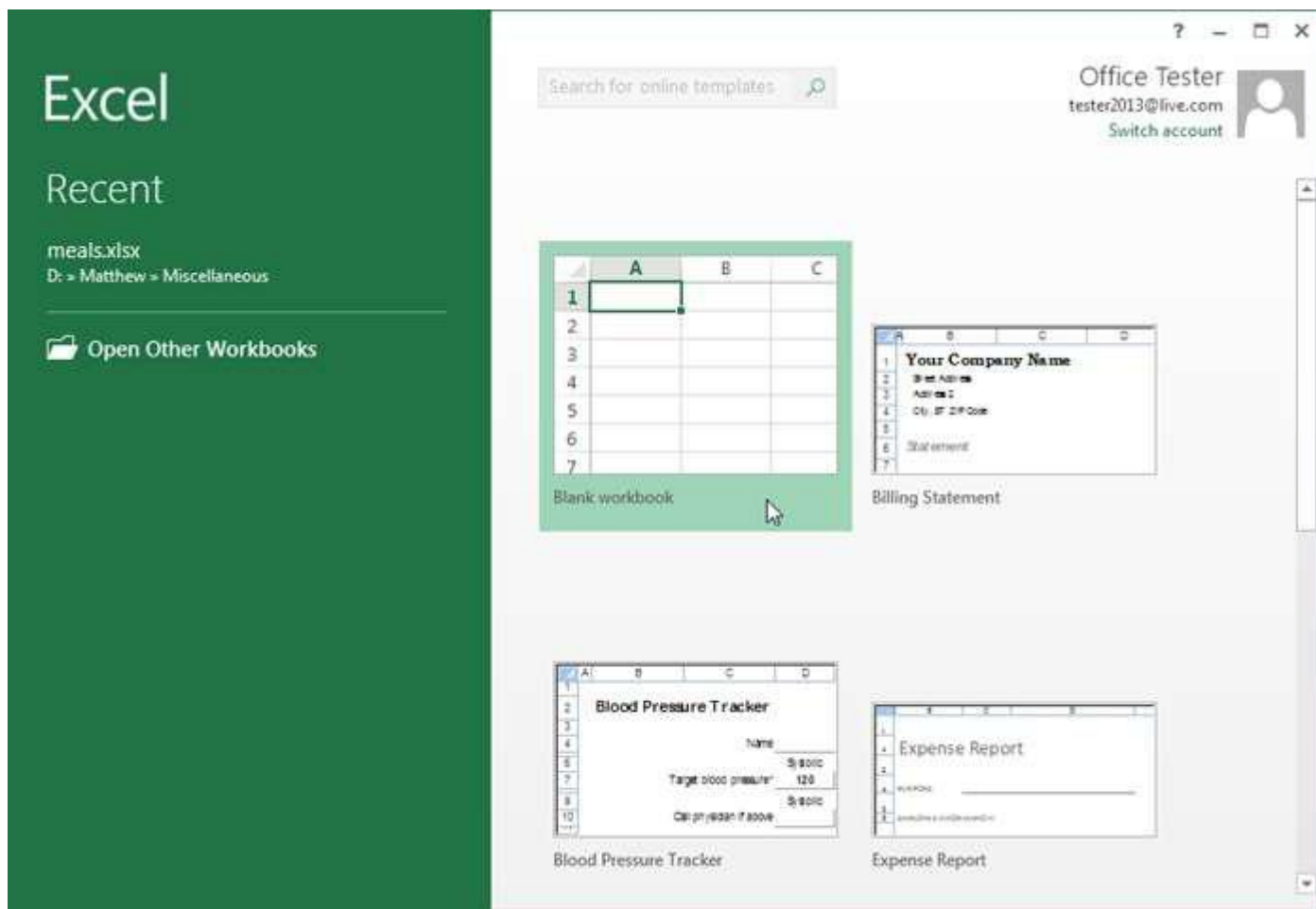


Figure 1-1. Excel's welcome page lets you create a new, blank worksheet or a ready-made workbook from a template. For now, click the "Blank workbook" picture to create a new spreadsheet with no formatting or data.

Excel fills most of the welcome page with templates, spreadsheet files preconfigured for a specific type of data. For example, if you want to create an expense report, you might choose Excel's "Travel

expense report” template as a starting point. You’ll learn lots more about templates in [Chapter 16](#), but for now, just click “Blank workbook” to start with a brand-spanking-new spreadsheet with no information in it.

NOTE

Workbook is Excel lingo for “spreadsheet.” Excel uses this term to emphasize the fact that a single *workbook* can contain multiple *worksheets*, each with its own grid of data. You’ll learn about this feature in [Chapter 4](#), but for now, each workbook you create will have just a single worksheet of information.

You don’t get to name your workbook when you first create it. That happens later, when you *save* your workbook ([Saving Files](#)). For now, you start with a blank canvas that’s ready to receive your numerical insights.

Adding Information to a Worksheet

When you click “Blank workbook,” Excel closes the welcome page and opens a new, blank *worksheet*, as shown in [Figure 1-2](#). A worksheet is a grid of cells where you type in information and formulas. This grid takes up most of the Excel window. It’s where you’ll perform all your work, such as entering data, writing formulas, and reviewing the results.

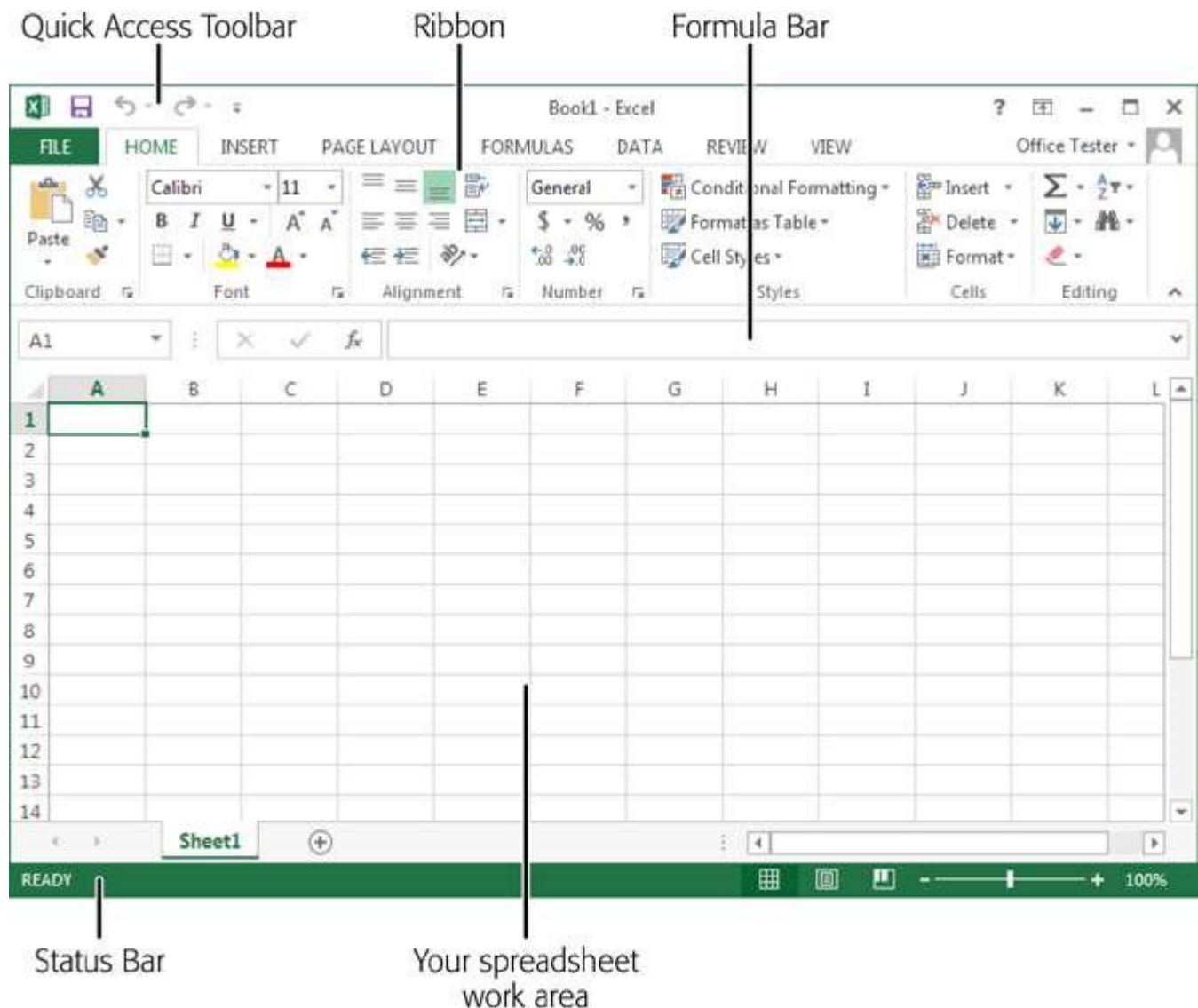


Figure 1-2. The largest part of the Excel window is the worksheet grid, where you type in your information.

Here are a few basics about Excel's grid:

- **The grid divides your worksheet into rows and columns.** Excel names columns using letters (A, B, C...), and labels rows using numbers (1, 2, 3...).
- **The smallest unit in your worksheet is the cell.** Excel uniquely identifies each cell by column letter and row number. For example, C6 is the address of a cell in column C (the third column) and row 6 (the sixth row). Figure 1-3 shows this cell, which looks

like a rectangular box. Incidentally, an Excel cell can hold approximately 32,000 characters.

- **A worksheet can span an eye-popping 16,000 columns and 1 million rows.** In the unlikely case that you want to go beyond those limits—say, if you’re tracking blades of grass on the White House lawn—you’ll need to create a new worksheet. Every spreadsheet file can hold a virtually unlimited number of worksheets, as you’ll learn in [Chapter 4](#).

- **When you enter information, enter it one cell at a time.** However, you don’t have to follow any set order. For example, you can start by typing information into cell A40 without worrying about filling any data in the cells that appear in the earlier rows.

NOTE

Obviously, once you go beyond 26 columns, you run out of letters. Excel handles this by doubling up (and then tripling up) letters. For example, after column Z is column AA, then AB, then AC, all the way to AZ and then BA, BB, BC—you get the picture. And if you create a ridiculously large worksheet, you’ll find that column ZZ is followed by AAA, AAB, AAC, and so on.

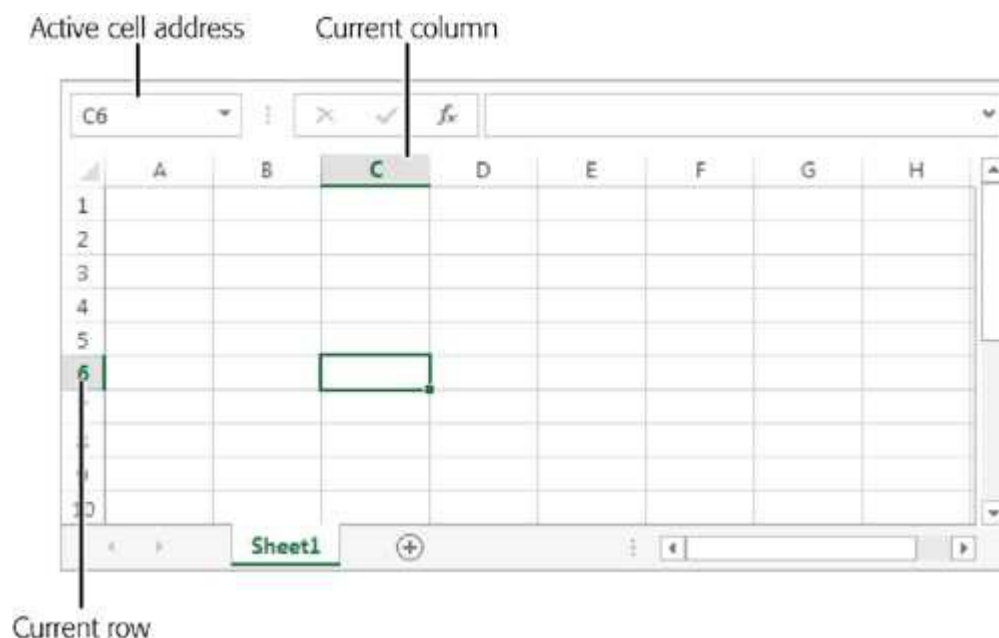


Figure 1-3. In this spreadsheet, the active cell is C6. You can recognize an active (or current) cell by its heavy black border. You’ll also notice that Excel highlights the corresponding

column letter (C) and row number (6) at the edges of the worksheet. Just above the worksheet, on the left side of the window, the formula bar gives you the active cell's address.

The best way to get a feel for Excel is to dive right in and start putting together a worksheet. The following sections cover each step that goes into assembling a simple worksheet. This one tracks household expenses, but you can use the same approach with any basic worksheet.

Adding Column Titles

Excel lets you arrange information in whatever way you like. There's nothing to stop you from scattering numbers left and right, across as many cells as you want. However, one of the most common (and most useful) ways to arrange information is in a table, with headings for each column.

It's important to remember that with even the simplest worksheet, the decisions you make about what's going to go in each column can have a big effect on how easy it is to manipulate your information. For example, in a worksheet that stores a mailing list, you *could* have two columns: one for names and another for addresses. But if you create more than two columns, your life will probably be easier because you can separate first names from street addresses from ZIP codes, and so on. Figure 1-4 shows the difference.

	A	B	C	D	E
1	Name	Address			
2	Michel DeFrance	3 Balding Pl., Gary, IN, 46403			
3	Johnson Whit	10932 Bigge Rd., Menlo Park, CA, 94025			
4	Marjorie Green	309 63rd St. #411, Oakland, CA, 94618			
5	Cheryl Carson	589 Darwin , Berkeley, CA, 94705			
6	Michael O'Leary	22 Cleveland Av. #14, San Jose, CA, 95128			
7	Dean Straight	5420 College Av., Oakland, CA, 94609			
8	Meander Smith	10 Mississippi Dr., Lawrence, KS, 66044			
9	Abraham Bennet	6223 Bateman St., Berkeley, CA, 94705			
10	Ann Dull	3410 Blonde St., Palo Alto, CA, 94301			

	A	B	C	D	E	F	G
1	First Name	Last Name	Address	City	State	Zip	
2	Michel	DeFrance	3 Balding Pl.	Gary	IN	46403	
3	Johnson	Whit	10932 Bigge Rd.	Menlo Park	CA	94025	
4	Marjorie	Green	309 63rd St. #411	Oakland	CA	94618	
5	Cheryl	Carson	589 Darwin	Berkeley	CA	94705	
6	Michael	O'Leary	22 Cleveland Av. #14	San Jose	CA	95128	
7	Dean	Straight	5420 College Av.	Oakland	CA	94609	
8	Meander	Smith	10 Mississippi Dr.	Lawrence	KS	66044	
9	Abraham	Bennet	6223 Bateman St.	Berkeley	CA	94705	
10	Ann	Dull	3410 Blonde St.	Palo Alto	CA	94301	

Figure 1-4. Top: If you enter both first and last names in a single column, you can sort the column only by first name. And if you clump the addresses and ZIP codes together, you have no way to count the number of people in a certain town or neighborhood. Bottom: The benefit of a six-column table is significant: It lets you break down (and therefore analyze) information granularly. For example, you can sort your list according to people's last names or where they live. This arrangement also lets you filter out individual bits of information when you start using functions later in this book.

You can, of course, always add or remove columns. But you can avoid getting gray hairs by starting a worksheet with all the columns you think you'll need.

The first step in creating a worksheet is to add your headings in the row of cells at the top of the sheet (row 1). Technically, you don't need to start right in the first row, but unless you want to add more information before your table—like a title for the chart or today's date—there's no point in wasting space. Adding information is easy—just click the cell you want and start typing. When you finish, hit Tab to complete your entry and

move to the cell to the right, or click Enter to head to the cell just underneath.

NOTE

The information you put in an Excel worksheet doesn't need to be in neat, ordered columns. Nothing stops you from scattering numbers and text in random cells. However, most Excel worksheets resemble some sort of table, because that's the easiest and most effective way to manage large amounts of structured information.

For a simple expense worksheet designed to keep a record of your most prudent and extravagant purchases, try the following three headings:

- **Date Purchased.** Stores the date when you spent the money.
- **Item.** Stores the name of the product that you bought.
- **Price.** Records how much it cost.

Right away, you face your first glitch: awkwardly crowded text. [Figure 1-5](#) shows how to adjust the column width for proper breathing room.

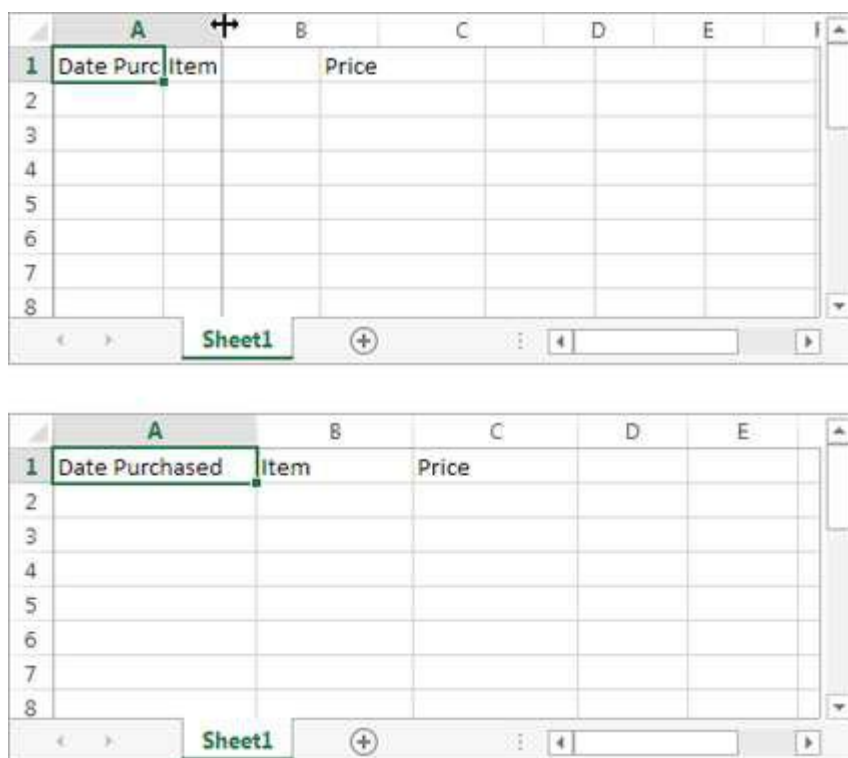


Figure 1-5. Top: The standard width of an Excel column is 8.43 characters, which hardly allows you to get a word in edgewise. Here's how to give yourself some more room. First,

position your mouse on the right border of the column header you want to expand so that the mouse pointer changes to the resize icon (it looks like a double-headed arrow). Now drag the column border to the right as far as you want. As you drag, a tooltip appears, telling you the character size and pixel width of the column. Both of these pieces of information play the same role—they tell you how wide the column is. Only the unit of measurement changes.

Bottom: When you release the mouse, Excel resizes the entire column of cells to the new width.

NOTE

A column's character width doesn't really reflect how many characters (or letters) fit in a cell. Excel uses *proportional* fonts, in which different letters take up different amounts of room. For example, the letter W is typically much wider than the letter I. All this means is that the character width Excel shows you isn't a real indication of how many letters can fit in the column, but it's a useful way to compare column widths.

Adding Data

You can now begin adding your data: Simply fill in the rows under the column titles. Each row in the expense worksheet represents a separate purchase. (If you're familiar with databases, you can think of each row as a separate *record*.)

As [Figure 1-6](#) shows, the first column is for dates, the second stores text, and the third holds numbers. Keep in mind that Excel doesn't impose any rules on what you type, so you're free to put text in the Price column. But if you don't keep a consistent kind of data in each column, you won't be able to easily analyze (or understand) your information later.

	A	B	C	D	E	F
1	Date Purchased	Item	Price			
2	7/7/2013	Cowbell	\$43.99			
3	7/7/2013	Fresh Fruit	\$3.50			
4	7/10/2013	IBM Laptop	\$750.00			
5						
6						
7						
8						

Figure 1-6. This rudimentary expense list has three items in it (in rows 2, 3, and 4). By default, Excel aligns the items in a column according to their data type. It aligns numbers and dates on the right, and text on the left.

That's it. You've now created a living, breathing worksheet. The next section explains how you can edit the data you just entered.

Editing Data

Every time you start typing in a cell, Excel erases any existing content in that cell. (You can also quickly remove the contents of a cell by moving to the cell and pressing Delete, which clears its contents.)

If you want to *edit* cell data instead of replacing it, you need to put the cell in *edit mode*, like this:

1. **Move to the cell you want to edit.**

Use the mouse or the arrow keys to get to the correct cell.

2. **Put the cell in edit mode by pressing F2 or by double-clicking inside it.**

Edit mode looks like ordinary text-entry mode, but you can use the arrow keys to position your cursor in the text you're editing. (When you aren't in edit mode, pressing these keys just moves you to another cell.)

3. Complete your edit.

Once you modify the cell content, press Enter to confirm your changes or Esc to cancel your edit and leave the old value in the cell. Alternatively, you can click on another cell to accept the current value and go somewhere else. But while you're in edit mode, you can't use the arrow keys to move out of the cell.

TIP

If you start typing new information into a cell and you decide you want to move to an earlier position in your entry (to make an alteration, for instance), just press F2. The cell box still looks the same, but now you're in edit mode, which means that you can use the arrow keys to move within the cell (instead of going from cell to cell). Press F2 again to return to data entry mode, where you can use the arrow keys to move to other cells.

As you enter data, you may discover the Bigtime Excel Display Problem (known to aficionados as BEDP): Cells in adjacent columns can overlap one another. [Figure 1-7](#) illustrates the problem. One way to fix BEDP is to manually resize the column, as shown in [Figure 1-5](#). Another option is to turn on text wrapping so you can fit multiple lines of text in a single cell, as described on [Alignment and Orientation](#).

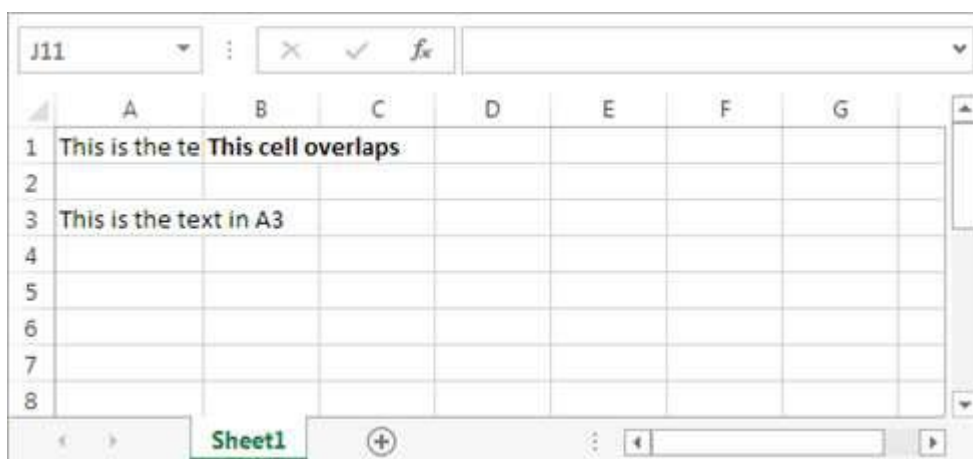


Figure 1-7. Overlapping cells can create big headaches. For example, if you type a large amount of text into A1 and then you type some text into B1, you see only part of A1's data in your worksheet (as shown here). The rest is hidden from view. But if, say, A3 contains a large amount of text and B3 is empty, Excel displays the content in A3 over both columns, and you don't have a problem.

Editing Cells with the Formula Bar

Just above the worksheet grid but under the ribbon is an indispensable editing tool called the *formula bar* (Figure 1-8). It displays the address of the active cell (like A1) on the left edge, and it shows you the current cell's contents.

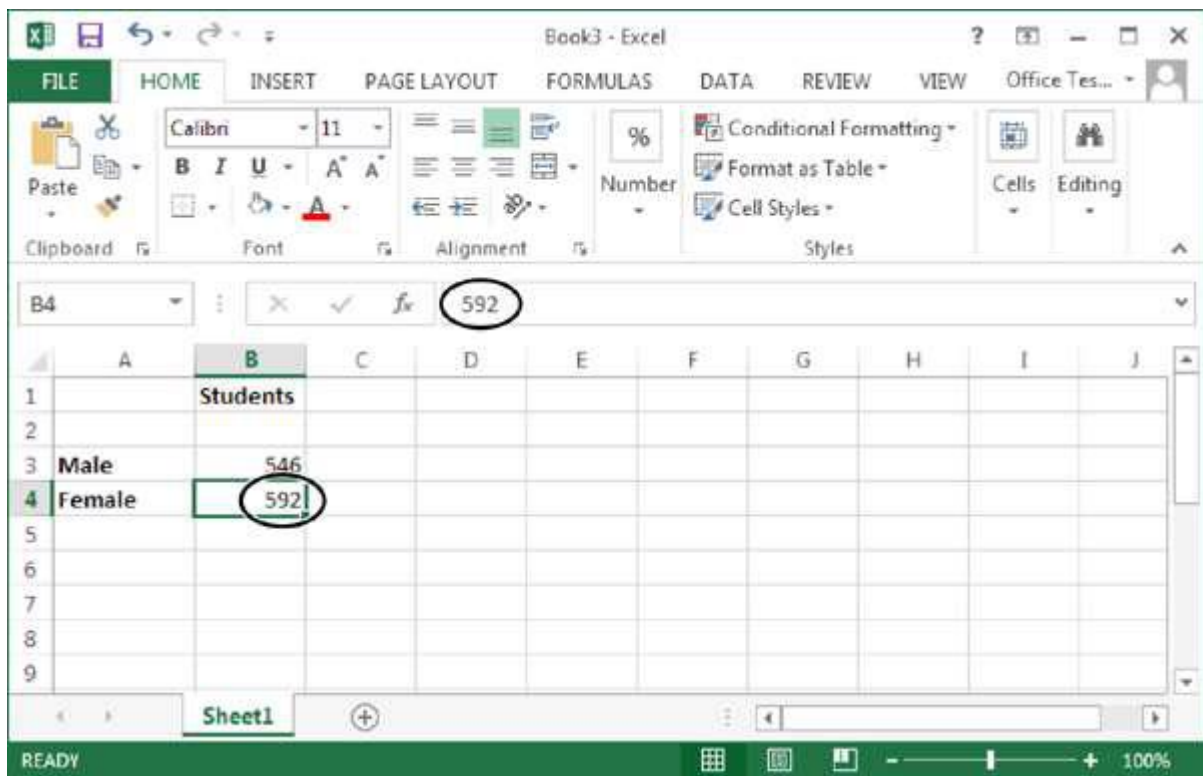


Figure 1-8. The formula bar (just above the grid) displays information about the active cell.

In this example, you can see that the current cell is B4 and it contains the number 592.

Instead of editing this value in the cell, you can click anywhere in the formula bar and make your changes there.

You can use the formula bar to enter and edit data instead of editing directly in your worksheet. This is particularly useful when a cell contains a formula or a large amount of information. That's because the formula bar gives you more work room than a typical cell. Just as with in-cell edits, you press Enter to confirm formula bar edits or Esc to cancel them. Or you can use the mouse: When you start typing in the formula bar, a checkmark and an "X" icon appear just to the left of the box where you're typing. Click the checkmark to confirm your entry or "X" to roll it back.

Ordinarily, the formula bar is a single line. If you have a *really* long entry in a cell (like a paragraph's worth of text), you need to scroll from one side to the other. However, there's another option—you can resize the formula bar so that it fits more information, as shown in [Figure 1-9](#).

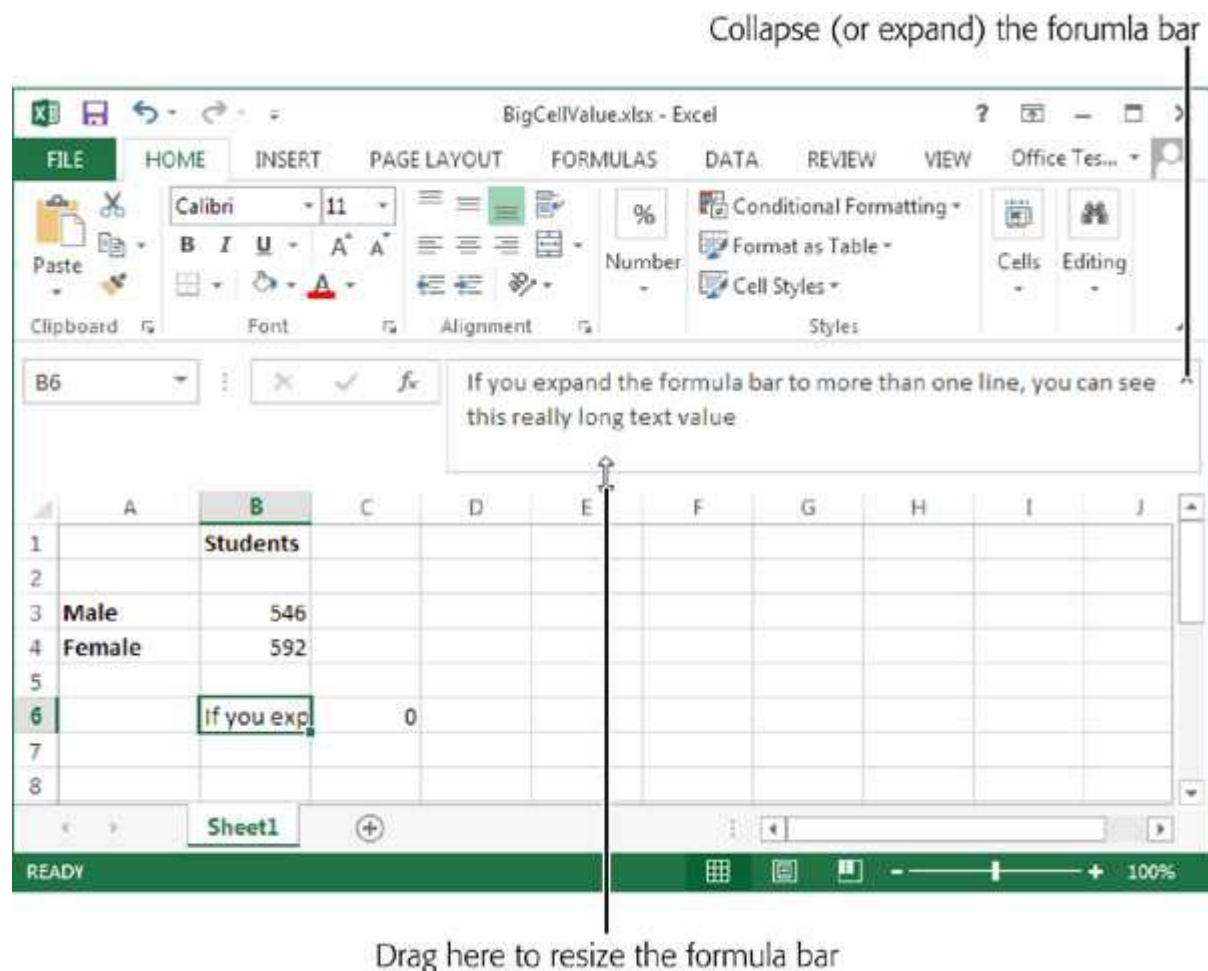


Figure 1-9. To enlarge the formula bar, click the bottom edge and pull down. You can make it two, three, four, or many more lines large. Best of all, once you get the size you want, you can use the expand/collapse button to the right of the formula bar to quickly expand it to your preferred size and collapse it back to the single-line view.

POWER USERS' CLINIC: USING R1C1 REFERENCE STYLE

Most people like to identify columns with letters and rows with numbers. This system makes it easy to tell the difference between the two, and it lets you use short cell addresses like A10, B4, and H99. When you first install Excel, it uses this style of cell addressing.

However, Excel lets you use another cell addressing system called *R1C1*. In R1C1 style, Excel identifies both rows and columns with numbers. That means the cell address A10 becomes R10C1 (read this as Row 10, Column 1). The letters R and C tell you which part of the address represents the row number and which part is the column number. The R1C1 format reverses the order of conventional cell addressing.

R1C1 addressing isn't all that common, but it can be useful if you need to deal with worksheets that have more than 26 columns. With normal cell addressing, Excel runs out of letters after column 26, and it starts using two-letter column names (as in AA, AB, and so on). But this approach can get awkward. For example, if you want to find cell AX1, it isn't immediately obvious that cell AX1 is in column 50. On the other hand, the R1C1 address for the same cell—R1C50—gives you a clearer idea of where to find the cell.

To use R1C1 for a spreadsheet, select File→Options. This shows the Excel Options window, where you can change a wide array of settings. In the list on the left, choose Formulas to hone in on the section you need. Then, look under the “Working with formulas” heading, and turn on the “R1C1 reference style” checkbox.

R1C1 is a file-specific setting, which means that if someone sends you a spreadsheet saved using R1C1, you'll see the R1C1 cell addresses when you open the file, regardless of what type of cell addressing you use in your own spreadsheets. Fortunately, you can change cell addressing at any time using the Excel Options window.

Using the Ribbon

The focal point of the Excel window is the worksheet grid. It's where you enter and edit information, whether that's an amortization table for a business loan or a catalog of your rare Spider-Man comics. However, it won't be long before you need to direct your attention upwards, to the super-toolbar that sits at the top of the Excel window. This is the *ribbon*, and it ensures that even the geekiest Excel features are only a click or two away.

The Tabs of the Ribbon

Everything you'll ever want to do in Excel—from picking a fancy background color to pulling information out of a database—is packed into the ribbon. To accommodate all these buttons without becoming an overstuffed turkey, the ribbon uses *tabs*. You start out with seven tabs. When you click one, you see a whole new collection of buttons ([Figure 1-10](#)).

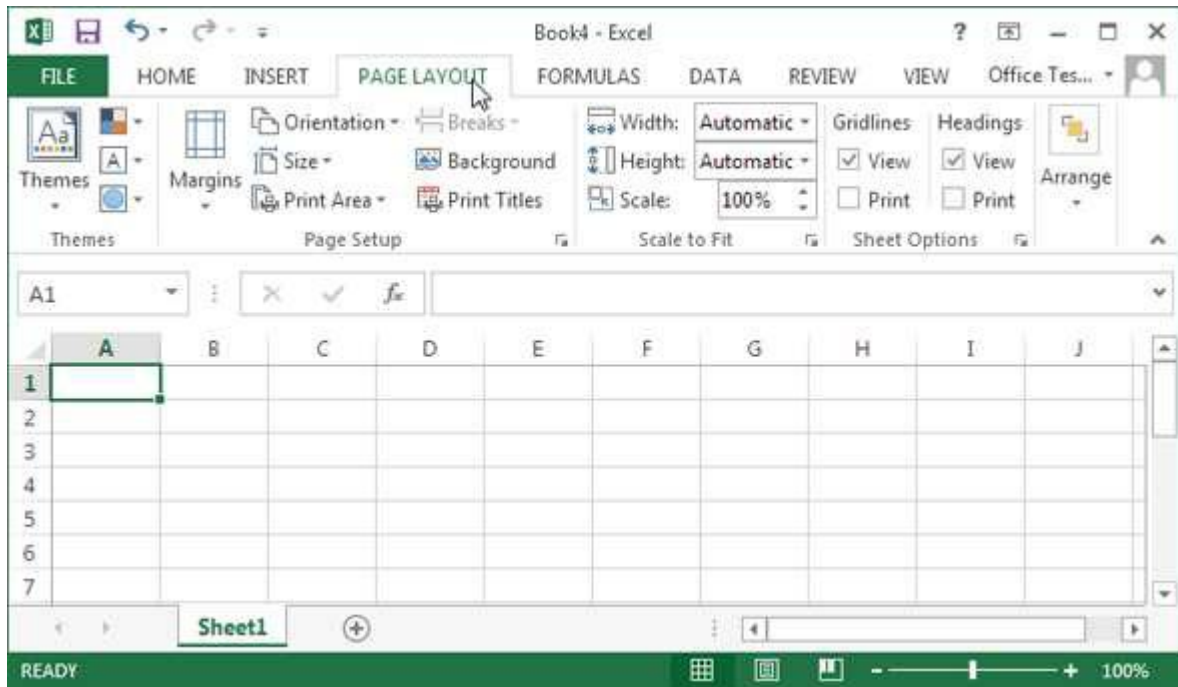


Figure 1-10. When you launch Excel, you start at the Home tab. But here's what happens when you click the Page Layout tab. Now, you have a slew of options for tasks like adjusting paper size and making a decent printout. Excel groups the buttons within a tab into smaller sections for clearer organization.

The ribbon makes it easy to find features because Excel groups related features under the same tab. Even better, once you find the button you need, you can often find other, associated commands by looking at the other buttons in the tab. In other words, the ribbon isn't just a convenient tool, it's also a great way to explore Excel.

The ribbon is full of craftsman-like detail. For example, when you hover over a button, you don't see a paltry two- or three-word description in a yellow rectangle. Instead, you see a friendly pop-up box with a mini-

description of the feature and (often) a shortcut that lets you trigger the command from the keyboard. Another nice detail is the way you can jump from one tab to another at high velocity by positioning your mouse pointer over the ribbon and rolling the scroll wheel (if your mouse has a scroll wheel). And you're sure to notice the way the ribbon rearranges its buttons when you change the size of the Excel window (see [Figure 1-11](#)).

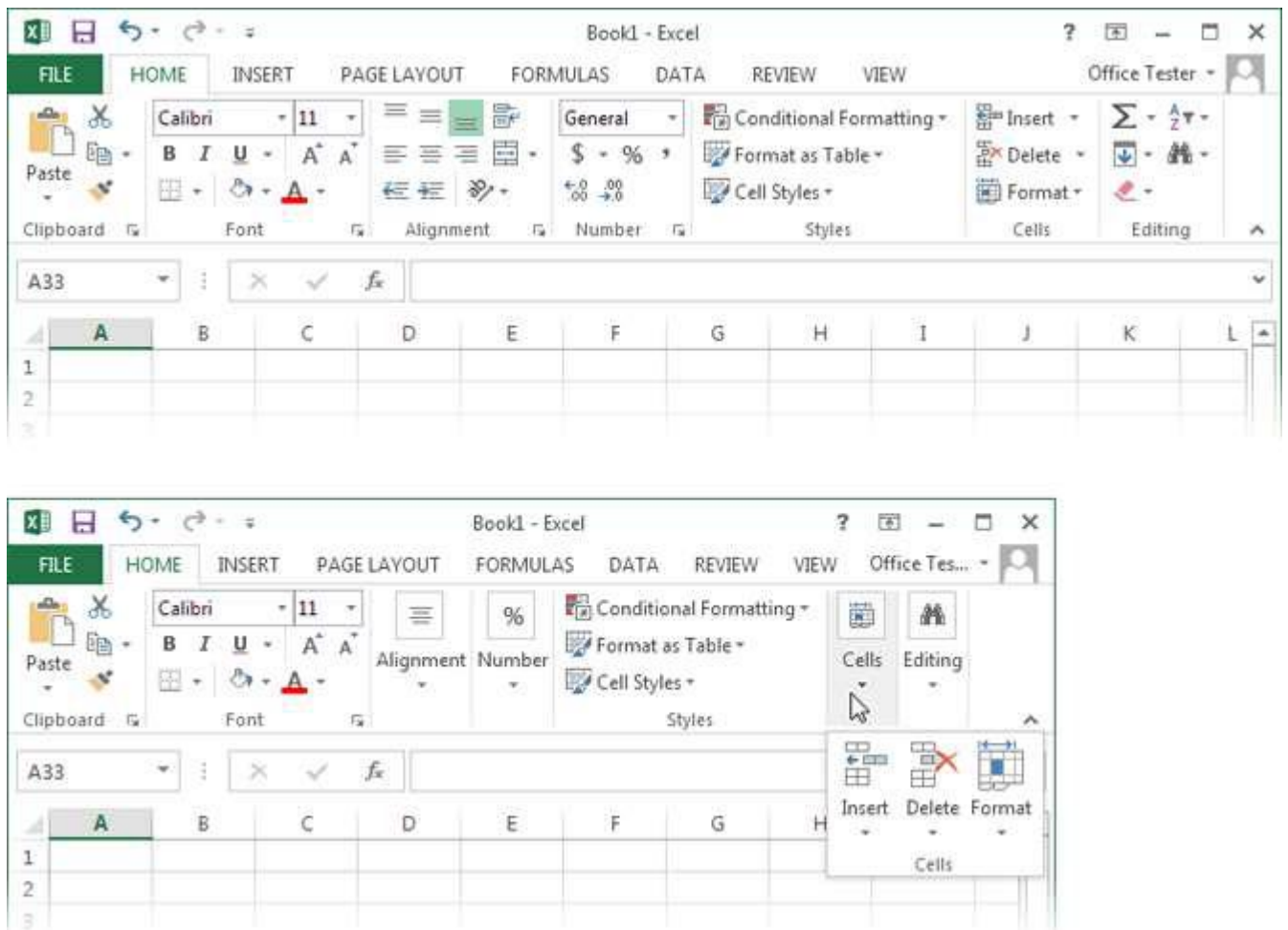


Figure 1-11. Top: A large Excel window gives you plenty of room to play. The ribbon uses the space effectively, making the most important buttons bigger. Bottom: When you shrink the Excel window, the ribbon shrinks some buttons or hides their text to make room. Shrink small enough, and Excel starts to replace cramped sections with a single button, like the Alignment, Cells, and Editing sections shown here. Click the button and the missing commands appear in a drop-down panel.

Throughout this book, you'll dig through the ribbon's tabs to find important features. But before you start your journey, here's a quick overview of what each tab provides.

- **File** isn't really a toolbar tab, even though it appears first in the list. Instead, it's your gateway to Excel's backstage view, as described on [Going Backstage](#).
- **Home** includes some of the most commonly used buttons, like those for cutting and pasting text, formatting data, and hunting down important information with search tools.
- **Insert** lets you add special ingredients to your spreadsheets, like tables, graphics, charts, and hyperlinks.
- **Page Layout** is all about getting your worksheet ready for printing. You can tweak margins, paper orientation, and other page settings.
- **Formulas** are mathematical instructions that perform calculations. This tab helps you build super-smart formulas and resolve mind-bending errors.
- **Data** lets you get information from an outside data source (like a heavy-duty database) so you can analyze it in Excel. It also includes tools for dealing with large amounts of information, like sorting, filtering, and subgrouping data.
- **Review** includes the familiar Office proofing tools (like the spell-checker). It also has buttons that let you add comments to a worksheet and manage revisions.
- **View** lets you switch on and off a variety of viewing options. It also lets you pull off a few fancy tricks if you want to view several separate Excel spreadsheet files at the same time; see [Viewing Multiple Workbooks at Once](#).

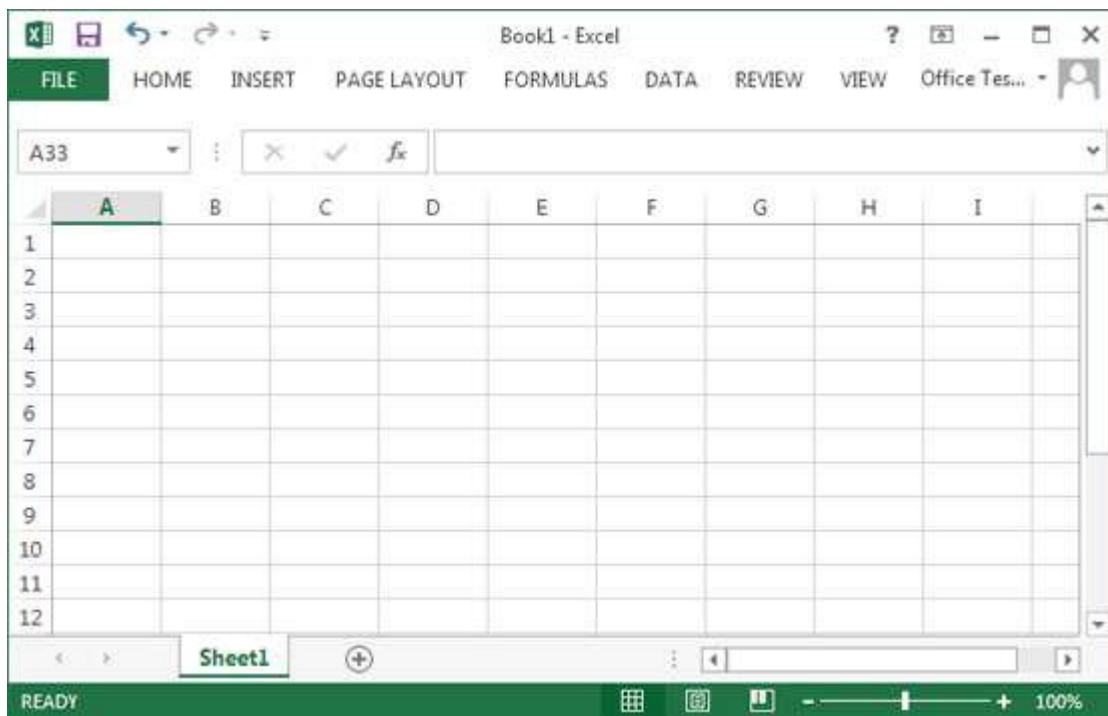
NOTE

In some circumstances, you may see tabs that aren't in this list. Macro programmers and other highly technical types use the Developer tab. (You'll learn how to reveal this tab on [Attaching a Macro to a Button Inside a Worksheet](#).) The Add-Ins tab appears when you open workbooks created in previous versions of Excel that use custom toolbars. And

finally, you can create a tab of your own if you're ambitious enough to customize the ribbon, as explained in the Appendix.

Collapsing the Ribbon

Most people are happy to have the ribbon sit at the top of the Excel window, with all its buttons on hand. But serious number-crunchers demand maximum space for their data—they'd rather look at another row of numbers than a pumped-up toolbar. If this describes you, then you'll be happy to find out that you can *collapse* the ribbon, which shrinks it down to a single row of tab titles, as shown in [Figure 1-12](#). To collapse it, just double-click the current tab title. (Or click the tiny up-pointing icon in the top-right corner of the ribbon, right next to the help icon.)



*Figure 1-12. Do you want to use every square inch of screen space for your cells? You can collapse the ribbon (as shown here) by double-clicking any tab. Click a tab to pop it open temporarily, or double-click a tab to bring the ribbon back for good. And if you want to perform the same trick without lifting your fingers from the keyboard, use the shortcut **Ctrl+F1**.*

Even if you collapse the ribbon, you can still use all its features. All you need to do is click a tab. For example, if you click Home, the Home tab

pops open over your worksheet. As soon as you click the button you want in the Home tab (or click a cell in your worksheet), the ribbon collapses again. The same trick works if you trigger a command in the ribbon using the keyboard, as described in the next section.

If you use the ribbon only occasionally, or if you prefer to use keyboard shortcuts, it makes sense to collapse the ribbon. Even then, you can still use the ribbon commands—it just takes an extra click to open the tab. On the other hand, if you make frequent trips to the ribbon or you’re learning about Excel and like to browse the ribbon to see what features are available, don’t bother collapsing it. The two or three spreadsheet rows you’ll lose are well worth it.

Using the Ribbon with the Keyboard

If you’re an unredeemed keyboard lover, you’ll be happy to hear that you can trigger ribbon commands with the keyboard. The trick is using *keyboard accelerators*, a series of keystrokes that starts with the Alt key (the same key you used to use to get to a menu). When you use a keyboard accelerator, you *don’t* hold down all the keys at the same time. (As you’ll soon see, some of these keystrokes contain so many letters that you’d be playing Finger Twister if you tried.) Instead, you hit the keys one after the other.

The trick to keyboard accelerators is understanding that once you hit the Alt key, there are two things you do, in this order:

1. **Pick the ribbon tab you want.**
2. **Choose a command in that tab.**

Before you can trigger a specific command, you *must* select the correct tab (even if it’s already selected). Every accelerator requires at least two key presses after you hit the Alt key. You need to press even more keys to dig through submenus.

By now, this whole process probably seems hopelessly impractical. Are you really expected to memorize dozens of accelerator key combinations?

Fortunately, Excel is ready to help you out with a feature called KeyTips. Here's how it works: When you press Alt, letters magically appear over every tab in the ribbon. Once you hit the corresponding key to pick a tab, letters appear over every button in that tab (Figure 1-13). Once again, you press the corresponding key to trigger the command (Figure 1-14).

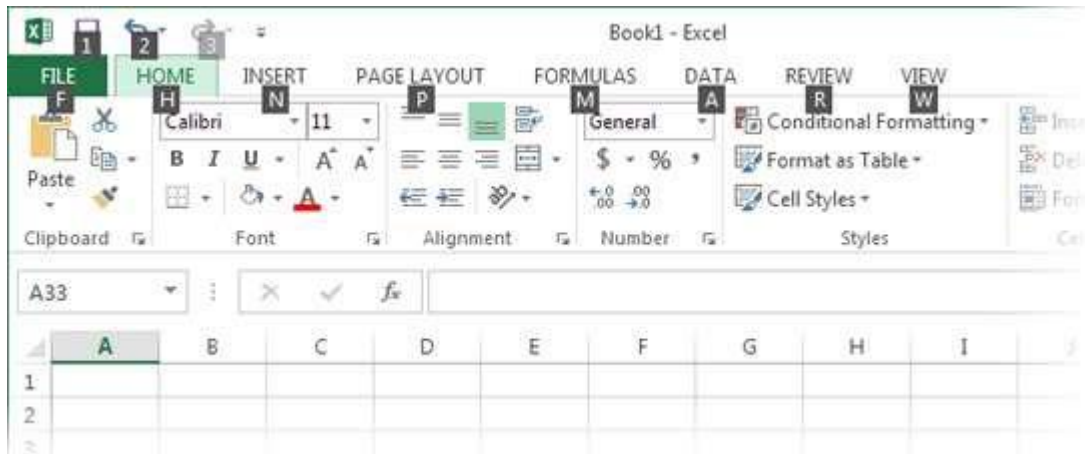


Figure 1-13. When you press Alt, Excel displays KeyTips next to every tab, over the File menu, and over the buttons in the Quick Access toolbar. If you follow up with M (for the Formulas tab), you'll see letters next to every command in that tab, as shown in Figure 1-11.

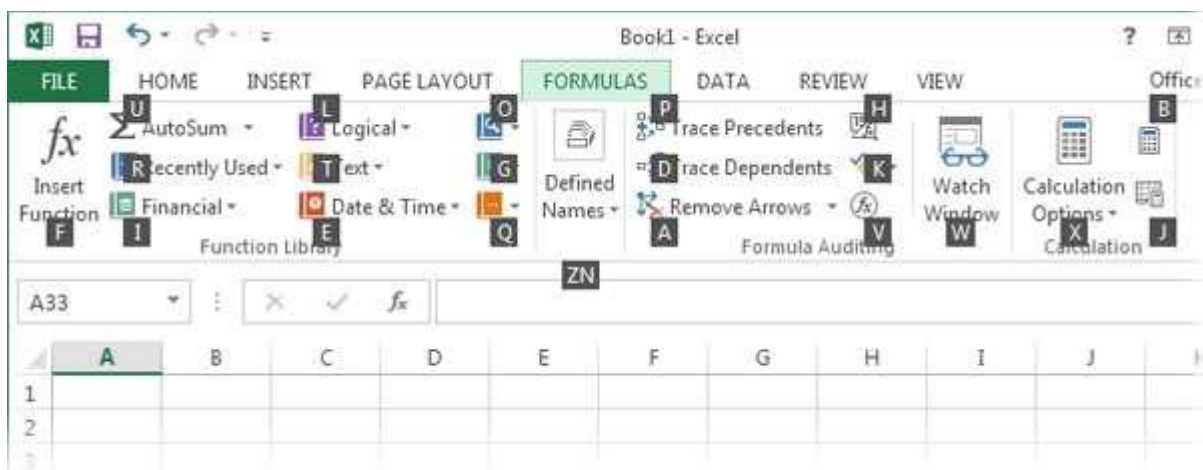


Figure 1-14. You can now follow up with F to trigger the Insert Function button, U to get to the AutoSum feature, and so on. Don't bother trying to match letters with tab or button names—there are so many features packed into the ribbon that in many cases the letters don't mean anything at all.

Sometimes, a command might have two letters, in which case you need to press both keys, one after the other. (For example, the Find & Select

button on the Home tab has the letters FD. To trigger it, press Alt, then H, then F, and then D.)

TIP

You can go back one step in KeyTips mode by pressing Esc. Or, you can stop cold without triggering a command by pressing Alt again.

Excel gives you other shortcut keys that don't use the ribbon. These are key combinations that start with the Ctrl key. For example, Ctrl+C copies highlighted text, and Ctrl+S saves your work. Usually, you find out about a shortcut key by hovering over a command with your mouse. For example, hover over the Paste button in the ribbon's Home tab, and you see a tooltip that tells you its timesaving shortcut key, Ctrl+V. And if you worked with a previous version of Excel, you'll find that Excel 2013 uses almost all the same shortcut keys.

NOSTALGIA CORNER: EXCEL 2003 MENU SHORTCUTS

If you've worked with an old version of Excel, you might have trained yourself to use menu shortcuts—key combinations that open a menu and pick out the command you want. For example, if you press Alt+E in Excel 2003, the Edit menu pops open. You can then press the S key to choose the Paste Special command.

At first glance, it doesn't look like these keyboard shortcuts will amount to much in Excel 2013. After all, Excel 2013 doesn't even have a corresponding series of menus! Fortunately, Microsoft went to a little extra trouble to make life easier for longtime Excel aficionados. The result is that you can still use your menu shortcuts, but they work in a slightly different way.

When you hit Alt+E in Excel 2013, you see a tooltip appear over the top of the ribbon ([Figure 1-15](#)) that lets you know you've started to enter an Excel 2003 menu shortcut. If you go on to press S, you wind up at the familiar Paste Special window, because Excel knows what you're trying to do. It's almost as though Excel has an invisible menu at work behind the scenes.

Of course, this feature can't help you out all the time. It doesn't work if you try to use one of the few commands that don't exist any longer. And if you need to see the menu to remember what key to press next, you're out of luck. All Excel gives you is the tooltip.

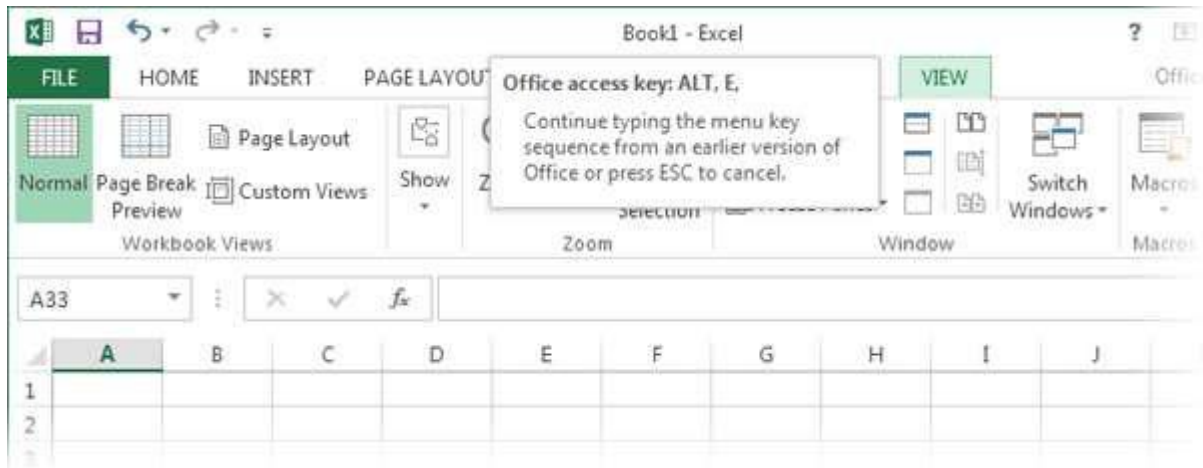


Figure 1-15. When you press Alt+E in Excel 2013, you trigger the “imaginary” Edit menu originally in Excel 2003 and earlier. You can’t actually see the menu, because it doesn’t exist in Excel 2013, but the tooltip lets you know that Excel is paying attention. You can now complete your action by pressing the next key for the menu command you’re nostalgic for.

The Quick Access Toolbar

Keen eyes will have noticed the tiny bit of screen real estate just above the ribbon. It holds a series of tiny icons, like the toolbars in older versions of Excel ([Figure 1-16](#)). This is the Quick Access toolbar (or QAT, to Excel nerds).

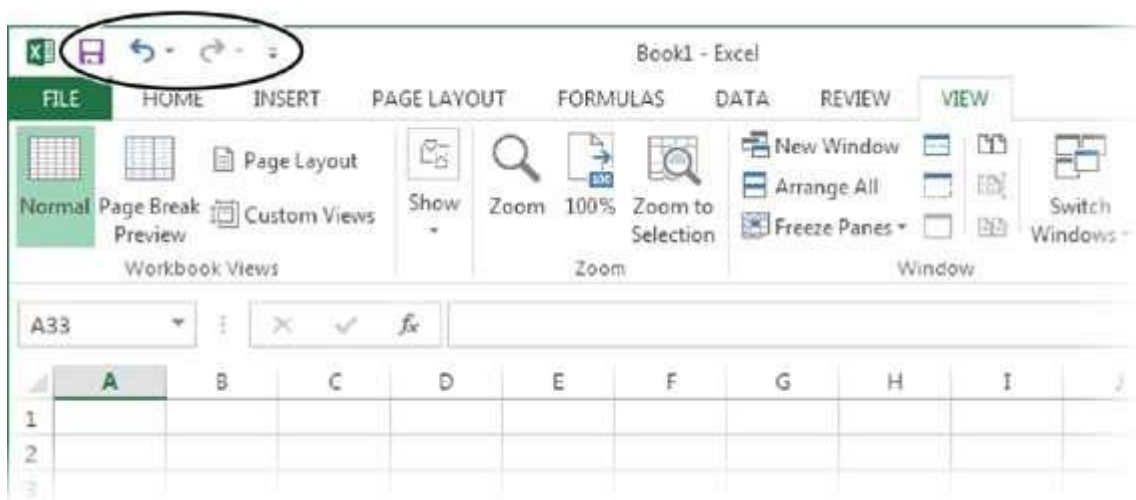


Figure 1-16. The Quick Access toolbar puts the Save, Undo, and Redo commands right at your fingertips. Excel provides easy access to these commands because most people use them more frequently than any others. But as you'll learn in the Appendix, you can add any commands you want here.

If the Quick Access toolbar were nothing but a specialized shortcut for three commands, it wouldn't be worth the bother. But it has one other notable attribute: You can customize it. In other words, you can remove commands you don't use and add your own favorites. The Appendix of this book ([Creating Custom Functions](#)) shows you how.

Microsoft has deliberately kept the Quick Access toolbar very small. It's designed to provide a carefully controlled outlet for those customization urges. Even if you go wild stocking the Quick Access toolbar with your own commands, the rest of the ribbon remains unchanged. (And that means a co-worker or spouse can still use Excel, no matter how dramatically you change the QAT.)

Using the Status Bar

Though people often overlook it, Excel's status bar ([Figure 1-17](#)) is a good way to monitor the program's current state. For example, if you save or print a document, the status bar shows the progress of the save operation or print job. If your task is simple, the progress indicator may disappear before you even have a chance to notice it. But if you're performing a time-consuming operation—say, printing an 87-page table of the hotel silverware you happen to own—you can look to the status bar to see how things are coming along.

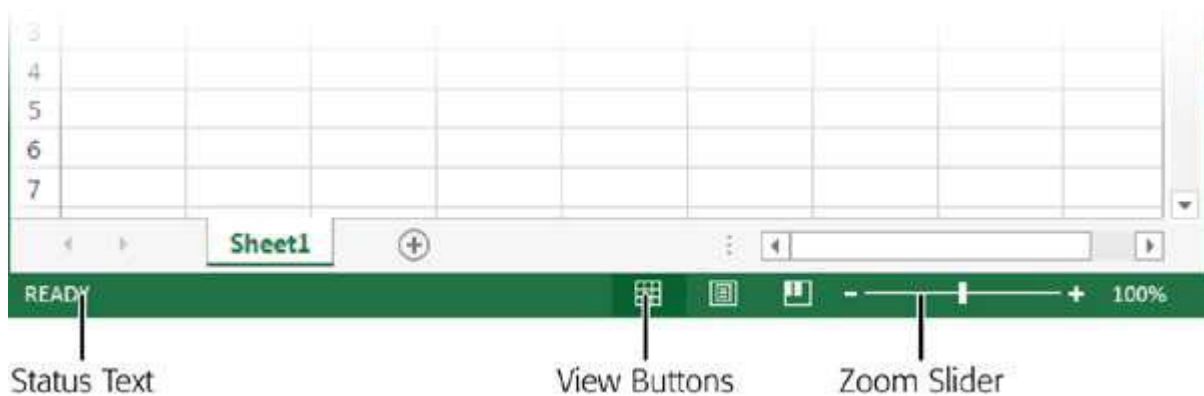


Figure 1-17. In the status bar, you can see the basic status text (which just says “Ready” in this example), the view buttons (useful as you prepare a spreadsheet for printing), and the zoom slider (which lets you enlarge or shrink the current worksheet).

The status bar combines several types of information. The leftmost area shows Cell Mode, which displays one of three indicators:

- **Ready** means that Excel isn’t doing anything much at the moment, other than waiting to execute a command.
- **Enter** appears when you start typing a new value into a cell.
- **Edit** means you currently have the cell in edit mode, and pressing the left and right arrow keys moves through the data within a cell, instead of moving from cell to cell. You can place a cell in edit mode or take it out of edit mode by pressing F2.

Farther to the right of the status bar are the view buttons, which let you switch to Page Layout view or Page Break Preview. These help you see what your worksheet will look like when you print it. They’re covered in [Chapter 7](#).

The zoom slider is next to the view buttons, at the far right edge of the status bar. You can slide it to the left to zoom out (which fits more information into your Excel window) or slide it to the right to zoom in (and take a closer look at fewer cells). You can learn more about zooming on [Zooming](#).

In addition, the status bar displays other miscellaneous indicators. If you press the Scroll Lock key, for example, a Scroll Lock indicator

appears in the status bar (next to the “Ready” text). This indicator tells you that you’re in *scroll mode*, where the arrow keys don’t move you from one cell to another, but scroll the entire worksheet up, down, or to the side. Scroll mode is a great way to check out another part of your spreadsheet without leaving your current position.

You can control what indicators appear in the status bar by configuring it. To see the list of possibilities, right-click the status bar ([Figure 1-8](#)). Table 1-2 describes the options.

Table 1-1. Status bar indicators

INDICATOR	MEANING
Cell Mode	Shows Ready, Edit, or Enter depending
Flash Fill Blank Cells and Flash Fill Changed Cells	Shows the number of cells that were s that were filled after a Flash Fill operat
Signatures, Information Management Policy, and Permissions	Displays information about the rights a These features come into play only if y spreadsheets among groups of people
Caps Lock	Indicates whether you have Caps Lock capitalizes every letter you type. To tur
Num Lock	Indicates whether Num Lock mode is o keypad (typically on the right side of yo quickly. When this sign’s off, the nume To turn Num Lock on or off, press Num
Scroll Lock	Indicates whether Scroll Lock mode is to scroll through a worksheet without c can control your scrollbars by just usin at all the information in your workshee

INDICATOR	MEANING
	currently in. You can turn Scroll Lock on or off by pressing the Scroll Lock key.
Fixed Decimal	Indicates when Fixed Decimal mode is on. When this indicator is on, you set number of decimal places to the value you tell Excel to use two fixed decimal places. For example, if you tell Excel to use two fixed decimal places and you enter 0.05, Excel actually enters 0.05. This seldom occurs in everyday use, but people who need to enter reams of data in a fixed format can turn it off by selecting File → Options , choosing Advanced under “Editing options” to find the “Automatic Formatting” checkbox. Once you turn this checkbox on, you can turn it off. The number of decimal places displayed (the standard option is 2).
Overtyping Mode	Indicates when you have Overwrite mode on. When this indicator is on, cell edits work. When you edit a cell with the Overwrite mode, the characters that you type overwrite existing characters. To turn Overwrite mode on or off by pressing the Overwrite key.
End Mode	Indicates that you’ve pressed End , which moves the cursor to the end of the row or column. Pressing End followed by Home moves the cursor to the beginning of the row or column; pressing End followed by Home moves the cursor to the bottom-right cell of the selected range.
Macro Recording	Macros are automated routines that perform a series of actions. The Macro Recording indicator shows when a macro is being recorded (superimposed on a worksheet) that lets you stop recording. For more information, learn more about macros in Chapter 2 .
Selection Mode	Indicates the current Selection mode. When this indicator is on, you can use extended selection. When you press the Ctrl key, you can use extended selection. Excel automatically selects all the rows and columns of the spreadsheet. Extended selection is useful when you use your mouse to select swaths of the grid. Pressing F8 toggles the Extended Selection mode. You’ll learn more about selecting cells in Chapter 2 .
Page Number	Shows the current page and the total number of pages in the document.

INDICATOR	MEANING
	Online of 4”). This indicator appears on Page Layout View: A Better Print P
Average, Count, Numerical Count, Minimum, Maximum, Sum	Show the result of a calculation on selected cells. For example, the AVERAGE function totals the value of all the numeric cells in the selected range. For a handy trick on Making Continuous Range
Upload Status	Does nothing (that we know of). Excel displays the status when you’re uploading files to the Web. However, Excel always displays the upload status, and it doesn’t seem to have any effect.
View Shortcuts	Shows the three view buttons that let you switch between Normal view, Layout view, and Page Break Preview.
Zoom	Shows the current zoom percentage (100 percent for a standard spreadsheet, and 200 percent for a spreadsheet with a large magnification).
Zoom Slider	Lets you zoom in (by moving the slider to the right) or zoom out (see more information at once).

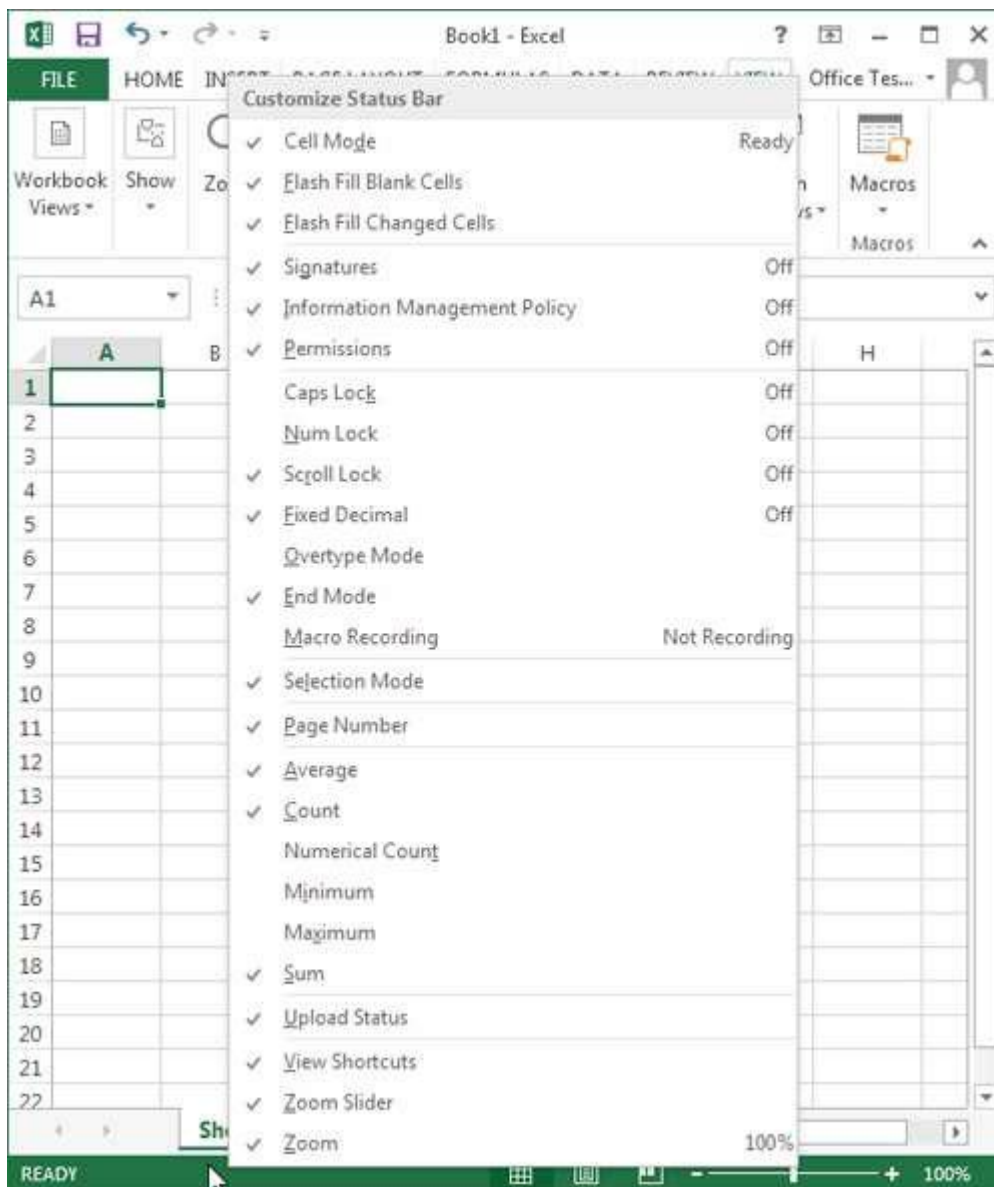


Figure 1-18. Every item that has a checkmark appears in the status bar when you need it. For example, if you choose Caps Lock, the text “Caps Lock” appears in the status bar whenever you hit the Caps Lock key. The text that appears on the right side of the list tells you the current value of the indicator. In this example, Caps Lock mode is currently off and the Cell Mode text says “Ready.”

Going Backstage

Your data is the star of the show. That’s why the creators of Excel refer to your worksheet as being “on stage.” The auditorium is the Excel main window, which—as you’ve just seen—includes the handy ribbon, formula bar, and status bar. Sure, it’s a strange

metaphor. But once you understand it, you'll realize the rationale for Excel's *backstage view*, which temporarily takes you away from your worksheet and lets you concentrate on other tasks that don't involve entering or editing data. These tasks include saving your spreadsheet, opening more spreadsheets, printing your work, and changing Excel's settings.

To switch to backstage view, click the File button to the left of the Home ribbon tab. Excel temporarily tucks your worksheet out of sight (although it's still open and waiting for you). This gives Excel the space it needs to display information related to the task at hand, as shown in [Figure 1-19](#). For example, if you plan to print your spreadsheet, Excel's backstage view previews the printout. Or if you want to open an existing spreadsheet, Excel can display a detailed list of files you recently worked on.

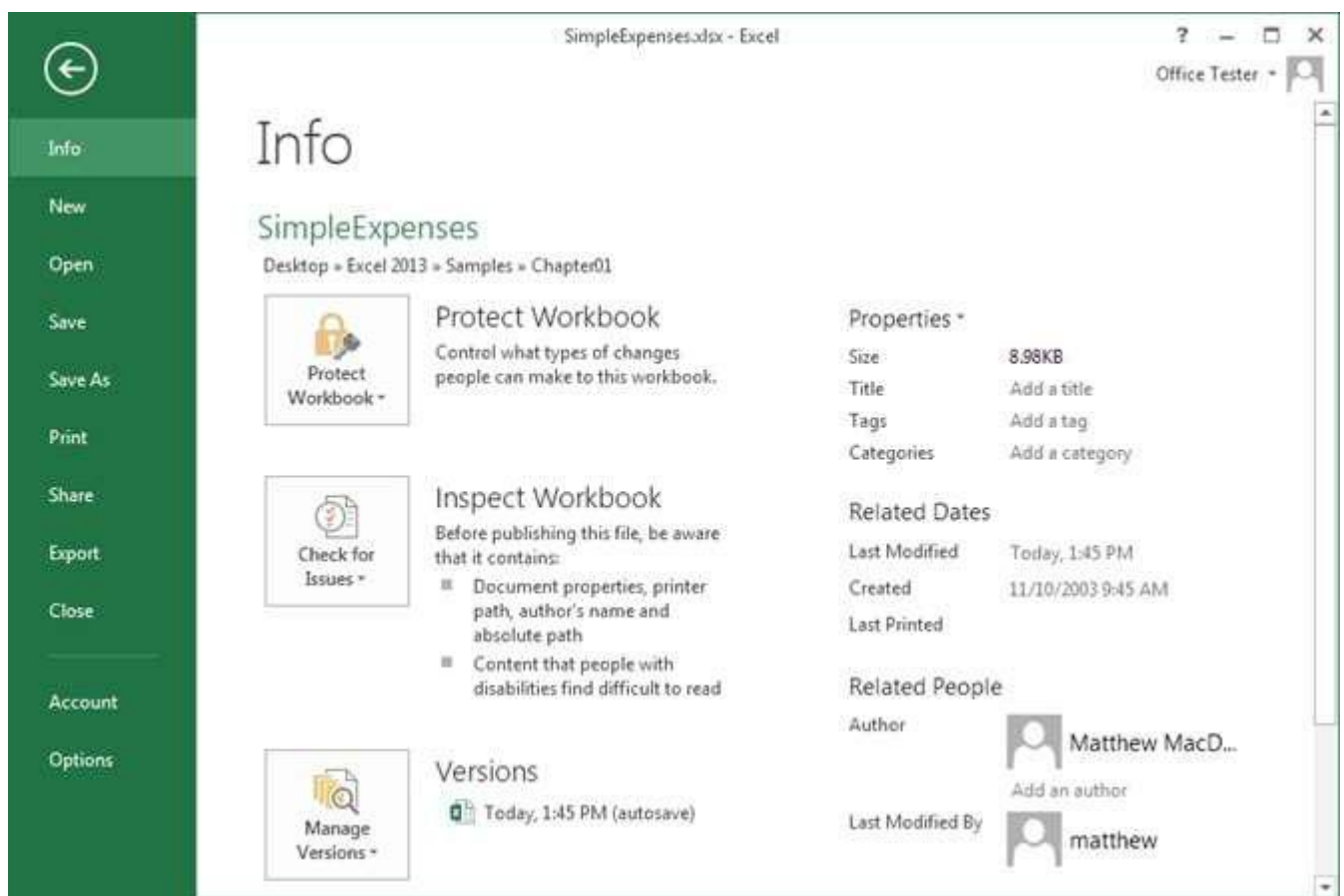


Figure 1-19. When you first switch to backstage view, Excel shows the Info page, which provides basic information about your workbook file, its size, when it was last edited, who

edited it, and so on (see the column on the far right). The Info page also provides the gateway to three important features: document protection (Chapter 21), compatibility checking (page 31), and AutoRecover backups (page 38). To go to another section, click a different command in the column on the far left.

To get out of backstage view and return to your worksheet, press Esc or click the arrow-in-a-circle icon in the top-right corner of backstage view.

The key to using backstage view is the menu of commands that runs in a strip along the left side of the window. You click a command to get to the page for the task you want to perform. For example, to create a new spreadsheet (in addition to the one you're currently working on), you begin by clicking the New command, as shown in Figure 1-20.

TIP

You don't need to go to backstage view to create a new, blank spreadsheet. Instead, hit the shortcut key Ctrl+N while you're in the worksheet grid. Excel will launch a new window, with a new, blank worksheet at the ready.

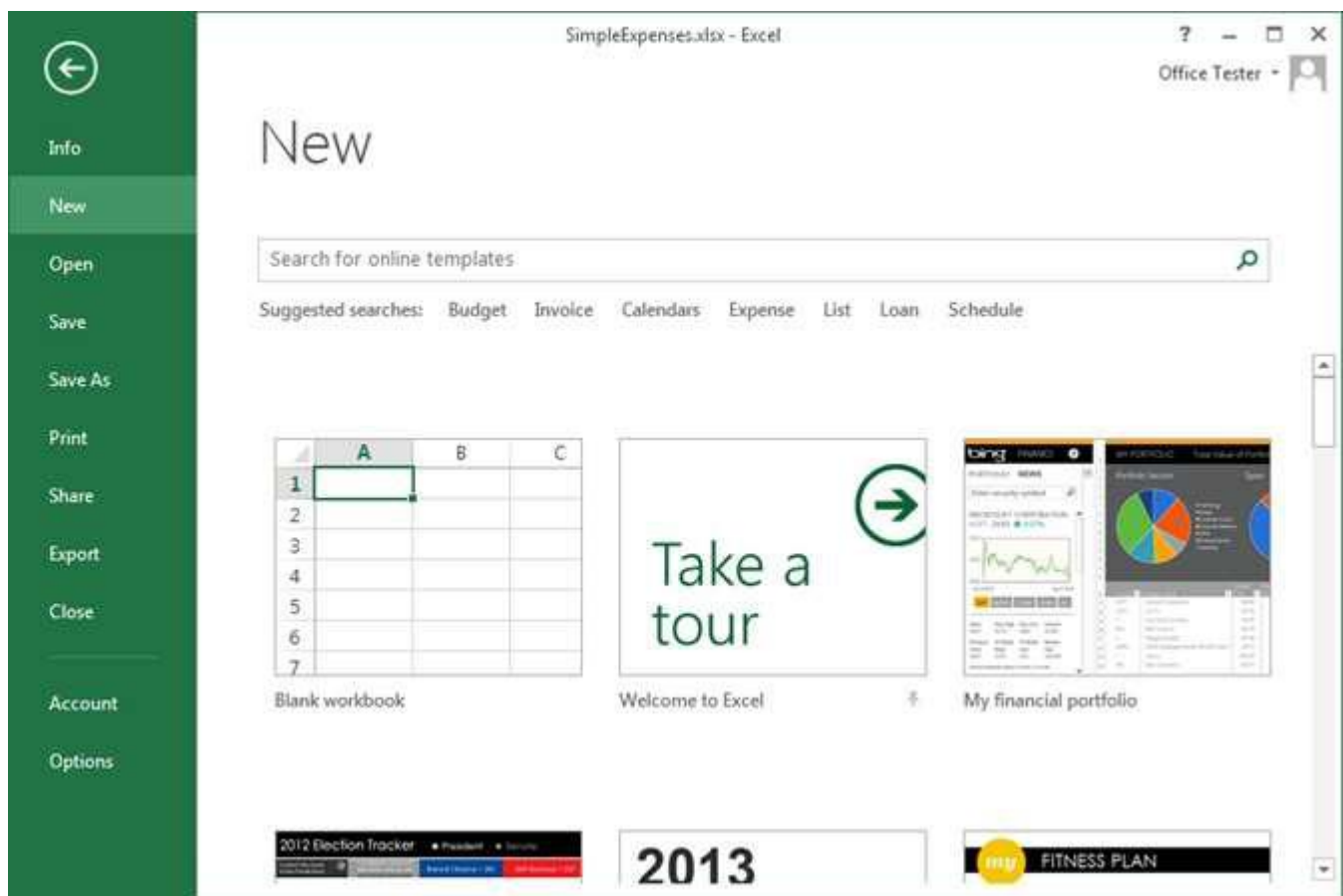


Figure 1-20. When you click New, you see a page resembling the welcome page that greets you when you start Excel. To create a new, empty workbook, click “Blank workbook.” Excel opens the workbook in a new window, so that it’s separate from your current workbook, which Excel leaves untouched.

Here are some of the things you’ll do in Excel’s backstage view:

- **Work with files** (create, open, close, and save them) with the help of the New, Open, Save, and Save As commands. You’ll spend the rest of this chapter learning the fastest and most effective ways to save and open Excel files.
- **Print your work** ([Chapter 7](#)) and **email** it to other people ([Chapter 25](#)) using the Print and Share commands.
- **Prepare a workbook** you want to share with others. For example, you can check its compatibility with older versions of Excel ([Chapter 1](#)) and lock your document to prevent other people from changing numbers ([Chapter 24](#)). You find these options under the Info command.

- **Configure your Office account**—that's the email address and password you use to access Microsoft's SkyDrive service for storing spreadsheets online ([Introducing SkyDrive](#)) or for your Office 365 account (if you're a subscriber; see page xvii). To do this, click the Account command.
- **Configure how Excel behaves.** Once you're in backstage view, click Options to launch the Excel Options window, an all-in-one place for configuring Excel.

Saving Files

As everyone who's been alive for at least three days knows, you should save your work early and often. Excel is no exception. To save a file for the first time, choose File→Save or File→Save As. Either way, you end up at the Save As page in backstage view ([Figure 1-21](#)).

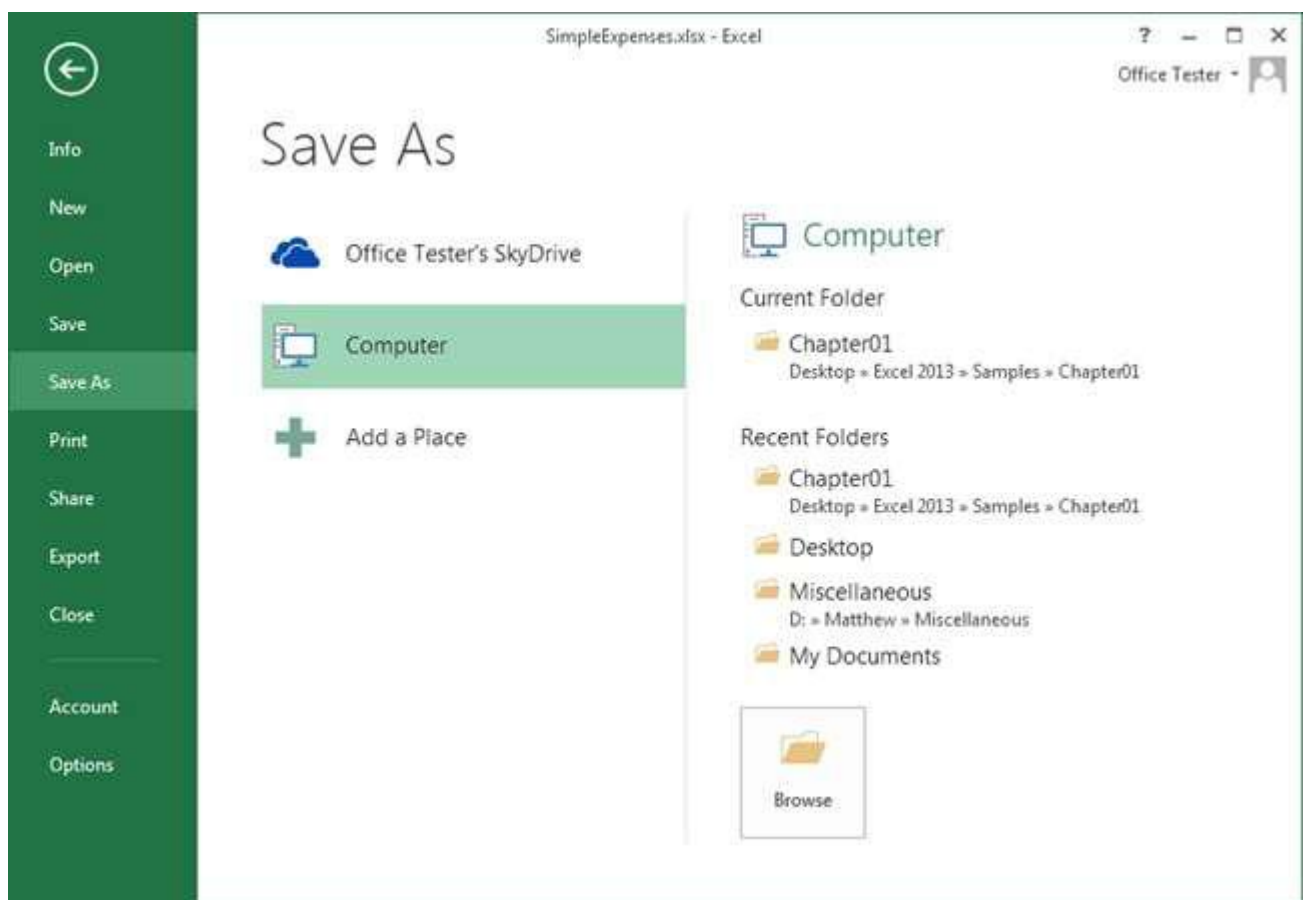


Figure 1-21. The first time you save your spreadsheet, you need to choose where to put it. Usually, you'll pick a location on your hard drive (click Computer in the Places list), but you can upload it to a corporate SharePoint service or to Microsoft's SkyDrive for online sharing almost as easily.

The Save As window includes a list of *places*—locations where you can store your work. The exact list depends on how you configured Excel, but here are some of the options you're likely to see:

- **Computer.** Choose this to store your spreadsheet somewhere on your computer's hard drive. This is the most common option. When you click Computer, Excel lists the folders where you recently saved or opened files (see [Figure 1-21](#), on the right). To save a file to one of these locations, select the folder. Or, click the big Browse button at the bottom to find a new location. Either way, Excel opens the familiar Save As window, where you type in a name for your file ([Figure 1-22](#)).

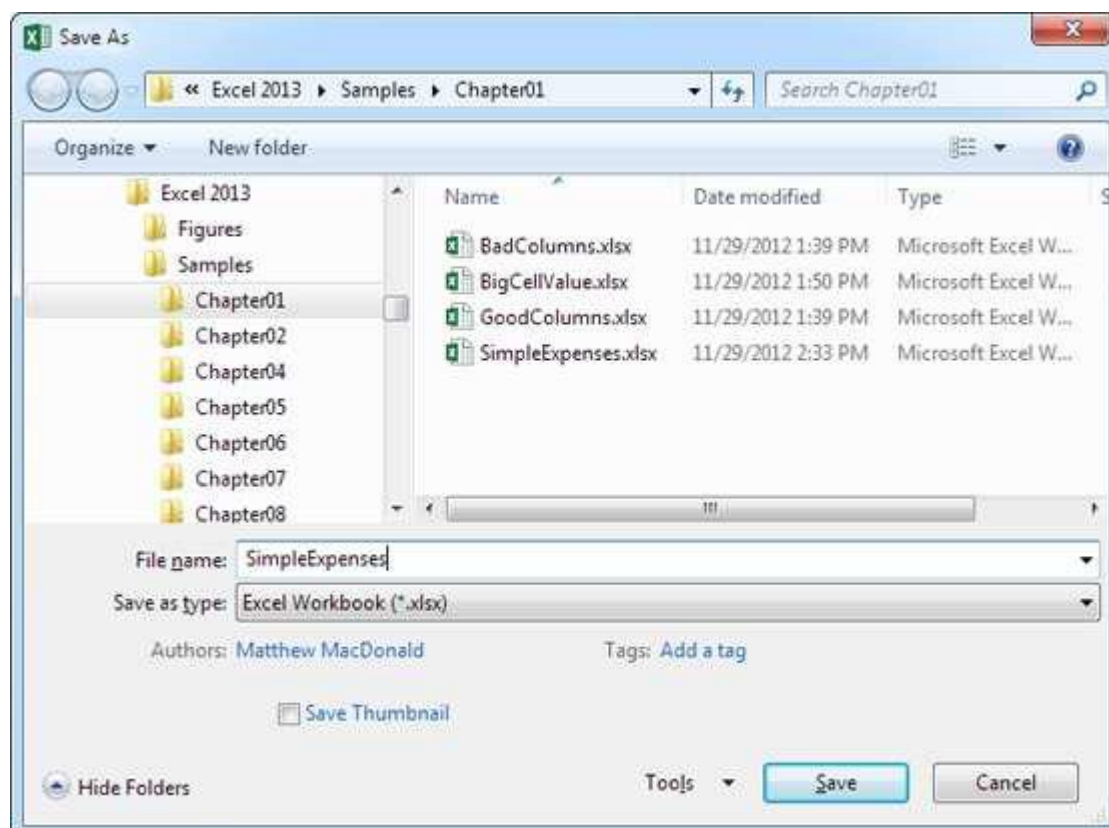


Figure 1-22. Once you pick a location for your file, you need to give it a name. This window won't surprise you, because it's the same Save As window that puts in an appearance in almost every document-based Windows application.

- **SkyDrive.** When you set up Excel, you can supply the email address and password you use for Microsoft services like Hotmail, Messenger, and SkyDrive, Microsoft's online file-storage system. Excel features some nifty SkyDrive integration features. For example, you can upload a spreadsheet straight to the Web by clicking your personalized SkyDrive item in the Places list, and then choosing one of your SkyDrive folders.

NOTE

The advantage of putting a file on SkyDrive is that you can open and edit it from another Excel-equipped computer, without needing to worry about copying or emailing the file. The other advantage is that other people can edit your file with the Excel Web App. You'll learn more about SkyDrive and the Excel Web App in [Chapter 23](#).

- **SharePoint.** If you're running a computer on a company network, you may be able to store your work on a SharePoint server. Doing so not only lets you share your work with everyone else on your team, it lets you tap into SharePoint's excellent workflow features. (For example, your organization could have a process set up where you save expense reports to a SharePoint server, and they're automatically passed on to your boss for approval and then accounting for payment.) A SharePoint server won't necessarily have the word "SharePoint" in its place name, but it will have the globe-and-server icon to let you know it's a web location.

After you save a spreadsheet once, you can quickly save it again by choosing File→Save, or by pressing Ctrl+S. Or look up at the top of the Excel window in the Quick Access toolbar for the tiny Save button, which looks like an old-style diskette. To save your spreadsheet with a new name or in a new place, select File→Save As, or press F12.

TIP

Saving a spreadsheet is an almost instantaneous operation, and you should get used to doing it regularly. After you make any significant change to a sheet, hit Ctrl+S to store the latest version of your data.

Ordinarily, you'll save your spreadsheets in the modern .xlsx format, which is described in the next section. However, sometimes you'll need to convert your spreadsheet to a different type of file—for example, if you want to pass them along to someone using a very old version of Excel, or a different type of spreadsheet program. There are two ways you can do this:

- **Choose File→Save As and pick a location.** Then, in the Save As window ([Figure 1-22](#)), click “Save as type” and then pick the format you want from the long drop-down list.
- **Choose File→Export, and then click Change File Type.** You'll see a list of the 10 most popular formats. Click one to open a Save As window with that format selected. Or, if you don't see the format you want, click the big Save As button underneath to open a Save As window, and then pick the format yourself from the “Save as type” drop-down list.

Excel lets you save your spreadsheet in a variety of formats, including the classic Excel 95 format from more than a decade ago. If you want to look at your spreadsheet using a mystery program, use the CSV file type, which produces a comma-delimited text file that almost all spreadsheet programs can read (comma-delimited means that commas separate the information in each cell). And in the following sections, you'll learn more about sharing your work with old versions of Excel ([Sharing Your Spreadsheet with Older Versions of Excel](#)) or putting it in PDF form so anyone can view and print it ([Saving Your Spreadsheet As a PDF](#)). But first, you need to take a closer look at Excel's standard file format.

The Excel File Format

Modern versions of Excel, including Excel 2013, use the *.xlsx* file format (which means your saved spreadsheet will have a name like *HotelSilverware.xlsx*). Microsoft introduced this format in Excel 2007, and it comes with significant advantages:

- **It's compact.** The *.xlsx* format uses ZIP file compression, so spreadsheet files are smaller—as much as 75 percent smaller than Excel 2003 files. And even though the average hard drive is already large enough to swallow millions of old-fashioned Excel files, a more compact format is easier to share online and via email.
- **It's less error-prone.** The *.xlsx* format carefully separates ordinary content, pictures, and macro code into separate sections. That means that if a part of your Excel file is damaged (due to a faulty hard drive, for example), there's a good chance that you can still retrieve the rest of the information. (You'll learn about Excel disaster recovery on [Disaster Recovery](#).)
- **It's extensible.** The *.xlsx* format uses XML (the eXtensible Markup Language), which is a standardized way to store information. (You'll learn more about XML in [Chapter 28](#).) XML storage doesn't benefit the average person, but it's sure to earn a lot of love from companies that use custom software in addition to Excel. As long as you store the Excel documents in XML format, these companies can create automated programs that pull the information they need straight out of the spreadsheet, without going through Excel itself. These programs can also generate made-to-measure Excel documents on their own.

For all these reasons, *.xlsx* is the format of choice for Excel 2013. However, Microsoft prefers to give people all the choices they could ever need (rather than make life really simple), and Excel file formats are no exception. In fact, the *.xlsx* file format actually comes in *two* additional flavors.

First, there's the closely related *.xlsm*, which lets you store macro code with your spreadsheet data. If you add macros to a spreadsheet, Excel prompts you to use this file type when you save your work. (You'll learn about macros in [Chapter 29](#).)

Second, there's the optimized *.xlsb* format, which is a specialized option that might be a bit faster when opening and saving gargantuan spreadsheets. The *.xlsb* format has the same automatic compression and error-resistance as *.xlsx*, but it doesn't use XML. Instead, it stores information in raw *binary* form (good ol' ones and zeros), which is speedier in some situations. To use the *.xlsb* format, choose File→Export, click Change File Type, and then choose “Binary Workbook (.xlsb)” from the drop-down list.

Most of the time, you don't need to think about Excel's file format. You can just create your spreadsheets, save them, and let Excel take care of the rest. The only time you need to stop and think twice is when you share your work with other, less fortunate people who have older versions of Excel, such as Excel 2003. You'll learn how to deal with this challenge in the following sections.

TIP

Don't use the *.xlsb* format unless you try it out and find that it really does give you better performance. Usually, *.xlsx* and *.xlsb* are just as fast. And remember, the only time you'll see any improvement is when you load or save a file. Once you open your spreadsheet in Excel, everything else (like scrolling around and performing calculations) happens at the same speed.

POWER USERS' CLINIC: UNDER THE HOOD WITH .XLSX FILES

Here's a shocking secret: The *.xlsx* file format is actually a ZIP file in disguise. It's composed of several files that are compressed and then packaged together as a single unit. With a little know-how, you can take a look at these hidden files-within-a-file, which makes for a great Excel party trick. Here's how:

1. Save your Excel spreadsheet in *.xlsx* format.

2. Browse to the file (using Windows Explorer or your favorite file-management tool). If you're lazy, you can save the file to your desktop so you can manipulate it right there.
3. Right-click the file, and then choose Rename.
4. Change the file extension to .zip. So if you start with *BlackMarketDinnerware.xlsx*, change it to *BlackMarketDinnerware.zip*.
5. Open the ZIP file by double-clicking the file name.
6. Now you can see the files hidden inside your Excel file. Excel organizes them into several folders (Figure 1-23). To find the actual content from your spreadsheet, head to xl→worksheets→sheet1.xml. Double-click the file name to open it and take a look at what's inside.
7. When you finish, rename the file using the .xlsx extension so you can open it in Excel.

To learn way more about the technical details of XML file storage, read the Microsoft white paper at <http://tinyurl.com/xmlfileformats>.*

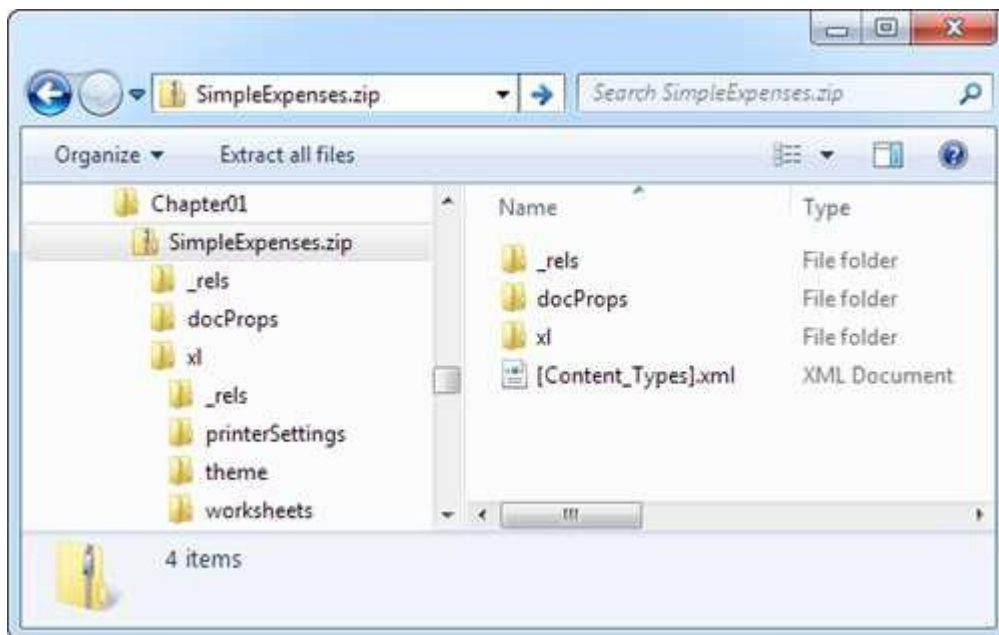


Figure 1-23. Inside every .xlsx file lurks a number of compressed files, each with different information. For example, separate files store printer settings, text styles, the name of the person who created the document, the composition of your workbook, and the individual worksheets themselves.

Sharing Your Spreadsheet with Older Versions of Excel

As you just learned, Excel 2013 uses the same .xlsx file format as Excel 2010 and Excel 2007. That means that an Excel 2013 fan can exchange files with an Excel 2010 devotee, and there won't be any technical problems.

However, a few issues can still trip you up when you share spreadsheets between different versions of Excel. For example, Excel 2013 introduces a few new formula functions, such as BASE (BASE() and DECIMAL(): Converting Numbers to Different Bases). If you write a calculation in Excel 2013 that uses BASE(), the calculation won't work in Excel 2010. Instead of seeing the numeric result you want, your recipient will see an error code mixed in with the rest of the spreadsheet data.

To avoid this sort of problem, you need the help of an Excel tool called the Compatibility Checker. It scans your spreadsheet for features and formulas that will cause problems in Excel 2010 or Excel 2007.

To use the Compatibility Checker, follow these steps:

1. **Choose File→Info.**

Excel switches into backstage view.

2. **Click the Check for Issues button, and choose Check Compatibility.**

The Compatibility Checker scans your spreadsheet, looking for signs of trouble. It reports problems to you (Figure 1-24).

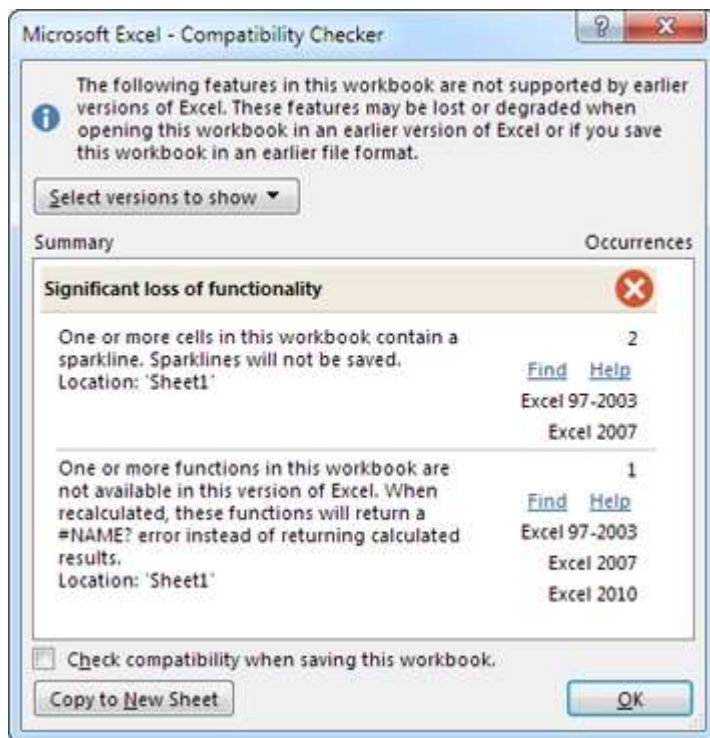


Figure 1-24. In this example, the Compatibility Checker found two potential problems. The first affects people using Excel 2007 or older, while the other affects people using Excel 2010 or older.

3. Optionally, you can choose to hide compatibility problems that don't affect you.

The Compatibility Checker reports on three types of problems:

1. Problems that affect old—really old—versions of Excel (Excel 97 to Excel 2003).
2. Problems that affect Excel 2007 or earlier.
3. Problems that affect Excel 2010 or earlier.

You don't necessarily need to worry about all these versions of Excel. For example, if you plan to share your files with Excel 2010 users but not with people using Excel 2007 or older, you don't need to pay attention to the first two categories, because they don't affect your peeps.

To choose what errors the Compatibility Checker reports on, click the "Select versions to show" button and turn off the checkboxes

next to the versions of Excel you don't want to consider. For example, you can turn off "Excel 97-2003" if you don't want to catch problems that affect only these versions of Excel.

4. Review the problems.

You can ignore the Compatibility Checker issues, click Find to hunt each one down, or click Help to figure out the exact problem. You can also click "Copy to New Sheet" to insert a full compatibility report into your spreadsheet as a separate worksheet. This way, you can print it up and review it in the comfort of your cubicle. (To get back to the worksheet with your data, click the Sheet1 tab at the bottom of the window. [Chapter 4](#) has more about how to use and manage multiple worksheets.)

NOTE

The problems that the Compatibility Checker finds won't cause serious errors, like crashing your computer or corrupting your data. That's because Excel is designed to *degrade gracefully*. That means you can still open a spreadsheet that uses newer, unsupported features in an old version of Excel. However, you may receive a warning message and part of the spreadsheet may seem broken—that is, it won't work as you intended.

5. Optionally, you can set the Compatibility Checker to run automatically for this workbook.

Turn on the "Check compatibility when saving this workbook" checkbox. Now, the Compatibility Checker runs each time you save your spreadsheet, just before Excel updates the file.

Once your work passes through the Compatibility Checker, you're ready to save it. Because Excel 2013, Excel 2010, and Excel 2007 all share the same file format, you don't need to perform any sort of conversion—just save your file normally. But if you want to share your spreadsheet with Excel 2003, follow the instructions in the next section.

Saving Your Spreadsheet for Excel 2003

Sharing your workbook with someone using Excel 2003 presents an additional consideration: Excel 2003 uses the older .xls format instead of the current-day .xlsx format.

There are two ways to resolve this problem:

- **Save your spreadsheet in the old format.** You can save a copy of your spreadsheet in the traditional .xls standard Microsoft has supported since Excel 97. To do so, choose File→Export, click Change File Type, and choose “Excel 97-2003 Workbook (*.xls)” from the list of file types.

NOTE

If you keep your spreadsheet in Excel 2013 and share it with an Excel 2003 user, the sheet might look a little different when your recipient opens it. That’s because, if Excel 2003 finds features it doesn’t support, it simply ignores them.

- **Use a free add-in for older versions of Excel.** People stuck with Excel 2000, Excel 2002, or Excel 2003 *can* read your Excel 2013 files—they just need a free add-in from Microsoft. This is a good solution because it doesn’t require you to do extra work, like saving both a current and a backward-compatible version of the spreadsheet. People with past-its-prime versions of Excel can find the add-in by surfing to www.microsoft.com/downloads and searching for “compatibility pack file formats” (or use the secret shortcut URL tinyurl.com/y5w78r). However, you should still run the Compatibility Checker to find out if your spreadsheet uses features that Excel 2003 doesn’t support.

TIP

If you save your Excel spreadsheet in the Excel 2003 format, make sure to keep a copy in the standard .xlsx format. Why? Because the old format isn’t guaranteed to retain all your information, particularly if you use newer chart features or data visualization.

As you already know, each version of Excel introduces a small set of new features. Older versions don't support these features. The differences between Excel 2010 and Excel 2013 are small, but the differences between Excel 2003 and Excel 2013 are more significant.

Excel tries to help you out in two ways. First, whenever you save a file in .xls format, Excel automatically runs the Compatibility Checker to check for problems. Second, whenever you open a spreadsheet in the old .xls file format, Excel switches into *compatibility mode*. While the Compatibility Checker points out potential problems after the fact, compatibility mode is designed to prevent you from using unsupported features in the first place. For example, in compatibility mode you'll face these restrictions:

- Excel limits you to a smaller grid of cells (65,536 rows instead of 1,048,576).
- Excel prevents you from using really long or deeply nested formulas.
- Excel doesn't let you use some pivot table features.

In compatibility mode, these missing features aren't anywhere to be found. In fact, compatibility mode is so seamless that you might not even notice its limitations. The only clear indication that you're in Compatibility Mode appears at the title bar at the top of the Excel window. Instead of seeing something like CateringList.xlsx, you'll see "CateringList.xls [Compatibility Mode]."

NOTE

When you save an Excel workbook in .xls format, Excel won't switch into compatibility mode right away. Instead, you need to close the workbook and reopen it.

If you decide at some point that you're ready to move into the modern world and convert your file to the .xlsx format favored by Excel 2013, you can use the trusty File→Save As command. However, there's an even quicker shortcut. Just choose File→Info and click the Convert button. This saves an Excel 2013 version of your file with the same name but with the

extension .xlsx, and reloads the file so you get out of compatibility mode. It's up to you to delete your old .xls original if you don't need it anymore.

Saving Your Spreadsheet As a PDF

Sometimes you want to save a copy of your spreadsheet so that people can read it even if they don't have Excel (and even if they're running a different operating system, like Linux or Apple's OS X). One way to solve this problem is to save your spreadsheet as a PDF file. This gives you the best of both worlds—you keep all the rich formatting (for when you print your workbook), and you let people who don't have Excel (and possibly don't even have Windows) see your work. The disadvantage is that PDFs are for viewing only—there's no way for you to open a PDF in Excel and start editing it.

UP TO SPEED: LEARNING TO LOVE PDFS

You've probably heard about PDFs, files saved in Adobe's popular format for sharing formatted, print-ready documents. People use PDFs to pass around product manuals, brochures, and all sorts of electronic documents. Unlike a document format like .xlsx, PDF files are designed to be viewed and printed, but not edited.

The best part about PDFs is that you can view them on just about any computer using the free Adobe Reader. You can download Adobe Reader at <http://get.adobe.com/reader>, but you probably don't need to. Most computers come with it installed because so many of today's programs use it (usually so you can view their electronic documentation). It's also widespread on the Web.

Incidentally, PDF isn't the only kid on the block. The Windows operating systems includes another electronic paper format called XPS, which works just as well as PDF for creating print-ready files. However, PDF is dramatically more popular and widespread, so it's the one to stick with for now. (If you're interested in saving an Excel document as an XPS file, you can do that, too—just choose XPS from the “Save as type” list.)

To save your spreadsheet as a PDF, select File→Export, click Create PDF/XPS Document (in the “File Types” section), and then click the

Create PDF/XPS button. Excel opens a modified version of the Save As window that has a few additional options (Figure 1-25).

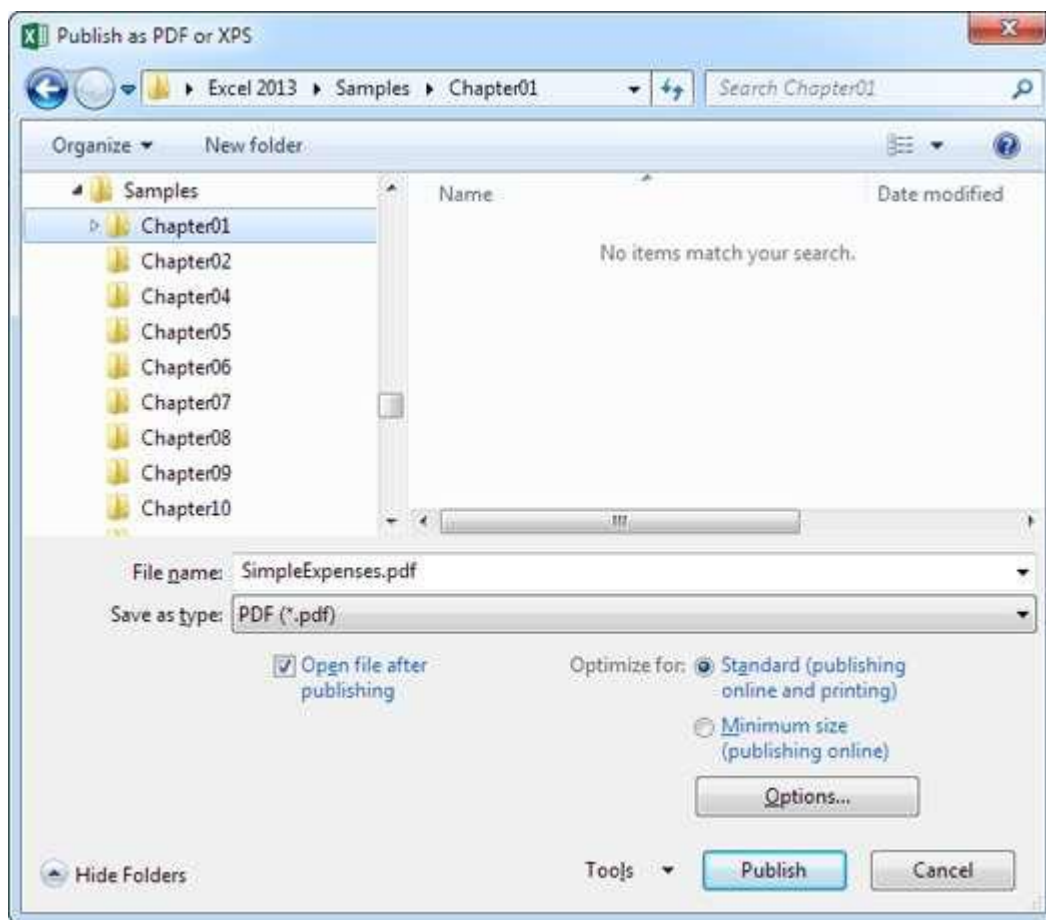


Figure 1-25. You can save PDF files at different resolutions and quality settings (which mostly affect graphics in your workbook, like pictures and charts). Normally, you use higher-quality settings if you want to print your PDF file, because printers use higher resolutions than computers.

The “Publish as PDF” window gives you some control over the quality of your printout using the “Optimize for” options. If you’re just saving a PDF copy so other people can *view* your workbook, choose “Minimum size (publishing online)” to cut down on the storage space required. On the other hand, if people reading your PDF might want to print it out, choose “Standard (publishing online and printing)” to save a slightly larger PDF that makes for a better printout.

You can switch on the “Open file after publishing” setting to tell Excel to open the PDF file in Adobe Reader (assuming you have it installed) after it saves the file. That way, you can check the result.

Finally, if you want to publish only a portion of your spreadsheet as a PDF file, click the Options button to open a window with even more settings. You can publish just a fixed number of pages, just selected cells, and so on. These options mirror the choices you see when you print a spreadsheet (Printing). You also see a few more cryptic options, most of which you can safely ignore (they’re intended for PDF nerds). One exception is the “Document properties” option—turn this off if you don’t want the PDF to keep track of certain information that identifies you, like your name. (Excel document properties are discussed in more detail on Document Properties.)

Password-Protecting Your Spreadsheet

Occasionally, you might want to add confidential information to a spreadsheet—a list of the hotels from which you’ve stolen spoons, for example. If your computer is on a network, the solution may be as simple as storing your file in the correct, protected location. But if you’re afraid you might email the spreadsheet to the wrong people (say, executives at Four Seasons), or if you’re about to expose systematic accounting irregularities in your company’s year-end statements, you’ll be happy to know that Excel provides a tighter degree of security. It lets you *password-protect* your spreadsheets, which means that anyone who wants to open them has to know the password you set.

Excel actually has two layers of password protection you can apply to a spreadsheet:

- You can prevent others from *opening* your spreadsheet unless they know the password. This level of security, which scrambles your data for anyone without the password (a process known as *encryption*), is the strongest.

- You can let others *read* but not *modify* the sheet unless they know the password.

To apply one or both of these restrictions to your spreadsheet, follow these steps:

1. **Choose File→Save As, and then choose a location.**

The Save As window opens.

2. **From the Tools drop-down menu, pick General Options.**

The Tools drop-down menu sits in the bottom-right corner of the Save As window, just to the left of the Save button.

The General Options window appears.

3. **Type a password next to the security level you want to turn on (as shown in Figure 1-26), and then click OK.**

The General Options window also gives you a couple of other unrelated options:

1. Turn on the “Always create backup” checkbox if you want a copy of your file in case something goes wrong with the first one (think of it as insurance). Excel creates a backup with the file extension *.xlk*. For example, if you save a workbook named *SimpleExpenses.xlsx* with the “Always create backup” option on, Excel creates a file named “Backup of *SimpleExpenses.xlk*” every time you save your spreadsheet. You can open the *.xlk* file in Excel just as you would an ordinary Excel file. When you do, you see that it is an exact copy of your work.
2. Turn on the “Read-only recommended” checkbox to prevent other people from accidentally making changes to your spreadsheet. With this option, Excel displays a message every time you (or anyone else) opens the file. It politely suggests that you open the spreadsheet in *read-only mode*, which means that Excel

won't let you make any changes to the file. Of course, it's entirely up to the person opening the file whether to accept this recommendation.



Figure 1-26. You can use any sequence of letters and numbers as a password. Passwords are case-sensitive (which means that PanAm is different from panam), and masked (which means that, when you type in the password, Excel displays just a series of asterisks).

4. **Click Save to store the file.**

If you use a password to restrict people from opening the spreadsheet, Excel prompts you to supply the “password to open” the next time you open the file ([Figure 1-27](#), top).

If you use a password to restrict people from modifying the spreadsheet, the next time you open this file, Excel gives you the choice, shown in [Figure 1-27](#) bottom, to open it in *read-only mode* (which requires no password) or to open it in full edit mode (in which case you’ll need to supply the “password to modify”).



Figure 1-27. Top: You can give a spreadsheet two layers of protection. Assign a “password to open,” and you’ll see this window when you open the file. Bottom: If you assign a “password to modify,” you’ll see the choices in this window. If you use both passwords, you’ll see both windows, one after the other.

Disaster Recovery

The corollary to the edict “Save your data early and often” is the truism “Sometimes things fall apart quickly...before you even had a chance to back up.” Fortunately, Excel includes an invaluable safety net called AutoRecover.

AutoRecover periodically saves backup copies of your spreadsheet while you work. If you suffer a system crash, you can retrieve the last backup even if you never managed to save the file yourself. Of course, even the AutoRecover backup won’t necessarily have *all* the information you entered in your spreadsheet before the problem occurred. But if AutoRecover saves a backup every 10 minutes (the standard), at most you’ll lose 10 minutes’ worth of work.

If your computer does crash, when you get it running again, you can easily retrieve your last AutoRecover backup. In fact, the next time you launch Excel, it automatically checks the backup folder and, if it finds a backup, it adds a link named Show Recovered Files to Excel’s welcome page

(Figure 1-28). Click that link, and Excel adds a panel named Document Recovery to the left side of the Excel window (Figure 1-29).

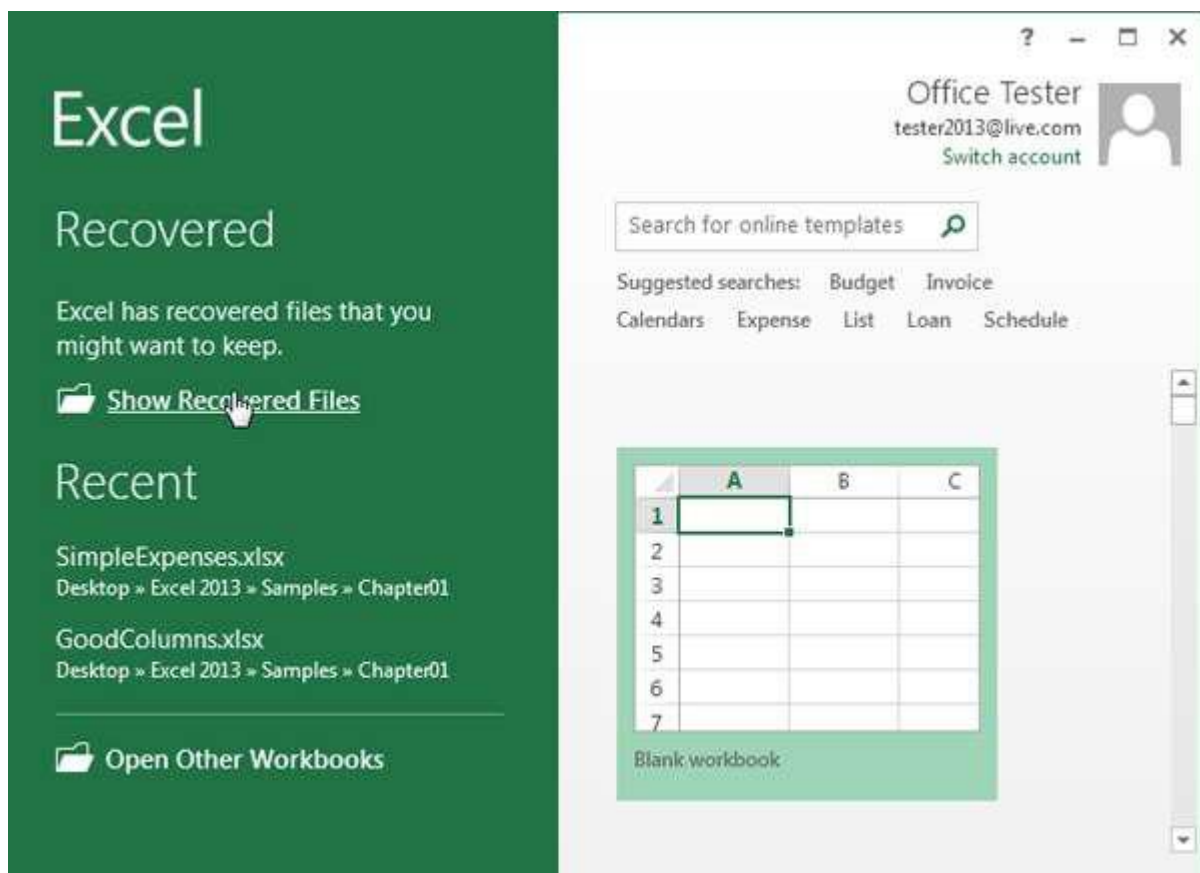


Figure 1-28. Excel's got your back—click Show Recovered Files to see what files it's rescued.

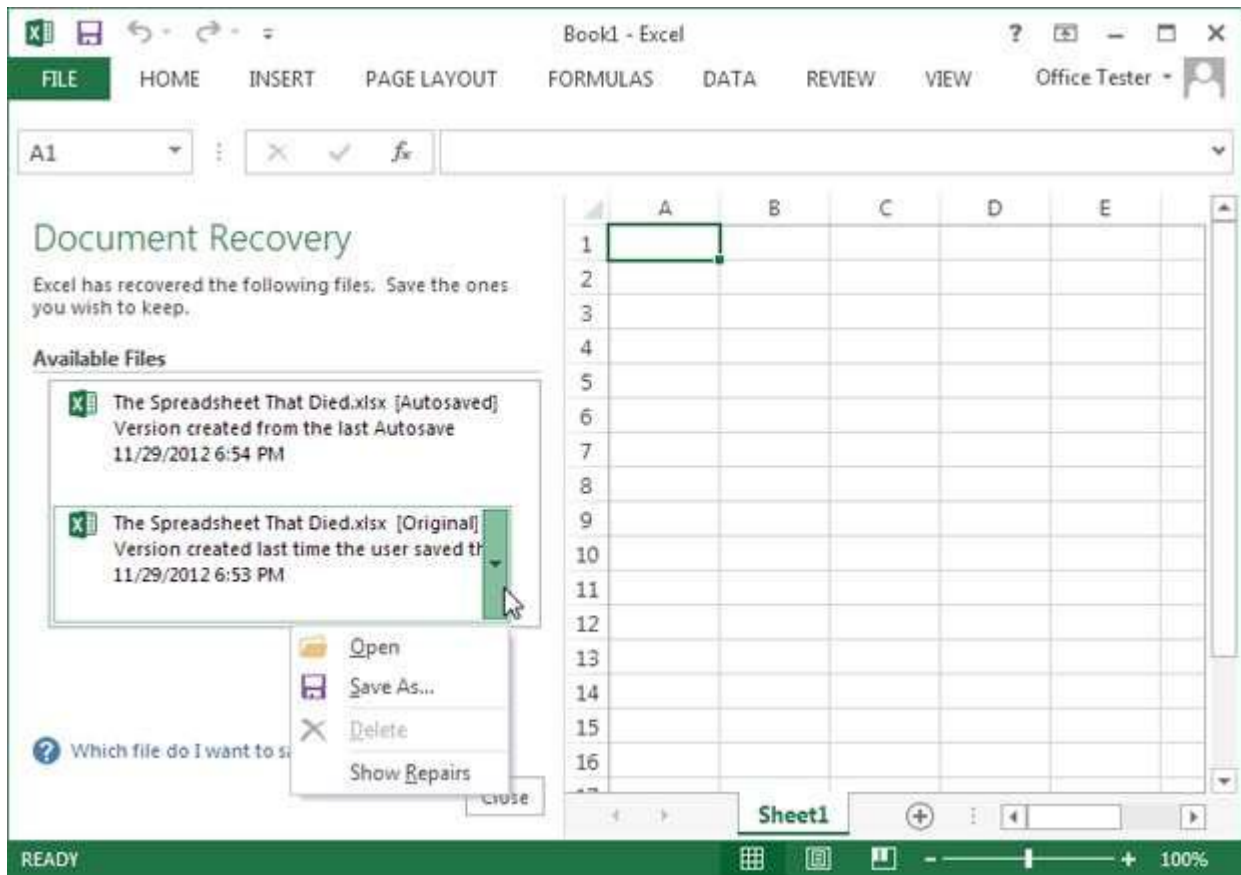


Figure 1-29. You can save or open an AutoRecover backup just as you would an ordinary Excel file; simply click the item in the list. Once you deal with all the backup files, close the Document Recovery window by clicking the Close button. If you haven't saved the backup, Excel asks you whether you want to save it permanently or delete it.

If your computer crashes mid-edit, the next time you open Excel you may see the same file listed twice in the Document Recovery window, as shown in [Figure 1-29](#). The difference is in the status: “[Autosaved]” indicates the most recent backup Excel created, while “[Original]” means the last version of the file *you* saved (which is safely stored on your hard drive, right where you expect it).

To open a file in the Document Recovery window, just click it. You can also use a drop-down menu with additional options ([Figure 1-29](#)). If you find a file you want to keep permanently, make sure to save it. If you don't, the next time you close Excel it asks if it should throw the backups away.

If you attempt to open a backup file that's somehow been scrambled (technically known as *corrupted*), Excel attempts to repair it. You can choose Show Repairs to display a list of any changes Excel made to recover the file.

AutoRecover Settings

AutoRecover comes switched on when you install Excel, but you can tweak its settings. Choose File→Options, and then choose the Save section. Under the “Save workbooks” section, make sure you have “Save AutoRecover information” turned on.

You can make a few other changes to AutoRecover:

- You can adjust the backup frequency in minutes. (See [Figure 1-30](#) for tips on timing.)
- You can control whether Excel keeps a backup if you create a new spreadsheet, work on it for at least 10 minutes, and then close it without saving your work. This sort of AutoRecover backup is called a *draft*, and it's discussed in more detail on [AutoRecover](#). Ordinarily, the setting “Keep the last Auto Recovered file if I exit without saving” is switched on, and Excel keeps drafts. (To find all the drafts that Excel has saved for you, choose File→Open, and scroll to the end of the list of recently opened workbooks, until you see the Recover Unsaved Workbooks button. Click it.)

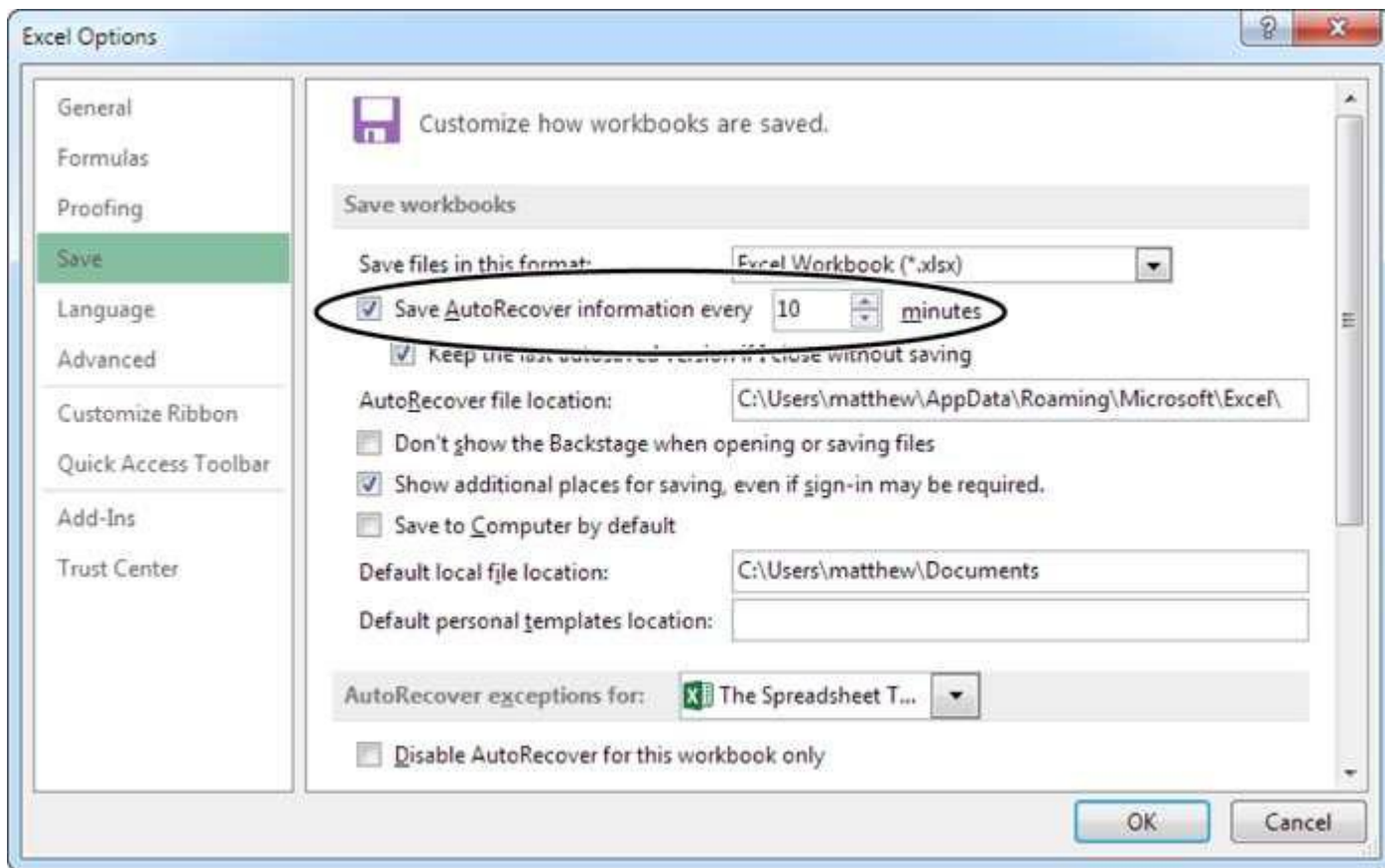


Figure 1-30. You can configure how often AutoRecover backs up your files. There's really no danger in being too frequent. Unless you work with extremely complex or large spreadsheets—which might suck up a lot of computing power and take a long time to save—you can set Excel to save a document every 5 minutes with no appreciable slowdown in performance.

- You can choose where you want Excel to save backup files. The standard folder works fine for most people, but feel free to pick some other place. Unfortunately, there's no handy Browse button to help you locate the folder, so you need to find the folder in advance (using a tool like Windows Explorer), write it down somewhere, and then copy the full folder path into this window.
- Under the "AutoRecover exceptions" heading, you can tell Excel not to bother saving a backup of a specific spreadsheet. Pick the spreadsheet name from the list (which shows all the currently open spreadsheet files), and then turn on the "Disable AutoRecover for this workbook only" setting. This setting is exceedingly uncommon, but you might use it if you have a gargantuan

spreadsheet full of data that doesn't need to be backed up. For example, this spreadsheet might hold records you pulled out of a central database so you can take a closer look. In such a case, you don't need to create a backup because your spreadsheet is just a copy of the data in the database. (If you're interested in learning more about this scenario, check out [Chapter 27](#).)

Opening Files

To open files in Excel, you begin by choosing File→Open (or using the keyboard shortcut Ctrl+O). This takes you to the Open page in Excel's backstage view. The left side of the page includes the Places list, which matches the list in the Save As page with one addition: Recent Workbooks. Click this, and you'll see up to 25 of the most recent spreadsheet files you worked on. If you find the file you want, click it to open it.

NOTE

When you open a file, Excel loads it into a new window. If you already have a workbook on the go, that workbook remains open in a separate Excel window.

The best part about the Recent Documents list is the way you can *pin* a document so it stays there forever, as shown in [Figure 1-31](#).

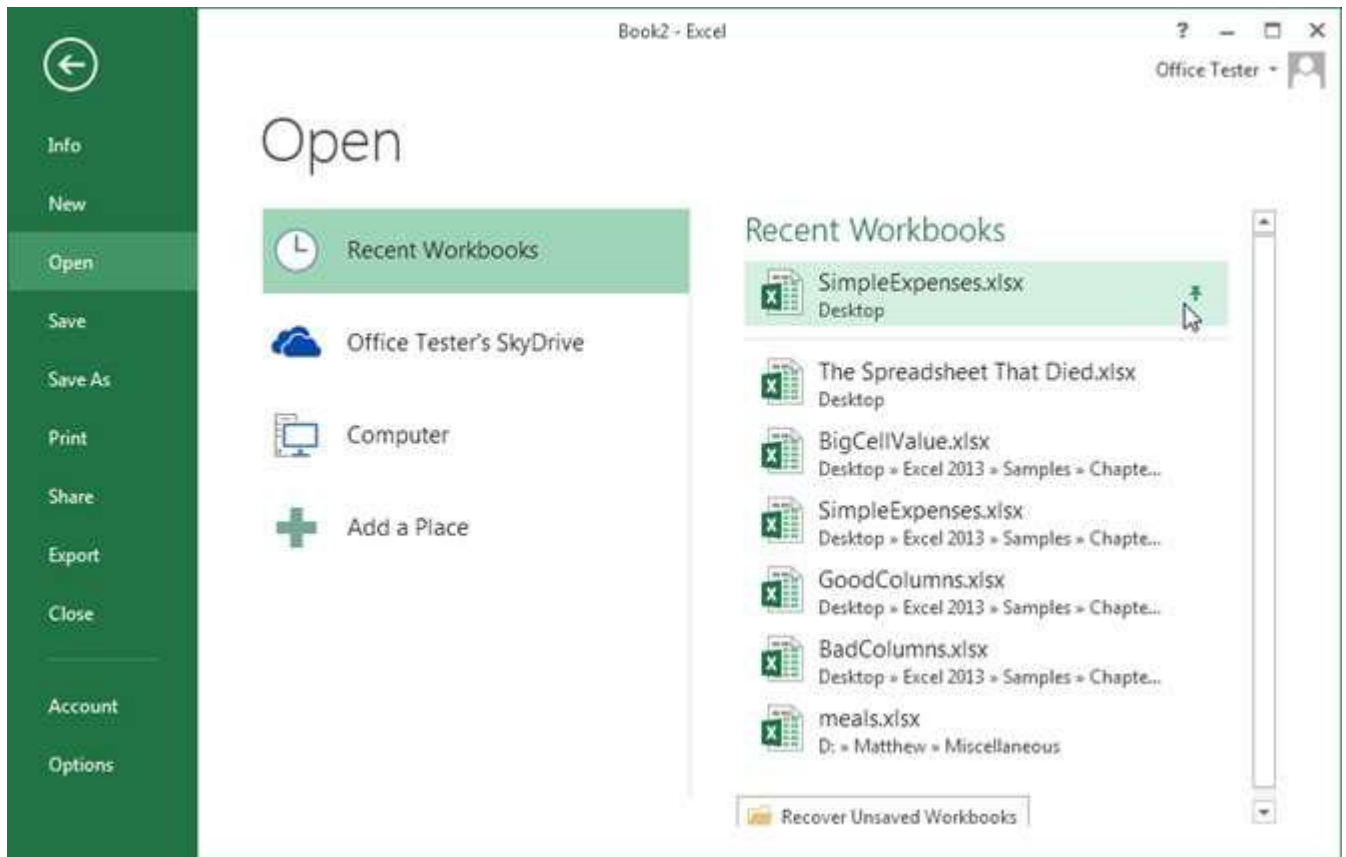


Figure 1-31. To keep a spreadsheet on the Recent Documents list, click the thumbtack on the right. Excel moves your workbook to the top of the list and pins it in place. That means it won't ever leave the list, no matter how many documents you open. If you decide to stop working with the file later on, just click the thumbtack again to release it. Pinning is a great way to keep your most important files at your fingertips.

TIP

Do you want to hide your recent editing work? You can remove any file from the recent document list by right-clicking it and choosing "Remove from list." And if the clutter is keeping you from finding the workbooks you want, pin the important files, then right-click any file and choose "Clear unpinned workbooks." This action removes every file that isn't pinned down.

If you don't see the file you want in the list of recent workbooks, you can choose one of the other locations in the Places list. Choose Computer to see a list of locations on your hard drive.

As with recently opened workbooks, you can pin your favorite locations so they remain on this list permanently. To open a file in one of these locations, click the folder (or click the Browse button underneath to look somewhere else). Either way, Excel opens the familiar Open window, where you can pick the file you want.

TIP

The Open window also lets you open several spreadsheets in one step, as long as they're all in the same folder. To use this trick, hold down the Ctrl key and click to select each file. When you click Open, Excel puts each one in a separate window, just as if you'd opened them one after the other.

Opening Files in Other Formats

Excel can open many file types other than its native .xlsx format. To open files in another format, begin by choosing File→Open, and then pick a location. When the Open window appears, pick the type of format you want from the “Files of type” list at the bottom.

If you want to open a file but don't know what format it's in, try using the first option in the list, “All Files.” Once you choose a file, Excel scans the beginning of the file and informs you about the type of conversion it will attempt (based on the type of file Excel thinks it is).

NOTE

Depending on your computer settings, Windows might hide file extensions. That means that instead of seeing the Excel spreadsheet file *MyCoalMiningFortune.xlsx*, you'll just see the name *MyCoalMiningFortune* (without the .xlsx part on the end). In this case, you can still tell what type of file it is by looking at the icon. If you see a small Excel icon next to the file name, that means Windows recognizes the file as an Excel spreadsheet. If you see something else (like a tiny paint palette, for example), you need to make a logical guess as to what type of file it is.

Protected View

Even something that seems as innocent as an Excel file can't always be trusted. Protected view is an Excel security feature that aims to keep you safe. It opens potentially risky Excel files in a specially limited Excel window. You'll know you're in protected view because Excel doesn't let you edit any of the data in the workbook, and it displays a message bar at the top of the window ([Figure 1-32](#)).

Excel automatically uses protected view when you download a spreadsheet from the Web or open it from your email inbox. This is actually a huge convenience, because Excel doesn't need to hassle you with questions when you try to view the file (such as "Are you sure you want to open this file?"). Because Excel's protected view has bullet-proof security, it's a safe way to view even the most suspicious spreadsheet.

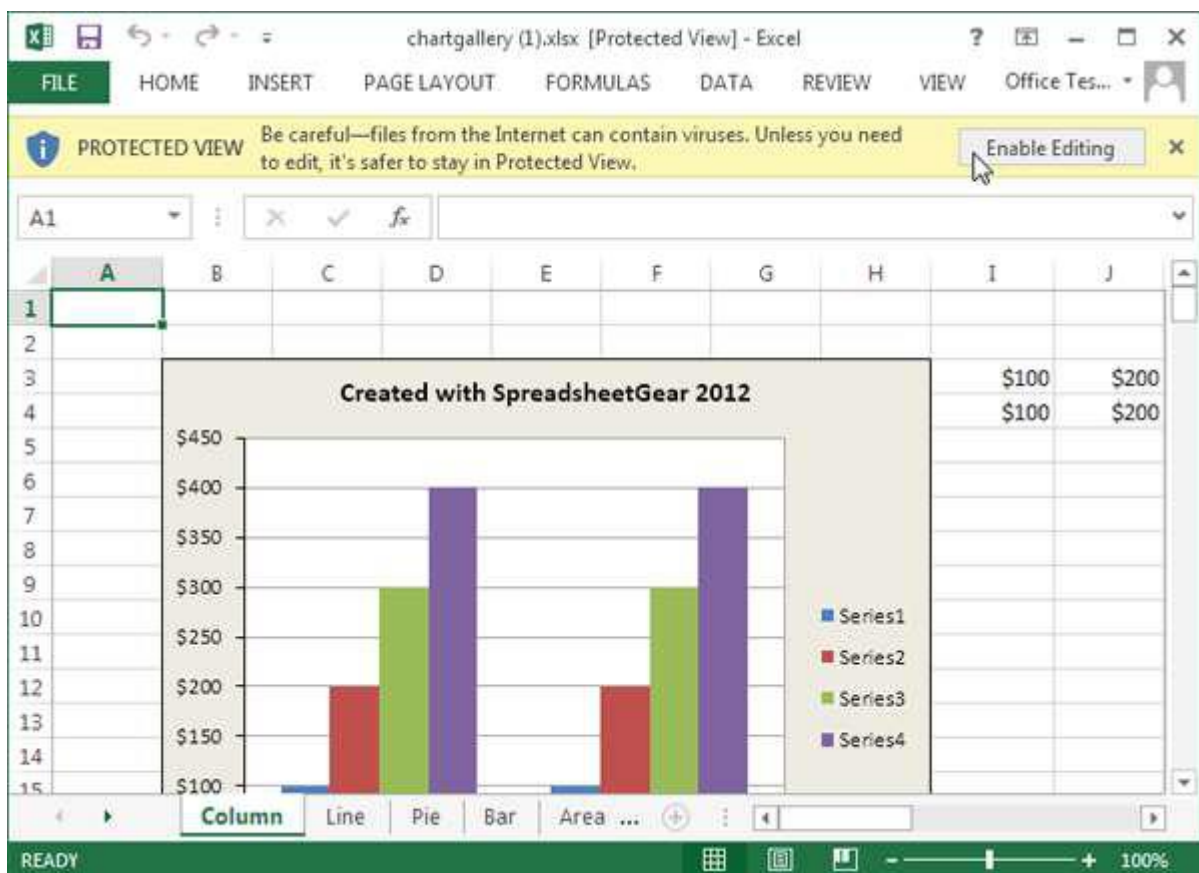


Figure 1-32. Currently, this file is in protected view. If you decide that it's safe and you need to edit its content, click the Enable Editing button to open the file in the normal Excel window with no security safeguards.

At this point, you're probably wondering about the risks of rogue spreadsheets. Truthfully, they're quite small. The most obvious danger is *macro code*: miniature programs stored in a spreadsheet file that perform Excel tasks. Poorly written or malicious macro code can tamper with your Excel settings, lock up the program, and even scramble your data. But before you panic, consider this: Excel macro viruses are very rare, and the .xlsx file format doesn't even allow macro code. Instead, macro-containing files must be saved as .xlsm or .xlsb files.

The more subtle danger here is that crafty hackers could create corrupted Excel files that might exploit tiny security holes in the program. One of these files could scramble Excel's brains in a dangerous way, possibly causing it to execute a scrap of malicious computer code that could do almost anything. Once again, this sort of attack is extremely rare. It might not even be possible with the up-to-date .xlsx file format. But protected view completely removes any chance of an attack, which helps corporate bigwigs sleep at night.

Opening Files—With a Twist

The Open window harbors a few tricks. To see these hidden secrets, first select the file you want to use (by clicking it once, not twice), and then click the drop-down arrow on the right-side of the Open button. A menu with several options appears, as shown in Figure 1-33.

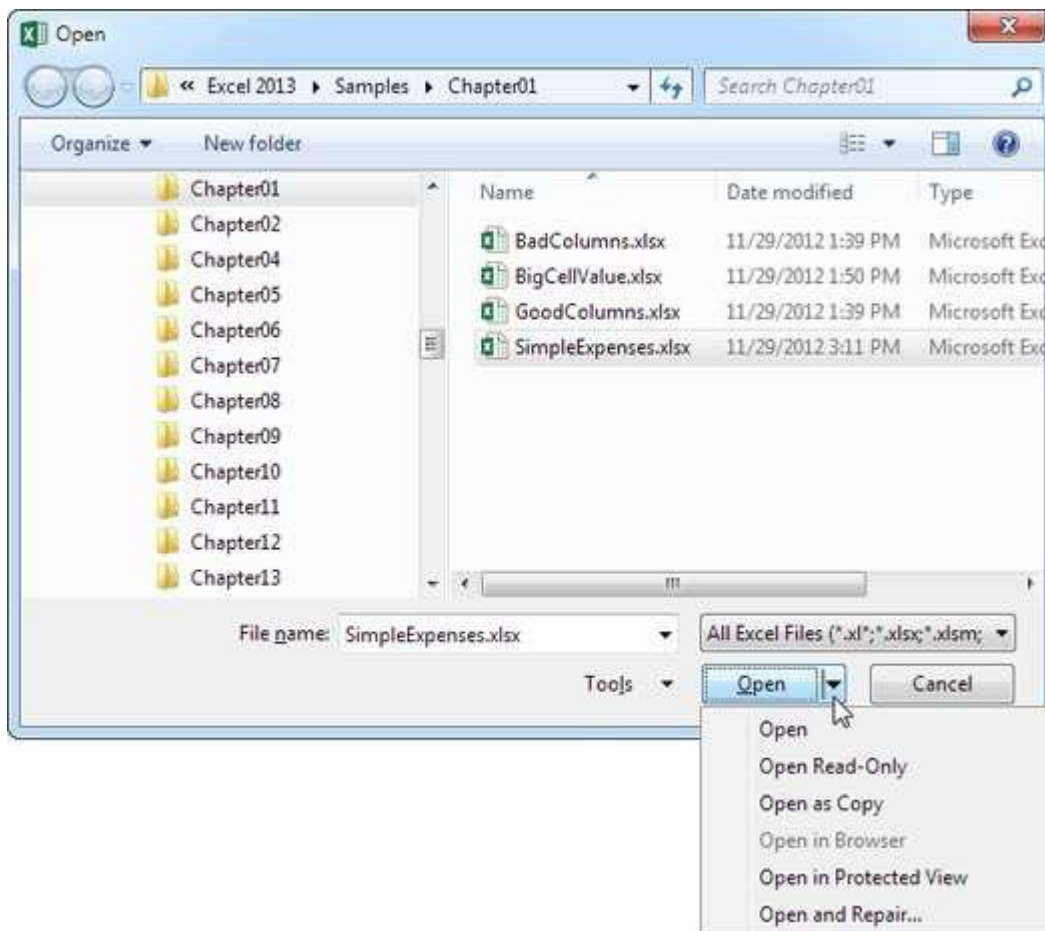


Figure 1-33. Why settle for the plain-vanilla Open command when you have all these choices?

Here's what these different choices do:

- **Open** opens the file in the normal way.
- **Open Read-Only** opens the file, but won't let you save changes. This option is great if you want to make sure you don't accidentally overwrite an existing file. (For example, if you're using last month's sales invoice as a starting point for this month's invoice, you might use Open Read-Only to make sure you can't accidentally wipe out the existing file.) If you open a document in read-only mode, you can still make changes—you just have to save the file with a new file name (choose File→Save As).
- **Open as Copy** creates a copy of the spreadsheet in the same folder. If you named your file *Book1.xlsx*, the copy will be named *Copy of Book1.xlsx*. This feature comes in handy if you're

about to start editing a spreadsheet and want to be able to look at the last version you saved. Excel won't let you open the same file twice, but you can load the previous version by selecting the same file and using "Open as Copy." (Of course, this technique works only when you have changes you haven't saved yet. Once you save the current version of a file, Excel overwrites the older version and it's lost forever.)

- **Open in Browser** is only available when you select an HTML file. This option lets you open the HTML file in your computer's web browser. It's part of an old Excel feature that allows you to save spreadsheets as web pages, which has now been replaced by Excel's Web App ([Putting Your Files Online](#)).

- **Open in Protected View** prevents a potentially dangerous file from running any code. However, you'll also be restrained from editing the file, as explained on [Opening Files in Other Formats](#).

- **Open and Repair** is useful if you need to open a file that's corrupted. If you try to open a corrupted file by just clicking Open, Excel warns you that the file has problems and refuses to open it. To get around this, you can open the file using the "Open and Repair" option, which prompts Excel to make the necessary corrections, display them for you in a list, and then open the document. Depending on the type of problem, you might not lose any information at all.

Working with Multiple Open Spreadsheets

As you open multiple spreadsheets, Excel creates a new window for each one. Although this helps keep your work separated, it can cause a bit of clutter and make it harder to track down the window you really want. Fortunately, Excel provides a few shortcuts that are indispensable when dealing with several spreadsheets at a time:

- To jump from one spreadsheet to another, find the window in the View→Window→Switch Windows list, which includes the file name of all the currently open spreadsheets ([Figure 1-34](#)).



Figure 1-34. When you have multiple spreadsheets open at the same time, you can easily move from one to the other using the Switch Windows list.

- To move to the next spreadsheet, use the keyboard shortcut Ctrl+Tab or Ctrl+F6.
- To move to the previous spreadsheet, use the shortcut key Ctrl+Shift+Tab or Ctrl+Shift+F6.

Q12. Calculate the following things of a range (C2:C11) of data in the worksheet created in question no

- **the sum of the marks using AutoSum in a range of cells (C2:C11)**
- **average of the marks in a range of cells (C2:C11)**
- **highest marks in a range of cells (C2:C11)**
- **minimum marks in a range of cells (C2:C11)**

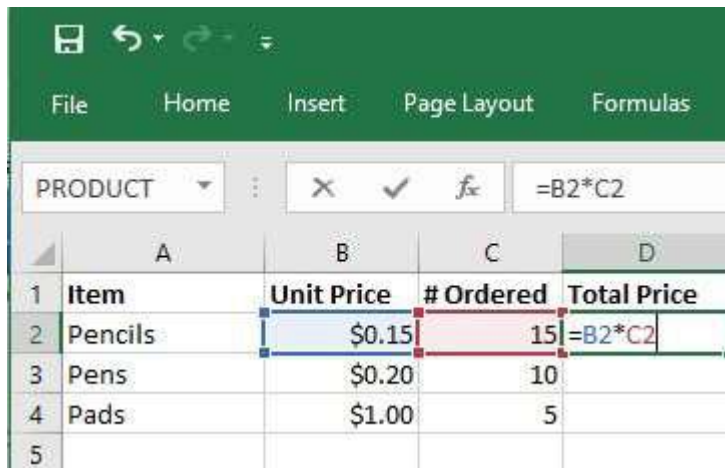
Ans. Formulas in Excel are basically mathematical expressions that use cell references (e.g., "A5", "D17") as arguments. For example, a formula that adds the contents of cell E5 and E6 could be written as follows:

= E5+E6

(Note: all formulas in Excel need to be preceded by an "=" sign.) If the values contained in E5 and E6 are 6 and 11, respectively, the formula will produce 17 as the value it displays. If you change E5 to 7, the result will automatically change to 18.

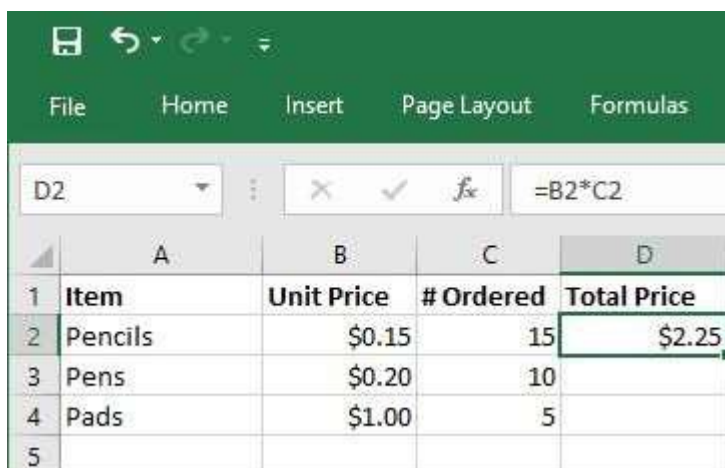
Example

Let's say you were putting together an office supply order, and you wanted to keep track of much you were spending. You could put together a spreadsheet like the one below, with the list of items to be purchased, their unit prices, the number of each item ordered, and the total spent for each. It would make sense to enter the things you know in advance (like the price of individual items and the number ordered), but you could let Excel calculate the totals for you. For the first item listed below (pencils), this could be done by making the value of the total price (cell D2), the value of the unit price (held in cell C2) multiplied by the number of items ordered (held in D2). This formula would be written " $=B2*C2$ ".



	A	B	C	D
1	Item	Unit Price	# Ordered	Total Price
2	Pencils	\$0.15	15	$=B2*C2$
3	Pens	\$0.20	10	
4	Pads	\$1.00	5	
5				

After hitting "Enter", the cell will display the calculated value, while the formula bar will still display the formula. (Note: Always hit "Enter" when finished entering a formula, manually. If you click off the cell, the cell you click to will be added to your formula.)



	A	B	C	D
1	Item	Unit Price	# Ordered	Total Price
2	Pencils	\$0.15	15	\$2.25
3	Pens	\$0.20	10	
4	Pads	\$1.00	5	
5				

Excel will generally be able to handle any properly-input mathematical formula, if valid operators are used. Commonly used operators include "+" (addition), "-" (subtraction), "*" (multiplication) and "/" (division). (Microsoft has a [complete list of valid operators to be used in Excel formulas](#) on the Office website). Here are some examples of formulas using common operators:

Formula

$=C2-B2$
C2

$=C2/B2$

$=(B2+C2+D2)/3$
result by 3

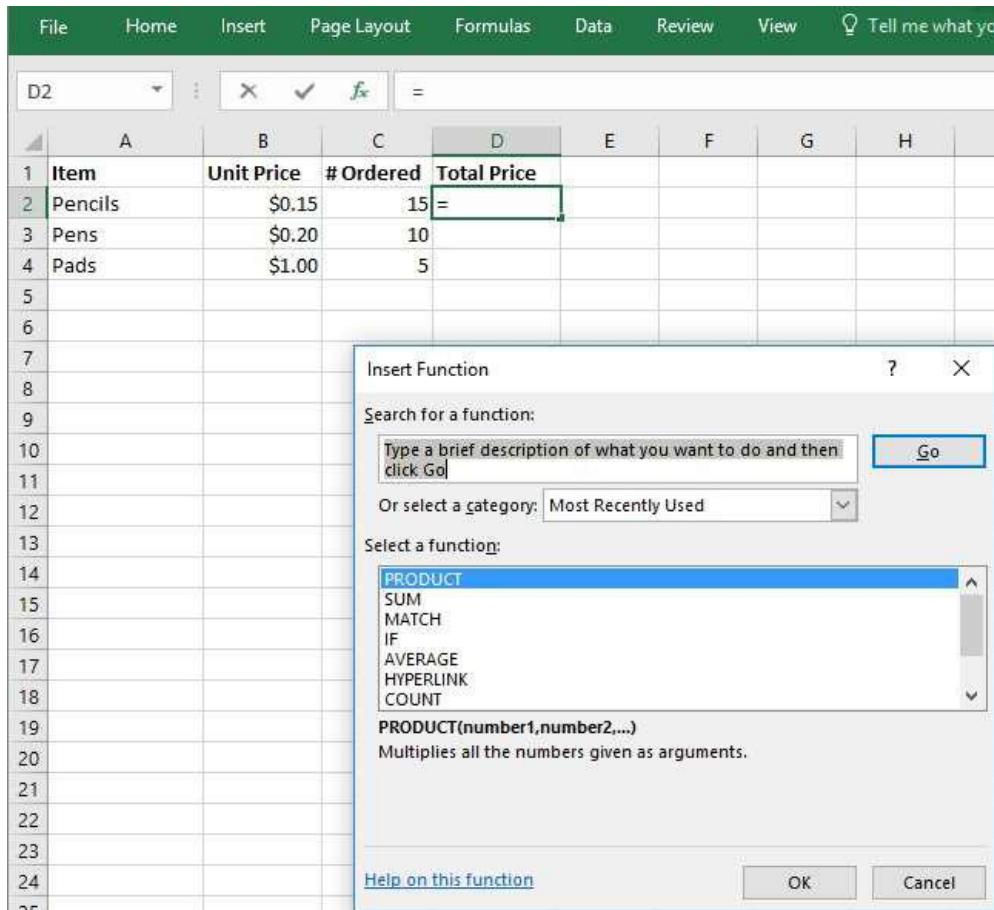
Description

Subtracts contents of B2 from contents of C2

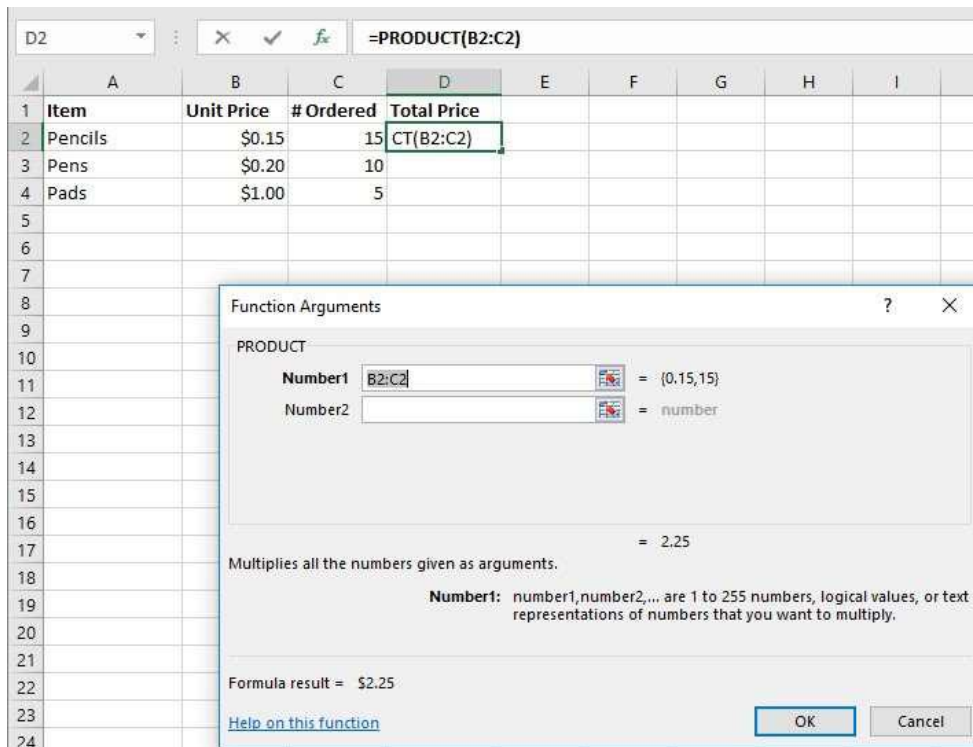
Divides contents of C2 by contents of B2

Adds contents of B2, C2, and D2 and divides

Excel also has built-in functions that can do a lot of useful calculations. These are most easily accessed by hitting the Insert Function button, which is represented by the "**fx**" symbol next to the formula bar. For example, instead of entering the formula shown above, the same result could have been achieved using the built-in "PRODUCT" function by clicking in cell D2 and hitting the Insert Formula button. This would give a dialog box like the one shown, below.



After selecting "PRODUCT" and clicking OK, you will get another dialog box, that allows you to select the cells to be multiplied. You can do this for individual cells, by selecting cells separately in the "Number1" and "Number2" boxes shown below, or by selecting an array of cells, by clicking and dragging on the range cells you want to use on the spreadsheet, itself. (Note: if you try to enter a formula in a cell using the Insert Formula button and there are adjacent cells with numbers, Excel will often select those cells automatically, so make sure the cells selected in the dialog box are the correct ones.)



Once you click "OK", your completed formula will be input into the cell.

Copying and pasting formulas

Often, you will need Excel to do a series of similar computations, where the only things that will change are the cells used as arguments. For instance, in the example above, you would probably like Excel to calculate the Total Price for each item in the order. You could re-input the same formula used to get the total price for pencils in each cell in that row, just changing the cells referenced (i.e. "`=PRODUCT(B3:C3)`", "`=PRODUCT(B4:C4)`", etc.), but Excel has a simpler method for this. If you have multiple cells in the same row or column that need to do the same computation, you can simply copy the value in the cell you entered a formula, and then paste it into the subsequent cells. Excel will then automatically adjust which cells are included in the formula, based upon which cell the formula was pasted to. So, if the original formula entered in D2 was "`=PRODUCT(B2:C2)`", the formula pasted into D4 would be "`=PRODUCT(B4:C4)`".

More simply, if you have a formula you want repeated in a number of directly adjoining cells, you can just click and drag the bottom right corner of the cell with the original formula (see image below) onto the cells you want the same formula entered, and Excel will automatically copy and paste the formula for you, with appropriate adjustments made to the cell numbers in the formula.

Formula bar: `=PRODUCT(B2:C2)`

	A	B	C	D	E	F
1	Item	Unit Price	# ordered	Total Price		
2	Pencils	\$0.15	15	\$2.25		
3	Pens	\$0.20	10			
4	Pads	\$1.00	5			
5						
6						
7						
8						
9						
10						

The image shows a spreadsheet with a formula bar at the top displaying `=PRODUCT(B2:C2)`. The spreadsheet has columns A through F and rows 1 through 10. The data is as follows:

	A	B	C	D	E	F
1	Item	Unit Price	# ordered	Total Price		
2	Pencils	\$0.15	15	\$2.25		
3	Pens	\$0.20	10			
4	Pads	\$1.00	5			
5						
6						
7						
8						
9						
10						

A yellow circle highlights the cell D2, which contains the value \$2.25. This value is the result of the formula `=PRODUCT(B2:C2)` applied to the data in row 2 (Pencils, \$0.15, 15).

- **average of the marks in a range of cells (C2:C11)**

Ans. Formulas

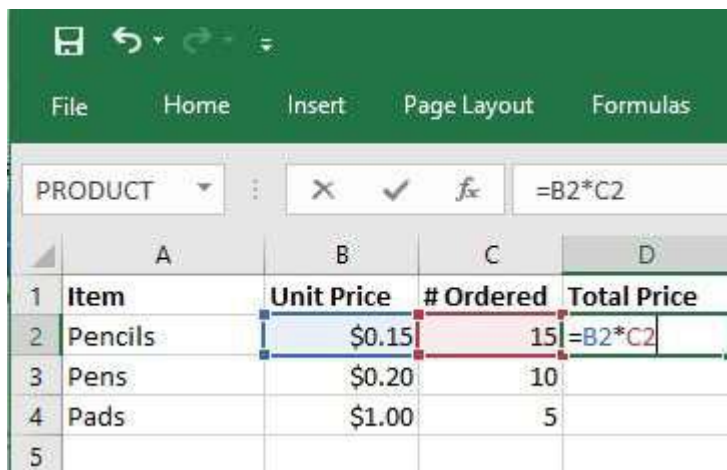
Formulas in Excel are basically mathematical expressions that use cell references (e.g., "A5", "D17") as arguments. For example, a formula that adds the contents of cell E5 and E6 could be written as follows:

$$= E5+E6$$

(Note: all formulas in Excel need to be preceded by an "=" sign.) If the values contained in E5 and E6 are 6 and 11, respectively, the formula will produce 17 as the value it displays. If you change E5 to 7, the result will automatically change to 18.

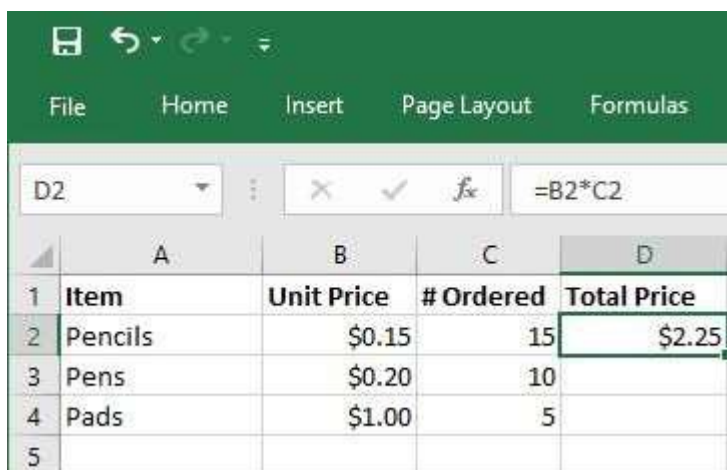
Example

Let's say you were putting together an office supply order, and you wanted to keep track of much you were spending. You could put together a spreadsheet like the one below, with the list of items to be purchased, their unit prices, the number of each item ordered, and the total spent for each. It would make sense to enter the things you know in advance (like the price of individual items and the number ordered), but you could let Excel calculate the totals for you. For the first item listed below (pencils), this could be done by making the value of the total price (cell D2), the value of the unit price (held in cell C2) multiplied by the number of items ordered (held in D2). This formula would be written " $=B2*C2$ ".



	A	B	C	D
1	Item	Unit Price	# Ordered	Total Price
2	Pencils	\$0.15	15	=B2*C2
3	Pens	\$0.20	10	
4	Pads	\$1.00	5	
5				

After hitting "Enter", the cell will display the calculated value, while the formula bar will still display the formula. (Note: Always hit "Enter" when finished entering a formula, manually. If you click off the cell, the cell you click to will be added to your formula.)



	A	B	C	D
1	Item	Unit Price	# Ordered	Total Price
2	Pencils	\$0.15	15	\$2.25
3	Pens	\$0.20	10	
4	Pads	\$1.00	5	
5				

Excel will generally be able to handle any properly-input mathematical formula, if valid operators are used. Commonly used operators include "+" (addition), "-" (subtraction), "*" (multiplication) and "/" (division). (Microsoft has a [complete list of valid operators to be used in Excel formulas](#) on the Office website). Here are some examples of formulas using common operators:

Formula

Description

=C2-B2
C2

Subtracts contents of B2 from contents of

=C2/B2

Divides contents of C2 by contents of B2

=(B2+C2+D2)/3
result by 3

Adds contents of B2, C2, and D2 and divides

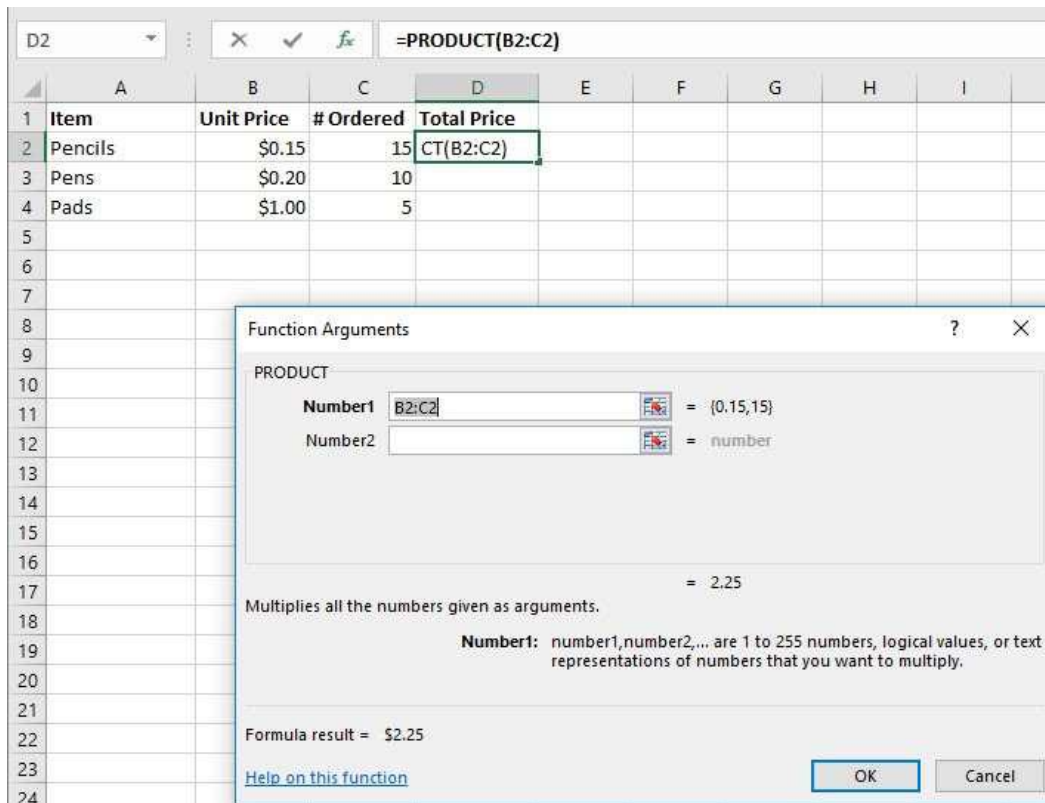
Excel also has built-in functions that can do a lot of useful calculations. These are most easily accessed by hitting the Insert Function button, which is represented by the "fx" symbol next to the formula bar. For example, instead of entering the formula shown above, the same result could have been achieved using the built-in "PRODUCT" function by clicking in cell D2 and hitting the Insert Formula button. This would give a dialog box like the one shown, below.

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H
1	Item	Unit Price	# Ordered	Total Price				
2	Pencils	\$0.15	15	=				
3	Pens	\$0.20	10					
4	Pads	\$1.00	5					
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

The 'Insert Function' dialog box is open, showing the 'PRODUCT' function selected. The description reads: 'PRODUCT(number1,number2,...) Multiplies all the numbers given as arguments.'

After selecting "PRODUCT" and clicking OK, you will get another dialog box, that allows you to select the cells to be multiplied. You can do this for individual cells, by selecting cells separately in the "Number1" and "Number2" boxes shown below, or by selecting an array of cells, by clicking and dragging on the range cells you want to use on the spreadsheet, itself. (Note: if you try to enter a formula in a cell using the Insert Formula button and there are adjacent cells with numbers, Excel will often select those cells automatically, so make sure the cells selected in the dialog box are the correct ones.)



Once you click "OK", your completed formula will be input into the cell.

Copying and pasting formulas

Often, you will need Excel to do a series of similar computations, where the only things that will change are the cells used as arguments. For instance, in the example above, you would probably like Excel to calculate the Total Price for each item in the order. You could re-input the same formula used to get the total price for pencils in each cell in that row, just changing the cells referenced (i.e. "`=PRODUCT(B3:C3)`", "`=PRODUCT(B4:C4)`", etc.), but Excel has simpler method for this. If you have multiple cells in the same row or column that need to do the same computation, you can simply copy the value in the cell you entered a formula, and then paste it into the subsequent cells. Excel will then automatically adjust which cells are included in the formula, based upon which cell the formula was pasted to. So, if the original formula entered in D2 was "`=PRODUCT(B2:C2)`", the formula pasted into D4 would be "`=PRODUCT(B4:C4)`"

More simply, if you have a formula you want repeated in a number of directly adjoining cells, you can just click and drag the bottom right corner of the cell with the original formula (see image below) onto the cells you want the same formula entered, and Excel will automatically copy and paste the formula for you, with appropriate adjustments made to the cell numbers in the formula.

D2		✕ ✓ <i>fx</i>		=PRODUCT(B2:C2)		
	A	B	C	D	E	F
1	Item	Unit Price	# ordered	Total Price		
2	Pencils	\$0.15	15	\$2.25		
3	Pens	\$0.20	10			
4	Pads	\$1.00	5			
5						
6						
7						
8						
9						
10						

- **highest marks in a range of cells (C2:C11)**

Find max value based on multiple criteria

In the first part of this tutorial, we created a MAXIFS formula in its simplest form to get the max value based on one condition. Now, we are going to take that example further and evaluate two different criteria.

Supposing, you want to find the tallest basketball player in junior school. To have it done, define the following arguments:

- *Max_range* - a range of cells containing heights - D2:D11.
- *Criteria_range1* - a range of cells containing sports - B2:B11.
- *Criteria1* - "basketball", which is input in cell G1.
- *Criteria_range2* - a range of cells defining the school type - C2:C11.
- *Criteria2* - "junior", which is input in cell G2.

Putting the arguments together, we get these formulas:

With "hardcoded" criteria:

=MAXIFS(D2:D11, B2:B11, "basketball", C2:C11, "junior")

With criteria in predefined cells:

=MAXIFS (D2:D11, B2:B11, G1, C2:C11, G2)

Please notice that the MAXIFS function in Excel is **case-insensitive**, so you needn't worry about the letter case in your criteria.

	A	B	C	D	E	F	G
1	Name	Sport	School	Height, cm		Sport	Basketball
2	Aiden	Football	Junior	156		School	Junior
3	Caden	Volleyball	Junior	165		Max height, cm	160
4	Ethan	Running	Senior	173			
5	Jackson	Running	Senior	170			
6	Jacob	Basketball	Senior	168			
7	Liam	Basketball	Junior	160			
8	Lucas	Football	Senior	171			
9	Mason	Volleyball	Senior	179			
10	Noah	Running	Senior	169			
11	Oliver	Basketball	Junior	159			

In case you plan to use your formula on multiple cells, be sure to lock all the ranges with [absolute cell references](#), like this:

=MAXIFS(\$D\$2:\$D\$11, \$B\$2:\$B\$11, G1, \$C\$2:\$C\$11, G2)

This will ensure that the formula copies to other cells correctly - the criteria references change based on the relative position of the cell where the formula is copied

while the ranges remain unchanged:

	A	B	C	D	E	F	G	H
1	Name	Sport	School	Height, cm		Sport	Basketball	Basketball
2	Aiden	Football	Junior	156		School	Junior	Senior
3	Caden	Volleyball	Junior	165		Max height	160	168
4	Ethan	Running	Senior	173				
5	Jackson	Running	Senior	170				
6	Jacob	Basketball	Senior	168				
7	Liam	Basketball	Junior	160				
8	Lucas	Football	Senior	171				
9	Mason	Volleyball	Senior	179				
10	Noah	Running	Senior	169				
11	Oliver	Basketball	Junior	159				

As an extra bonus, I will show you a quick way to extract a value from another cell that is associated with the max value. In our case, that will be the name of the tallest person. For this, we will be using the classic [INDEX MATCH formula](#) and nest MAXIFS in the first argument of MATCH as the lookup value:

```
=INDEX($A$2:$A$11, MATCH(MAXIFS($D$2:$D$11, $B$2:$B$11, G1, $C$2:$C$11, G2), $D$2:$D$11, 0))
```

The formula tells us that the name of the tallest basketball player in junior school is Liam:

	A	B	C	D	E	F	G	H	I
1	Name	Sport	School	Height, cm		Sport	Basketball		
2	Aiden	Football	Junior	156		School	Junior		
3	Caden	Volleyball	Junior	165		Max height	160		
4	Ethan	Running	Senior	173		Name	Liam		
5	Jackson	Running	Senior	170					
6	Jacob	Basketball	Senior	168					
7	Liam	Basketball	Junior	160					
8	Lucas	Football	Senior	171					
9	Mason	Volleyball	Senior	179					
10	Noah	Running	Senior	169					
11	Oliver	Basketball	Junior	159					

Excel MAXIFS with logical operators

In situation when you need to evaluate numeric criteria, use logical operators such as:

- greater than ($>$)

- less than (<)
- greater than or equal to (>=)
- less than or equal to (<=)
- not equal to (<>)

The "equal to" operator (=) can be omitted in most cases.

Usually, choosing an operator is not a problem, the trickiest part is to build criteria with the correct syntax. Here's how:

- A logical operator followed by a number or text must be enclosed in double quotes like ">=14" or "<>running".
- In case of a cell reference or another function, use the quotes to begin a string and an ampersand to concatenate the reference and finish the string off, e.g. ">"&B1 or "<"&TODAY().

To see how it works in practice, let's add the Age column (column C) to our sample table and find the maximum height among the boys aged between 13 and 14. This can be done with the following criteria:

Criteria1: ">=13"

Criteria2: "<=14"

Because we compare the numbers in the same column, criteria_range in both cases is the same (C2:C11):

```
=MAXIFS(D2:D11, C2:C11, ">=13", C2:C11, "<=14")
```

If you do not want to hardcode the criteria in the formula, input them in separate cells (e.g. G1 and H1) and use the following syntax:

```
=MAXIFS(D2:D11, C2:C11, ">="&G1, C2:C11, "<="&H1)
```

The screenshot below shows the result:

G2		✕ ✓ fx		=MAXIFS(D2:D11, C2:C11, ">="&G1, C2:C11, "<="&H1)				
	A	B	C	D	E	F	G	H
1	Name	Sport	Age	Height, cm		Age between	13	14
2	Aiden	Football	13	156		Max height	165	
3	Caden	Volleyball	14	165				
4	Ethan	Running	17	173				
5	Jackson	Running	16	170				
6	Jacob	Basketball	15	168				
7	Liam	Basketball	13	160				
8	Lucas	Football	16	171				
9	Mason	Volleyball	16	179				
10	Noah	Running	15	169				
11	Oliver	Basketball	13	159				

Aside from numbers, logical operators can also work with text criteria. In particular, the "not equal to" operator comes in handy when you wish to exclude something from your calculations. For example, to find the tallest student in all sports excluding volleyball, use the following formula:

=MAXIFS(D2:D11, B2:B11, "<>volleyball")

Or this one, where G1 is the excluded sport:

=MAXIFS(D2:D11, B2:B11, "<>"&G1)

G2						=MAXIFS(D2:D11, B2:B11, "<>"&G1)	
	A	B	C	D	E	F	G
1	Name	Sport	Age	Height, cm		Sport excluding	Volleyball
2	Aiden	Football	13	156		Max height	173
3	Caden	Volleyball	14	165			
4	Ethan	Running	17	173			
5	Jackson	Running	16	170			
6	Jacob	Basketball	15	168			
7	Liam	Basketball	13	160			
8	Lucas	Football	16	171			
9	Mason	Volleyball	16	179			
10	Noah	Running	15	169			
11	Oliver	Basketball	13	159			

MAXIFS formulas with wildcard characters (partial match)

To evaluate a condition that contains a specific text or character, include one of the following wildcard character in your criteria:

- Question mark (?) to match any single character.
- Asterisk (*) to match any sequence of characters.

For this example, let's find out the tallest guy in game sports. Because the names of all game sports in our dataset end with the word "ball", we include this word in the criteria and use an asterisk to match any previous characters:

```
=MAXIFS(D2:D11, B2:B11, "*ball")
```

You can also type "ball" in some cell, e.g. G1, and concatenate the wildcard character with the cell reference:

```
=MAXIFS(D2:D11, B2:B11, "*" & G1)
```

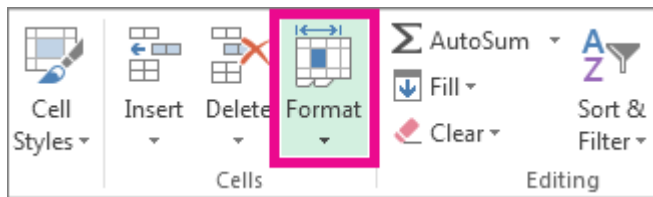
The result will look as follows:

Q13 a) Describe various steps involved in the following

- To modify column width of a worksheet
- To modify the row height of a worksheet
- To delete rows and columns of a worksheet

Ans. Set a column to a specific width

1. Select the column or columns that you want to change.
2. On the **Home** tab, in the **Cells** group, click **Format**.



3. Under **Cell Size**, click **Column Width**.
4. In the **Column width** box, type the value that you want.

Q13 b) Describe following terms in the worksheet

- Absolute reference and relative reference in formula
5. ▪ Cell address.

Ans. There are two types of cell references: **relative** and **absolute**. Relative and absolute references behave differently when copied and filled to other cells. Relative references **change** when a formula is copied to another cell. Absolute references, on the other hand, remain **constant** no matter where they are copied.

Optional: Download our [example file](#) for this lesson.

Watch the video below to learn more about cell references.

Relative references

By default, all cell references are **relative references**. When copied across multiple cells, they change based on the relative

position of rows and columns. For example, if you copy the formula **=A1+B1** from row 1 to row 2, the formula will become **=A2+B2**. Relative references are especially convenient whenever you need to **repeat** the same calculation across multiple rows or columns.

To create and copy a formula using relative references:

In the following example, we want to create a formula that will multiply each item's **price** by the **quantity**. Rather than create a new formula for each row, we can create a single formula in cell **D2** and then copy it to the other rows. We'll use relative references so the formula correctly calculates the total for each item.

1. Select the **cell** that will contain the formula. In our example, we'll select cell **D2**.

D2	:				
	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	\$2.99	15		
3	Empanadas: Chipotle Shrimp	\$3.99	10		
4	Empanadas: Black Bean & Plantain	\$2.49	20		
5	Tamales: Chicken Tinga	\$2.29	20		
6	Tamales: Vegetable	\$2.29	30		
7	Arepas: Carnitas	\$2.89	10		
8	Arepas: Queso Blanco	\$2.49	20		
9	Empanadas: Apple Cinnamon	\$3.19	40		
10	Beverages: Horchata	\$1.89	25		
11	Beverages: Lemonade	\$1.89	35		
12	Beverages: Tamarindo	\$1.89	10		
13	Total				
14					

2. Enter the **formula** to calculate the desired value. In our example, we'll type **=B2*C2**.

C2	:	X	✓	<i>fx</i>	=B2*C2
	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	\$2.99	15	=B2*C2	
3	Empanadas: Chipotle Shrimp	\$3.99	10		
4	Empanadas: Black Bean & Plantain	\$2.49	20		
5	Tamales: Chicken Tinga	\$2.29	20		
6	Tamales: Vegetable	\$2.29	30		
7	Arepas: Carnitas	\$2.89	10		
8	Arepas: Queso Blanco	\$2.49	20		
9	Empanadas: Apple Cinnamon	\$3.19	40		
10	Beverages: Horchata	\$1.89	25		
11	Beverages: Lemonade	\$1.89	35		
12	Beverages: Tamarindo	\$1.89	10		
13	Total				
14					

3. Press **Enter** on your keyboard. The formula will be **calculated**, and the result will be displayed in the cell.
4. Locate the **fill handle** in the lower-right corner of the desired cell. In our example, we'll locate the fill handle for cell **D2**.

D2 : =B2*C2

	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	\$2.99	15	\$44.85	
3	Empanadas: Chipotle Shrimp	\$3.99	10		
4	Empanadas: Black Bean & Plantain	\$2.49	20		
5	Tamales: Chicken Tinga	\$2.29	20		
6	Tamales: Vegetable	\$2.29	30		
7	Arepas: Carnitas	\$2.89	10		
8	Arepas: Queso Blanco	\$2.49	20		
9	Empanadas: Apple Cinnamon	\$3.19	40		
10	Beverages: Horchata	\$1.89	25		
11	Beverages: Lemonade	\$1.89	35		
12	Beverages: Tamarindo	\$1.89	10		
13	Total				
14					

The fill handle

5. Click, hold, and drag the **fill handle** over the cells you wish to fill. In our example, we'll select cells **D3:D12**.

D2 : =B2*C2

	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	\$2.99	15	\$44.85	
3	Empanadas: Chipotle Shrimp	\$3.99	10		
4	Empanadas: Black Bean & Plantain	\$2.49	20		
5	Tamales: Chicken Tinga	\$2.29	20		
6	Tamales: Vegetable	\$2.29	30		
7	Arepas: Carnitas	\$2.89	10		
8	Arepas: Queso Blanco	\$2.49	20		
9	Empanadas: Apple Cinnamon	\$3.19	40		
10	Beverages: Horchata	\$1.89	25		
11	Beverages: Lemonade	\$1.89	35		
12	Beverages: Tamarindo	\$1.89	10		
13	Total				
14					

Click, hold and drag the fill handle to copy the formula to adjacent cells

6. Release the mouse. The formula will be **copied** to the selected cells with **relative references** and the values will be calculated in each cell.

D2

:

X

✓

fx

=B2*C2

	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	\$2.99	15	\$44.85	
3	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90	
4	Empanadas: Black Bean & Plantain	\$2.49	20	\$49.80	
5	Tamales: Chicken Tinga	\$2.29	20	\$45.80	
6	Tamales: Vegetable	\$2.29	30	\$68.70	
7	Arepas: Carnitas	\$2.89	10	\$28.90	
8	Arepas: Queso Blanco	\$2.49	20	\$49.80	
9	Empanadas: Apple Cinnamon	\$3.19	40	\$127.60	
10	Beverages: Horchata	\$1.89	25	\$47.25	
11	Beverages: Lemonade	\$1.89	35	\$66.15	
12	Beverages: Tamarindo	\$1.89	10	\$18.90	
13	Total				
14					

You can double-click the **filled cells** to check their formulas for accuracy. The relative cell references should be different for each cell, depending on its row.

SUM		✕ ✓ f _x		=B8*C8	
	A	B	C	D	E
1	Menu Item	Price	Quantity	Total	
2	Empanadas: Beef Picadillo	\$2.99	15	\$44.85	
3	Empanadas: Chipotle Shrimp	\$3.99	10	\$39.90	
4	Empanadas: Black Bean & Plantain	\$2.49	10	\$24.90	
5	Tamales: Chicken Tinga	\$2.29	10	\$22.90	
6	Tamales: Vegetable	\$2.29	10	\$22.90	
7	Arepas: Carnitas	\$2.89	10	\$28.90	
8	Arepas: Queso Blanco	\$2.49	20	=B8*C8	
9	Empanadas: Apple Cinnamon	\$3.19	40	\$127.60	
10	Beverages: Horchata	\$1.89	25	\$47.25	
11	Beverages: Lemonade	\$1.89	35	\$66.15	
12	Beverages: Tamarindo	\$1.89	10	\$18.90	
13	Total				
14					

Cell references in row 8 are relative to row 8

Let's practice!

Question 1 of 1

Which of the following is a relative cell reference?

C2

\$C2

\$C\$2

!C2

Submit

Absolute references

There may be times when you do not want a cell reference to change when filling cells. Unlike relative references, **absolute**

references do not change when copied or filled. You can use an absolute reference to keep a row and/or column **constant**.

An absolute reference is designated in a formula by the addition of a **dollar sign (\$)** before the column and row. If it precedes the column or row (but not both), it's known as a **mixed reference**.

\$A\$2	The column and the row do not change when copied
A\$2	The row does not change when copied
\$A2	The column does not change when copied

You will use the relative (**A2**) and absolute (**\$A\$2**) formats in most formulas. Mixed references are used less frequently.

When writing a formula in Microsoft Excel, you can press the **F4** key on your keyboard to switch between relative, absolute, and mixed cell references, as shown in the video below. This is an easy way to quickly insert an absolute reference.

To create and copy a formula using absolute references:

In our example, we'll use the 7.5% sales tax rate in cell **E1** to calculate the sales tax for all items in **column D**. We'll need to use the absolute cell reference **\$E\$1** in our formula. Because each formula is using the same tax rate, we want that reference

to remain constant when the formula is copied and filled to other cells in column D.

1. Select the **cell** that will contain the formula. In our example, we'll select cell **D3**.

D3	:				
	A	B	C	D	E
1	Sales Tax				7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	\$2.99	15		
4	Empanadas: Chipotle Shrimp	\$3.99	10		
5	Empanadas: Black Bean & Plantain	\$2.49	20		
6	Tamales: Chicken Tinga	\$2.29	20		
7	Tamales: Vegetable	\$2.29	30		
8	Arepas: Carnitas	\$2.89	10		
9	Arepas: Queso Blanco	\$2.49	20		
10	Empanadas: Apple Cinnamon	\$3.19	40		
11	Beverages: Horchata	\$1.89	25		
12	Beverages: Lemonade	\$1.89	35		
13	Beverages: Tamarindo	\$1.89	10		
14	Total				
15					

2. Enter the **formula** to calculate the desired value. In our example, we'll type **= $(B3 * C3) * \$E\1** .

SUM	:				= $(B3 * C3) * \$E\1
	A	B	C	D	E
1	Sales Tax				7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	\$2.99	15	= $(B3 * C3) * \$E\1	
4	Empanadas: Chipotle Shrimp	\$3.99	10		
5	Empanadas: Black Bean & Plantain	\$2.49	20		
6	Tamales: Chicken Tinga	\$2.29	20		
7	Tamales: Vegetable	\$2.29	30		
8	Arepas: Carnitas	\$2.89	10		
9	Arepas: Queso Blanco	\$2.49	20		
10	Empanadas: Apple Cinnamon	\$3.19	40		
11	Beverages: Horchata	\$1.89	25		
12	Beverages: Lemonade	\$1.89	35		
13	Beverages: Tamarindo	\$1.89	10		
14	Total				
15					

3. Press **Enter** on your keyboard. The formula will calculate, and the result will display in the cell.
4. Locate the **fill handle** in the lower-right corner of the desired cell. In our example, we'll locate the fill handle for cell **D3**.

D3					
	A	B	C	D	E
1	Sales Tax				7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	\$2.99	15	\$3.36	
4	Empanadas: Chipotle Shrimp	\$3.99	10	\$2.99	
5	Empanadas: Black Bean & Plantain	\$2.49	20	\$3.74	
6	Tamales: Chicken Tinga	\$2.29	20	\$3.44	
7	Tamales: Vegetable	\$2.29	30	\$5.15	
8	Arepas: Carnitas	\$2.89	10	\$2.17	
9	Arepas: Queso Blanco	\$2.49	20	\$3.74	
10	Empanadas: Apple Cinnamon	\$3.19	40	\$9.57	
11	Beverages: Horchata	\$1.89	25	\$3.54	
12	Beverages: Lemonade	\$1.89	35	\$4.96	
13	Beverages: Tamarindo	\$1.89	10	\$1.42	
14	Total				
15					

You can double-click the **filled cells** to check their formulas for accuracy. The absolute reference should be the same for each cell, while the other references are relative to the cell's row.

SUM					
	A	B	C	D	E
1	Sales Tax				7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo				
4	Empanadas: Chipotle Shrimp				
5	Empanadas: Black Bean & P				
6	Tamales: Chicken Tinga	\$2.29	20	\$3.44	
7	Tamales: Vegetable	\$2.29	30	\$5.15	
8	Arepas: Carnitas	\$2.89	10	\$2.17	
9	Arepas: Queso Blanco	\$2.49	20	\$3.74	
10	Empanadas: Apple Cinnamon	\$3.19	40	\$0.00	
11	Beverages: Horchata	\$1.89	25	\$3.54	
12	Beverages: Lemonade	\$1.89	35	\$4.96	
13	Beverages: Tamarindo	\$1.89	10	\$1.42	
14	Total				
15					

Relative cell references in row 9 are relative to row 9 while the absolute cell reference remains constant

Be sure to include the **dollar sign (\$)** whenever you're making an absolute reference across multiple cells. The dollar signs were omitted in the example below. This caused the

spreadsheet to interpret it as a relative reference, producing an incorrect result when copied to other cells.

SUM		✕ ✓ <i>fx</i>		=(B10*C10)*E8	
	A	B	C	D	E
1	Sales Tax				7.5%
2	Menu Item	Price	Quantity	Sales Tax	Total
3	Empanadas: Beef Picadillo	\$2.99	15	\$3.36	\$48.21
4	Empanadas: Chipotle Shrimp	\$3.99	10	#VALUE!	\$42.89
5	Empanada			\$2,401.04	\$53.54
6	Tamales: C			#VALUE!	\$49.24
7	Tamales: V			\$168,373.03	\$73.85
8	Arepas: Ca			#VALUE!	\$31.07
9	Arepas: Qu			\$8,388,398.37	\$53.54
10	Empanadas: Apple Cinnamon	\$3.19	40	= (B10*C10)*E10	\$127.60
11	Beverages: Horchata	\$1.89	25	\$396,354,176.00	\$50.79
12	Beverages: Lemonade	\$1.89	35	#VALUE!	\$71.11
13	Beverages: Tamarindo	\$1.89	10	\$7,491,094,819.49	\$20.32
14	Total				

Without the dollar sign (\$), the reference to cell E1 was interpreted as a relative reference, leading to incorrect results

Question 1 of 1

If you wanted to make an absolute reference to cell E2, what would it look like?

@E2

[E2]

\$E\$2

E2

Submit

Using cell references with multiple worksheets

Most spreadsheet programs allow you to refer to any cell on any **worksheet**, which can be especially helpful if you want to reference a specific value from one worksheet to another. To do this, you'll simply need to begin the cell reference with the **worksheet name** followed by an **exclamation point (!)**. For example, if you wanted to reference cell **A1** on **Sheet1**, its cell reference would be **Sheet1!A1**.

Note that if a worksheet name contains a **space**, you will need to include **single quotation marks (' ')** around the name. For example, if you wanted to reference cell **A1** on a worksheet named **July Budget**, its cell reference would be **'July Budget'!A1**.

To reference cells across worksheets:

In our example below, we'll refer to a cell with a calculated value between two worksheets. This will allow us to use the **exact same value** on two different worksheets without rewriting the formula or copying data between worksheets.

1. Locate the cell you wish to reference, and note its worksheet. In our example, we want to reference cell **E14** on the **Menu Order worksheet**.

	A	B	C	D	E
5	Empanadas: Black Bean & Plantain	\$2.49	20	\$3.74	\$53.54
6	Tamales: Chicken Tinga	\$2.29	20	\$3.44	\$49.24
7	Tamales: Vegetable	\$2.29	30	\$5.15	\$73.85
8	Arepas: Carnitas	\$2.89	10	\$2.17	\$31.07
9	Arepas: Queso Blanco	\$2.49	20	\$3.74	\$53.54
10	Empanadas: Apple Cinnamon	\$3.19	40	\$9.57	\$137.17
11	Beverages: Horchata	\$1.89	25	\$3.54	\$50.79
12	Beverages: Lemonade	\$1.89	35	\$4.96	\$71.11
13	Beverages: Tamarindo	\$1.89	10	\$1.42	\$20.32
14	Total				\$587.65
15					
16					

Menu Order
Catering Invoice
+

2. Navigate to the desired **worksheet**. In our example, we'll select the **Catering Invoice** worksheet.

12	Beverages: Lemonade	\$1.89	35	\$4.96	\$71.11
13	Beverages: Tamarindo	\$1.89	10	\$1.42	\$20.32
14	Total				\$587.65
15					
16					

Menu Order
Catering Invoice
+

3. The **selected worksheet** will appear.
4. Locate and select the **cell** where you want the value to appear. In our example, we'll select cell **B2**.

B2			
	A	B	C
1	Total Cost for Requested Services		
2	Menu Items		
3	Paper Items (Plates, silverware, cups)	\$110.87	
4	Rental Equipment (Tables, Chairs, Linens)	\$249.95	
5	Service Fee (18% of menu items ordered)	\$0.00	
6	Total Cost	\$360.82	
7			
	Menu Order	Catering Invoice	

5. Type the **equals sign (=)**, the **sheet name** followed by an **exclamation point (!)**, and the **cell address**. In our example, we'll type **=Menu Order!E14**.

SUM			=Menu Order!E14
	A	B	C
1	Total Cost for Requested Services		
2	Menu Items	=Menu Order!E14	
3	Paper Items (Plates, silverware, cups)	\$110.87	
4	Rental Equipment (Tables, Chairs, Linens)	\$249.95	
5	Service Fee (18% of menu items ordered)	\$113.63	
6	Total Cost	\$1,105.72	
7			
	Menu Order	Catering Invoice	

6. Press **Enter** on your keyboard. The **value** of the referenced cell will appear. If the **value** of cell E14 changes on the Menu Order worksheet, it will be **updated** automatically on the Catering Invoice worksheet.

B2	:	X	✓	<i>fx</i>	=Menu Order!E14
	A	B	C		
1	Total Cost for Requested Services				
2	Menu Items	\$587.65			
3	Paper Items (Plates, silverware, cups)	\$110.87			
4	Rental Equipment (Tables, Chairs, Linens)	\$249.95			
5	Service Fee (18% of menu items ordered)	\$113.63			
6	Total Cost	\$1,105.72			
7					
	Menu Order	Catering Invoice			

If you **rename** your worksheet at a later point, the cell reference will be updated automatically to reflect the new worksheet name.

Challenge!

1. Open an existing Excel workbook. If you want, you can use the [example file](#) for this lesson.
2. Create a formula that uses a **relative reference**. If you are using the example, use the **fill handle** to fill in the formula in cells **E4** through **E14**. Double-click a cell to see the copied formula and the relative cell references.
3. Create a formula that uses an **absolute reference**. If you are using the example, correct the formula in cell **D4** to refer only to the tax rate in cell **E2** as an **absolute reference**, then use the fill handle to fill the formula from cells **D4** to **D14**.
4. Try referencing a cell across **worksheets**. If you are using the example, create a cell reference in cell **B3** on the **Catering Invoice** worksheet for cell **E15** on the **Menu Order** worksheet

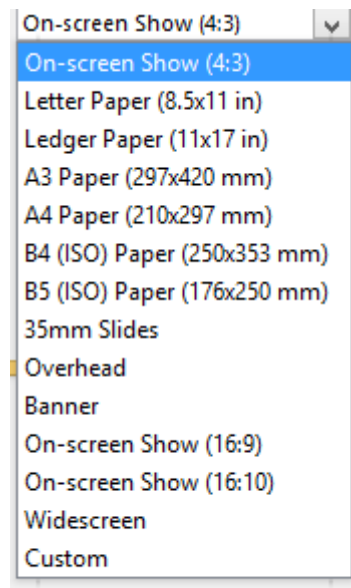
Q14. a) What tools are available to customize our PowerPoint presentation?

Ans. Customize presentation options and views

Changing page setup options

Presentations are created mainly to project either on a projector or more and more frequently to a plasma or TV screen. There are times when a presentation can be created for delivery in different formats.

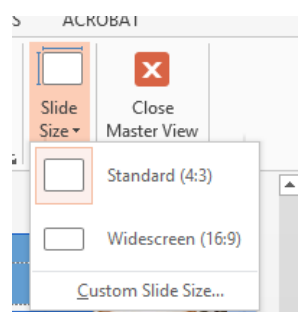
- On-screen show (4:3)
- Letter Paper (8.5 x 11 in)
- Ledger Paper (11 x 17 in)
- A3 Paper (297 x 420 mm)
- A4 Paper (210 x 297 mm)
- B4 (ISO) Paper (250 x 353 mm)
- B5 (ISO) Paper (176 x 250 mm)
- 35mm Slides
- Overhead
- Banner
- On-screen Show (16:9)
- On-screen Show (16:10)
- Widescreen
- Custom



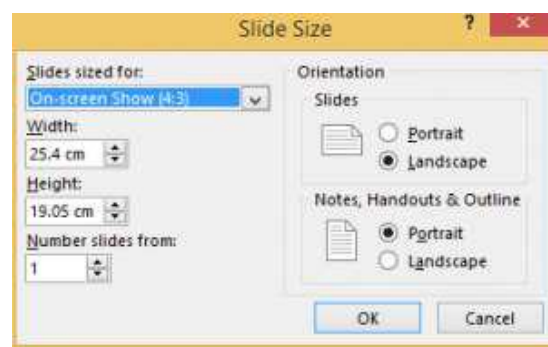
Slide Sizes

To select a slide size other than the standard one:

1. In Slide Master View
2. Click on Slide Size
3. Select from one of the two options
4. For more choices, click Custom
5. Select one of the options



Slide Size



Slide Size box

Figure 89- standard or widescreen

Figure 90 – other options

If you change the orientation to Portrait for the presentation it will apply to all the slides.

Changing to view in color/grayscale

Why change to view the presentation in grayscale? You might want to print the presentation and to print in colour is more expensive than printing to greyscale, so you need to see what the presentation looks like in grayscale before you print.

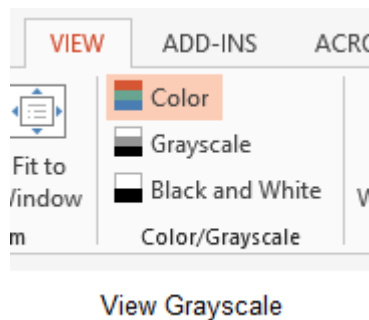


Figure 91- colour/grayscale options

On the View Ribbon, click on the option you want, Colour, Grayscale or Black and White.

Then from the Grayscale Ribbon select the option you want to see:

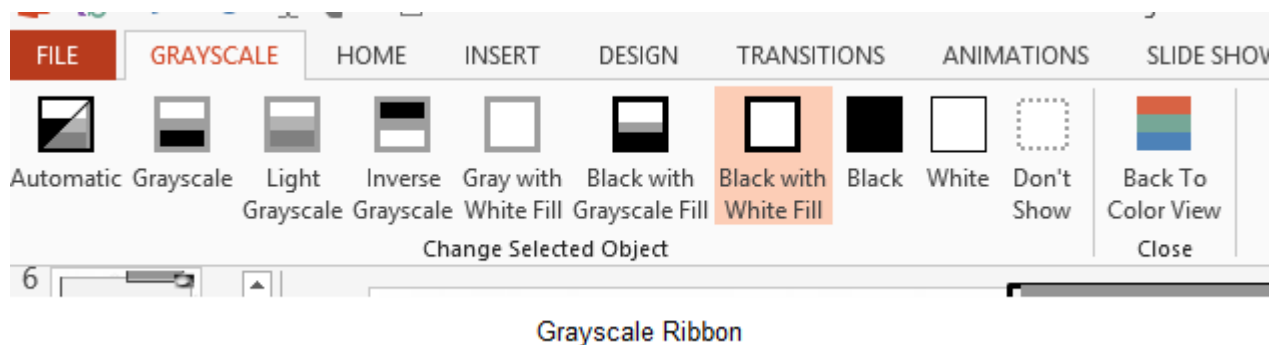


Figure 92- grayscale options

To get back to the colour view, click Back to Colour View.

Navigating using presentation views

There are several different views in PowerPoint as we saw earlier and you can navigate through the presentation in each in different ways.

In Normal View

- Click on the thumbnail of the slide you want to see
- Use the Vertical Scrollbar to move between slides
- Use the up and down arrow keys on the keyboard to move one slide backwards or forwards

In Slide Sorter View

- Click on the slide you want to select
- Use the arrow keys to move up, down, left and right

In Reading View

Use the next and back icons in the status bar to move back or forwards or use the menu which is accessed from the icon in the middle

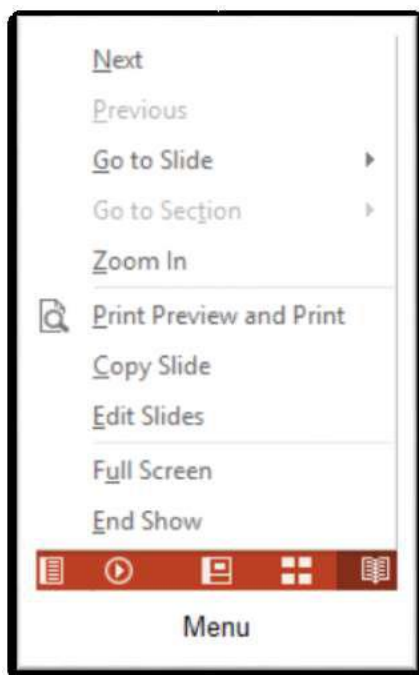


Figure 93- reading view

Pick from the menu – you can use Go to Slide to pick the slide number

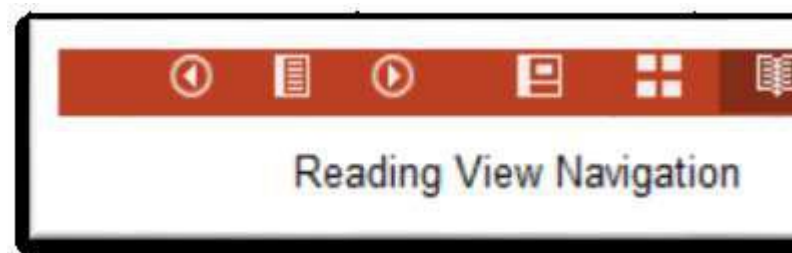


Figure 94 – icons

Back and Next icons move between slides.

In Slide Show view

When presenting you can use the mouse or the arrows on the keyboard to move through the presentation one slide at a time.

You can also type the number of the slide you want to see and press Enter.

When you hover the mouse over the bottom left corner of the slide on display you will notice some faint icons, there is a back arrow and forward arrow which move you through one slide at a time.

Figure 95- slide show icons

Use the fourth icon along to show the slides in a presentation view of Slide Sorter View. This lays the slides on the screen and you can click on the one you want to see

Figure 96- Slide Sorter in presentation view

Use the back arrow at the top left to get back to the slide you started from.

To end the slide show, press the Escape Key on the keyboard – this takes you back to PowerPoint in the edit mode which means that your audience will see the back end of your presentation.

You can also use the End Presentation option which is on the small ellipse icon on the bottom left of the slide when you hover the mouse.

Figure 97- end show and stay in presentation mode

We hope you enjoyed this article!

PowerPoint 2013 has a lot more exciting features. All you have to do is to explore it. Aren't you excited to discover and use these features such as how to [track changes in PowerPoint 2013?](#)

Good luck with your next presentation and don't forget to have a look at the other blog articles for more tips:

- [PowerPoint Presentations: 2 Ways to Make Them More Appealing](#)
- [3 Simple Ways to Make a Creative Design in PowerPoint](#)
- [How to use SmartArt graphics in PowerPoint 2013](#)
- [How to use PowerPoint AND engage your audience](#)
- [How to present a PowerPoint presentation online](#)
- [How to use masters in Power Point 2013](#)
- [How to format text in PowerPoint](#)
- [How to use PowerPoint AND engage your audience](#)

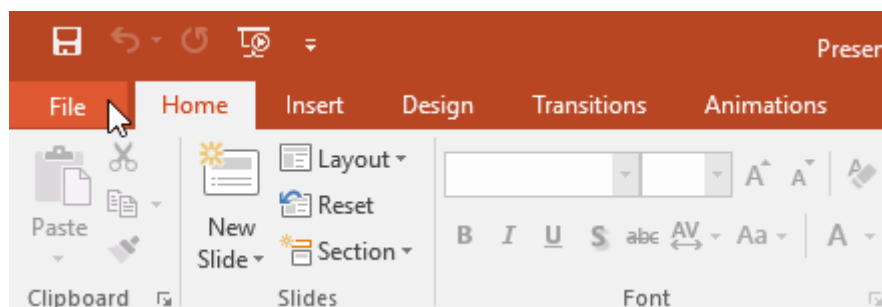
Q14 b) Write the steps for the following action for creation of power point presentation

- **Open a Blank presentation**
- **Save the presentation as Lab1.pptx**

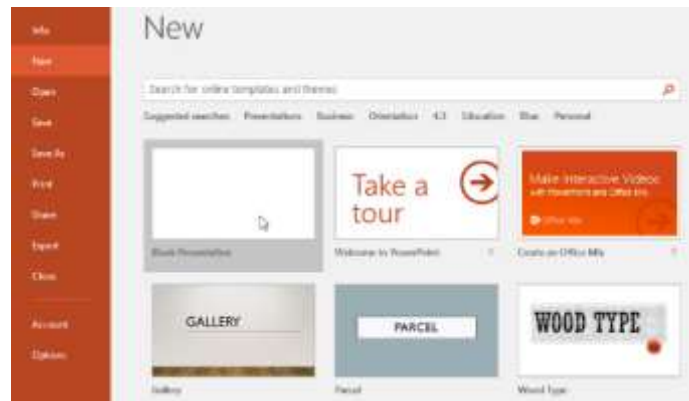
Ans. To create a new presentation:

When beginning a new project in PowerPoint, you'll often want to start with a new blank presentation.

1. Select the **File** tab to go to **Backstage view**.



2. Select **New** on the left side of the window, then click **Blank Presentation**.

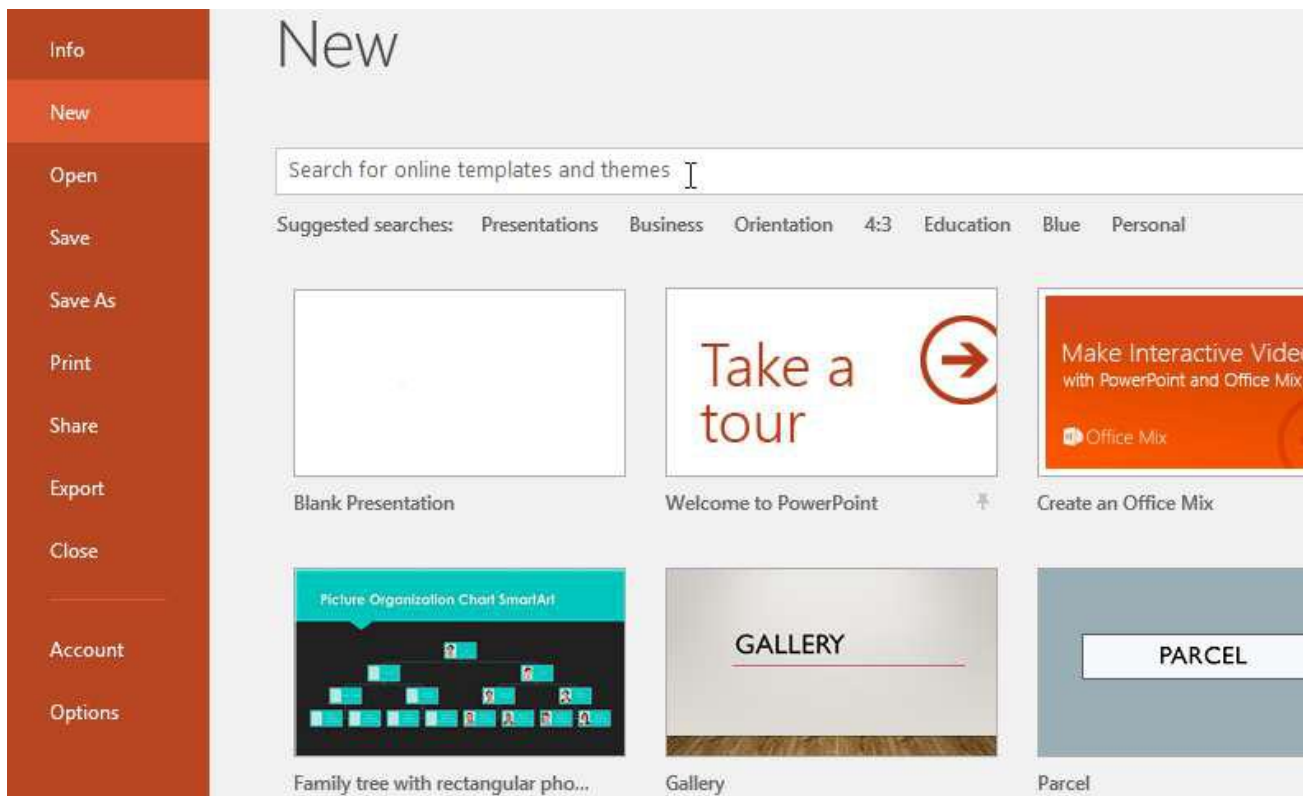


3. A new presentation will appear.

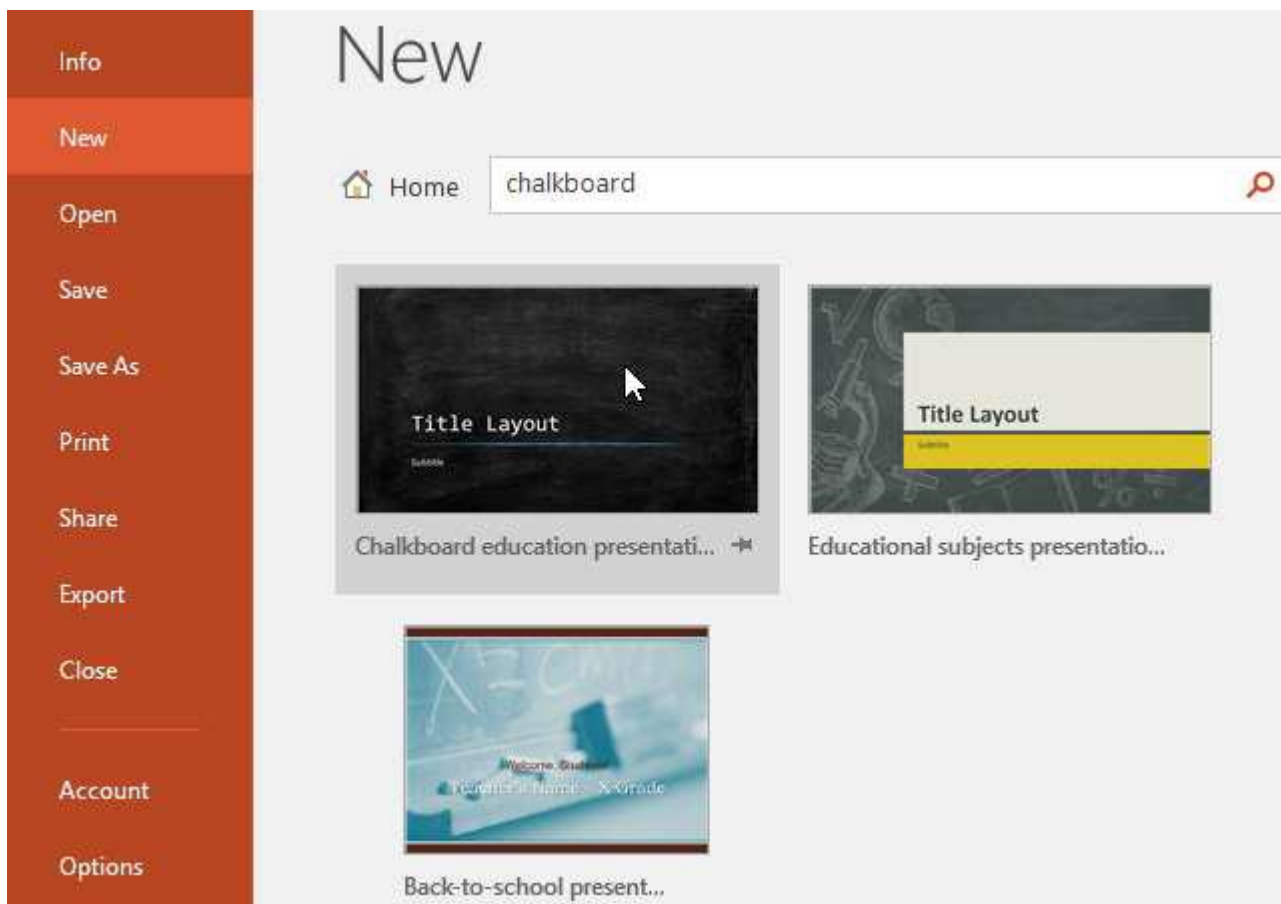
To create a new presentation from a template:

A **template** is a **predesigned presentation** you can use to create a new slide show quickly. Templates often include **custom formatting** and **designs**, so they can save you a lot of time and effort when starting a new project.

1. Click the **File** tab to access **Backstage view**, then select **New**.
2. You can click a suggested search to find templates or use the **search bar** to find something more specific. In our example, we'll search for the keyword **chalkboard**.



3. Select a **template** to review it.



4. A **preview** of the template will appear, along with **additional information** on how the template can be used.
5. Click **Create** to use the selected template.



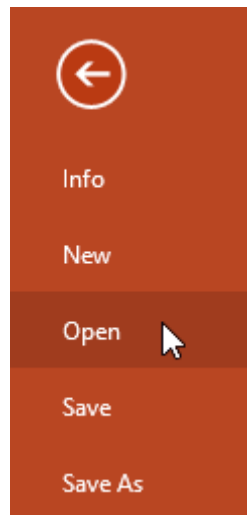
6. A new presentation will appear with the **selected template**.

It's important to note that not all templates are created by Microsoft. Many are created by third-party providers and even individual users, so some templates may work better than others.

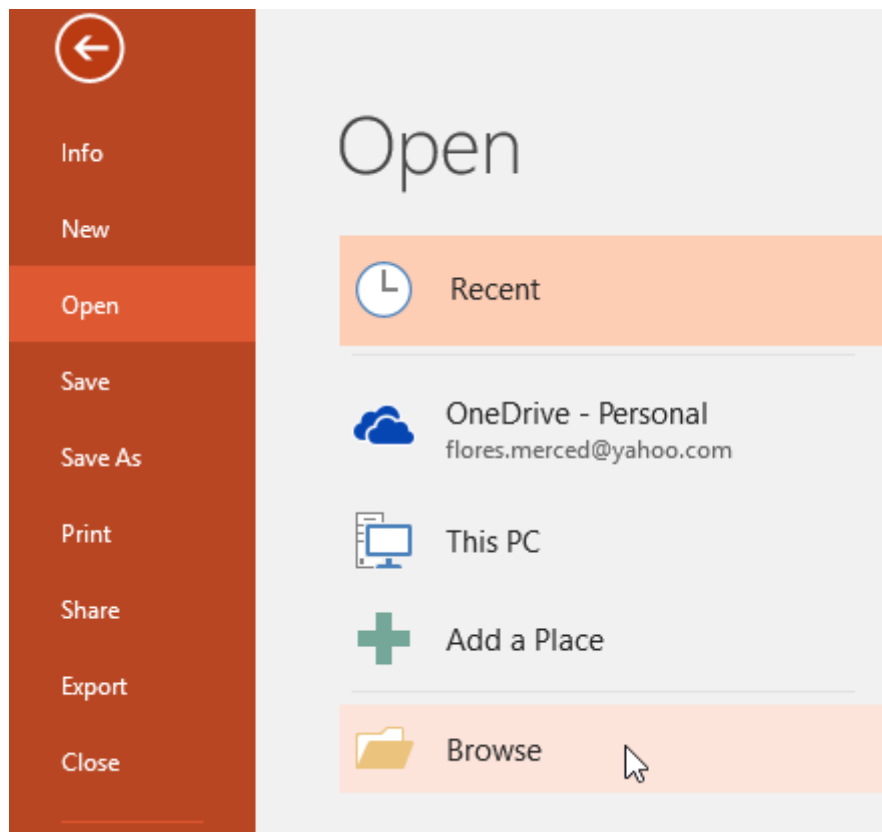
To open an existing presentation:

In addition to creating new presentations, you'll often need to open a presentation that was previously saved. To learn more about saving presentations, visit our lesson on [Saving Presentations](#).

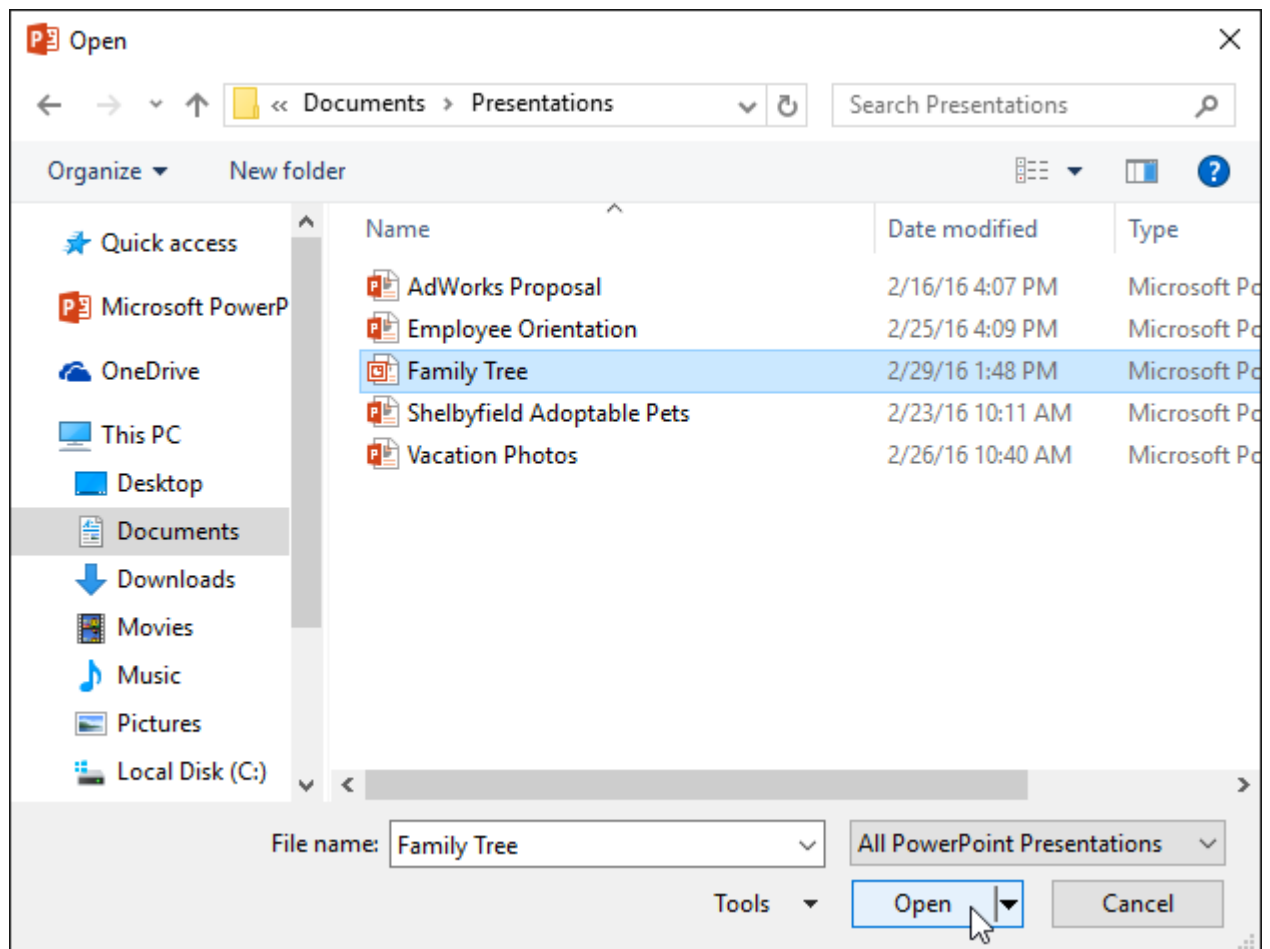
1. Select the **File** tab to go to **Backstage view**, then click **Open**.



2. Click **Browse**. Alternatively, you can choose **OneDrive** to open files stored on your OneDrive.



3. The **Open** dialog box will appear. Locate and select your **presentation**, then click **Open**.



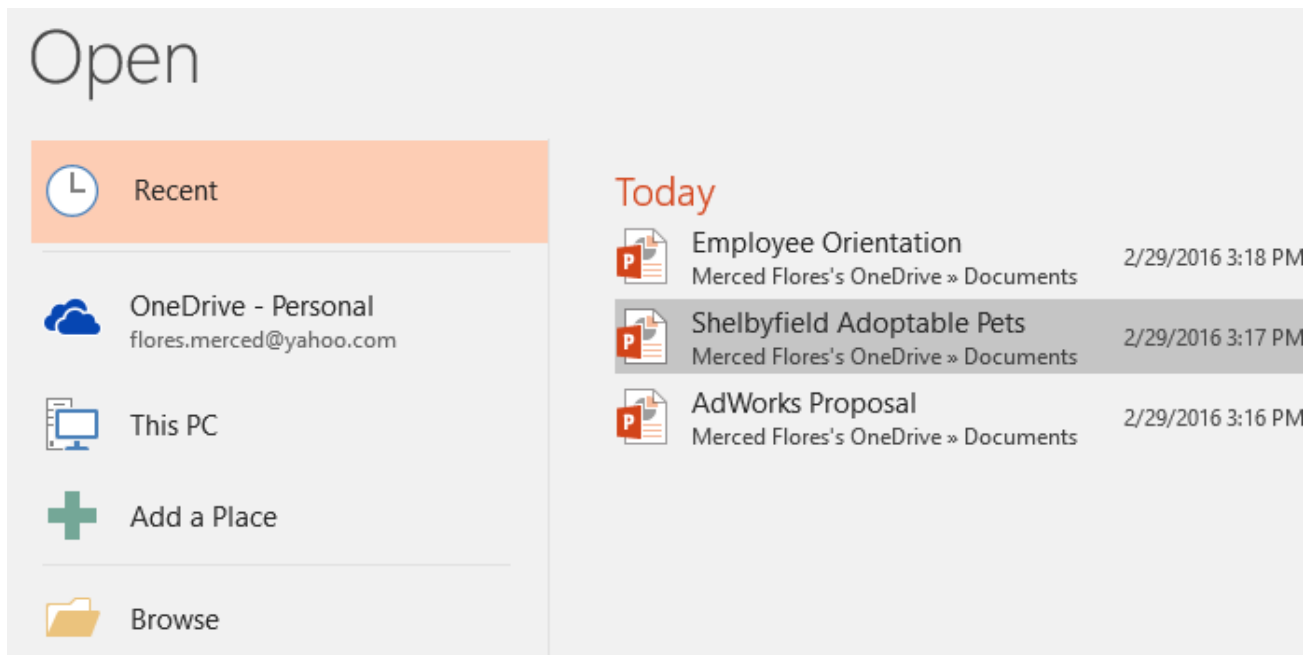
Most features in Microsoft Office, including PowerPoint, are geared toward saving and sharing documents **online**. This is done with **OneDrive**, which is an online storage space for your documents and files. If you want to use OneDrive, make sure you're signed in to PowerPoint with your Microsoft account. Review our lesson on [Understanding OneDrive](#) to learn more.

To pin a presentation:

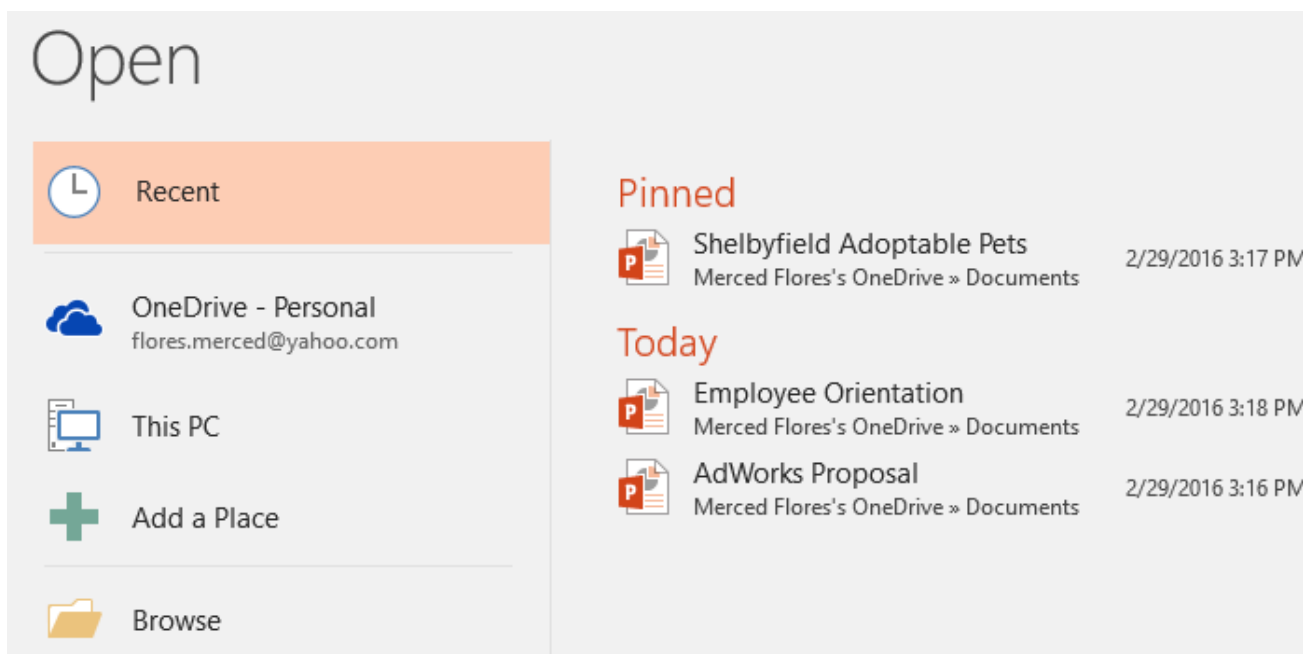
If you frequently work with the **same presentation**, you can **pin** it to Backstage view for easy access.

1. Select the **File** tab to go to **Backstage view**, then click **Open**. Your **Recent Presentations** will appear.

2. Hover the mouse over the **presentation** you want to pin, then click the **pushpin icon**.



3. The presentation will stay in the **Recent presentations** list until it is unpinned. To **unpin** a presentation, click the pushpin icon again.

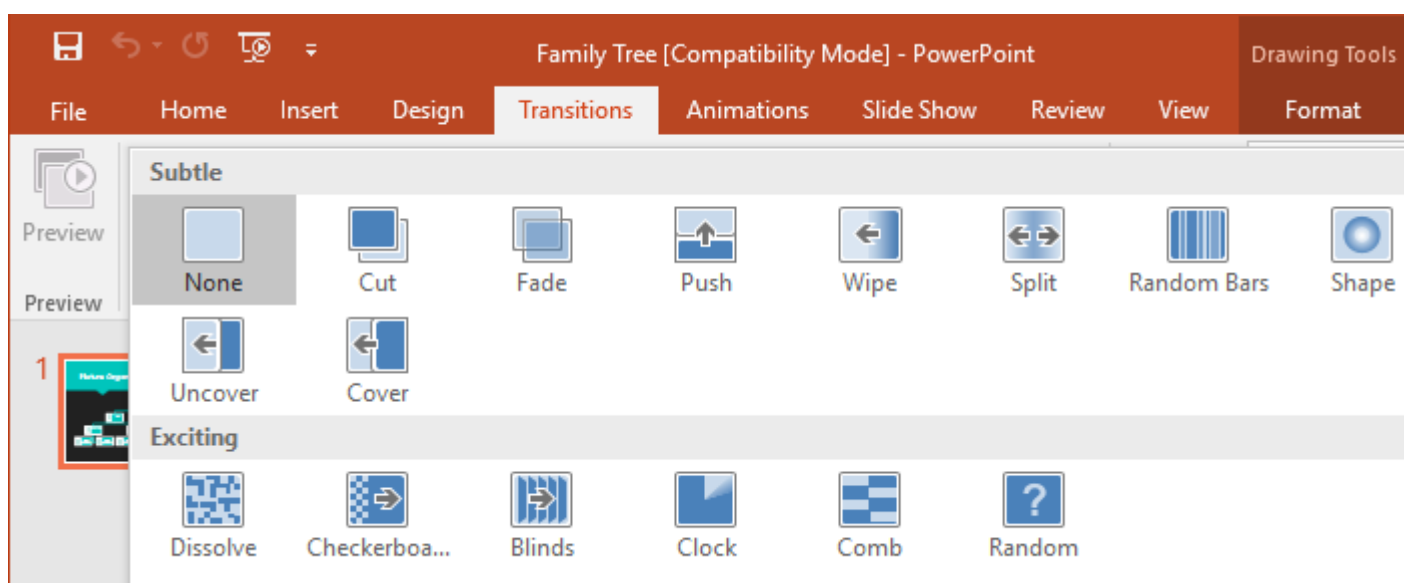


Compatibility Mode

Sometimes you may need to work with presentations that were created in earlier versions of PowerPoint, like PowerPoint 2003 or PowerPoint 2000. When you open these types of presentations, they will appear in **Compatibility Mode**.

Compatibility Mode **disables** certain features, so you'll only be able to access commands found in the program that was used to create the presentation. For example, if you open a presentation created in PowerPoint 2003, you can only use tabs and commands found in PowerPoint 2003.

In the image below, you can see at the top of the window that the presentation is in Compatibility Mode. This will disable some PowerPoint 2016 features, including newer types of slide transitions.



To exit Compatibility Mode, you'll need to **convert** the presentation to the current version type. However, if you're collaborating with others who only have access to an earlier version of PowerPoint, it's best to leave the presentation in Compatibility Mode so the format will not change.

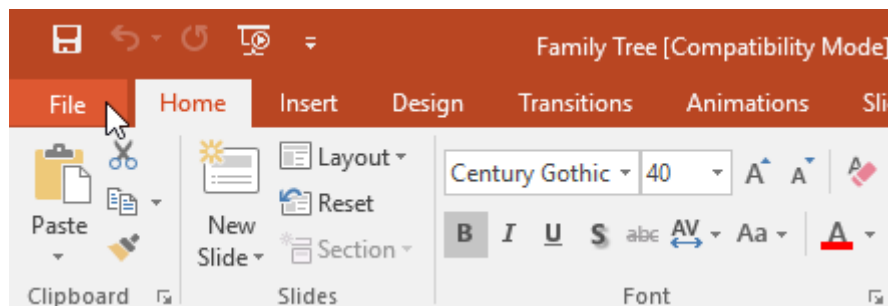
You can review this [support page](#) from Microsoft to learn more about which features are disabled in Compatibility Mode.

To convert a presentation:

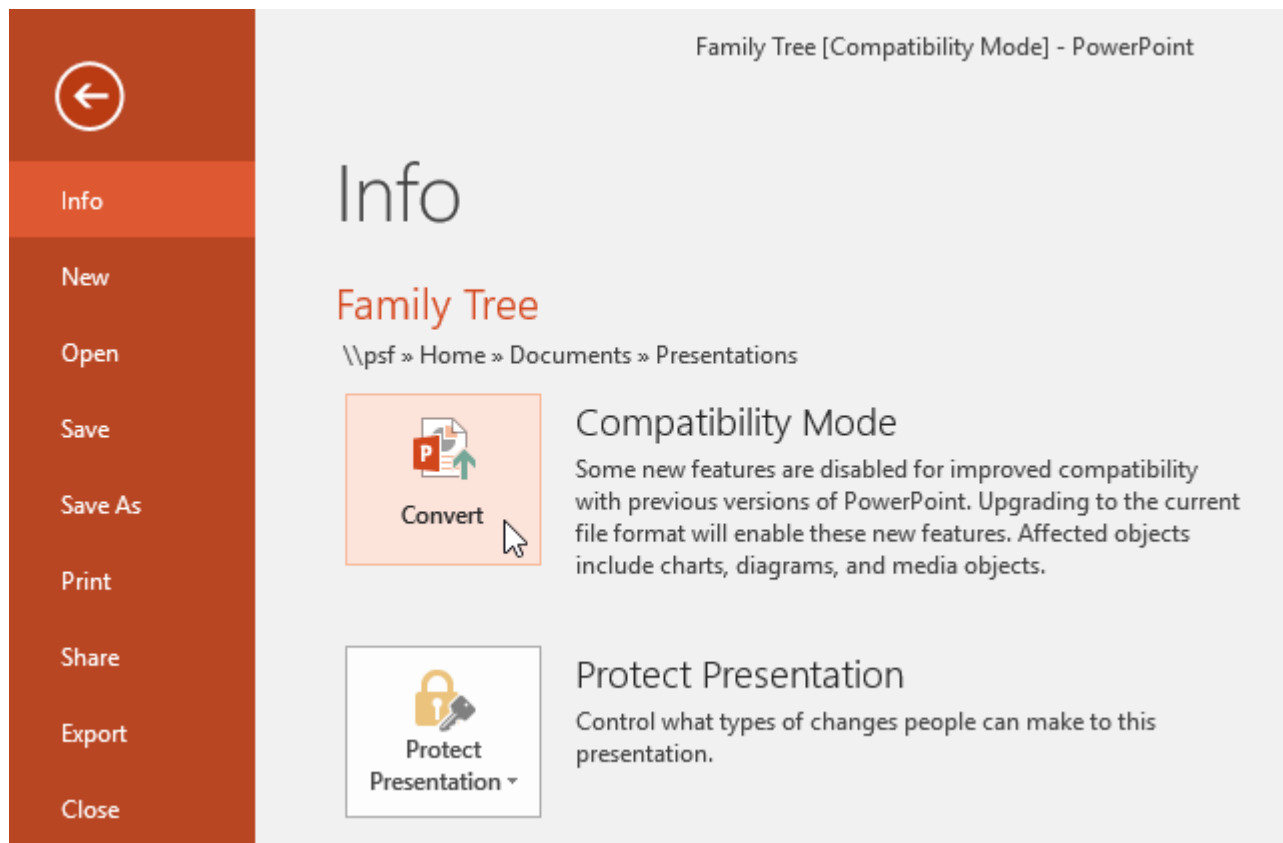
If you want access to all PowerPoint 2016 features, you can **convert** the presentation to the 2016 file format.

Note that converting a file may cause some changes to the **original layout** of the presentation.

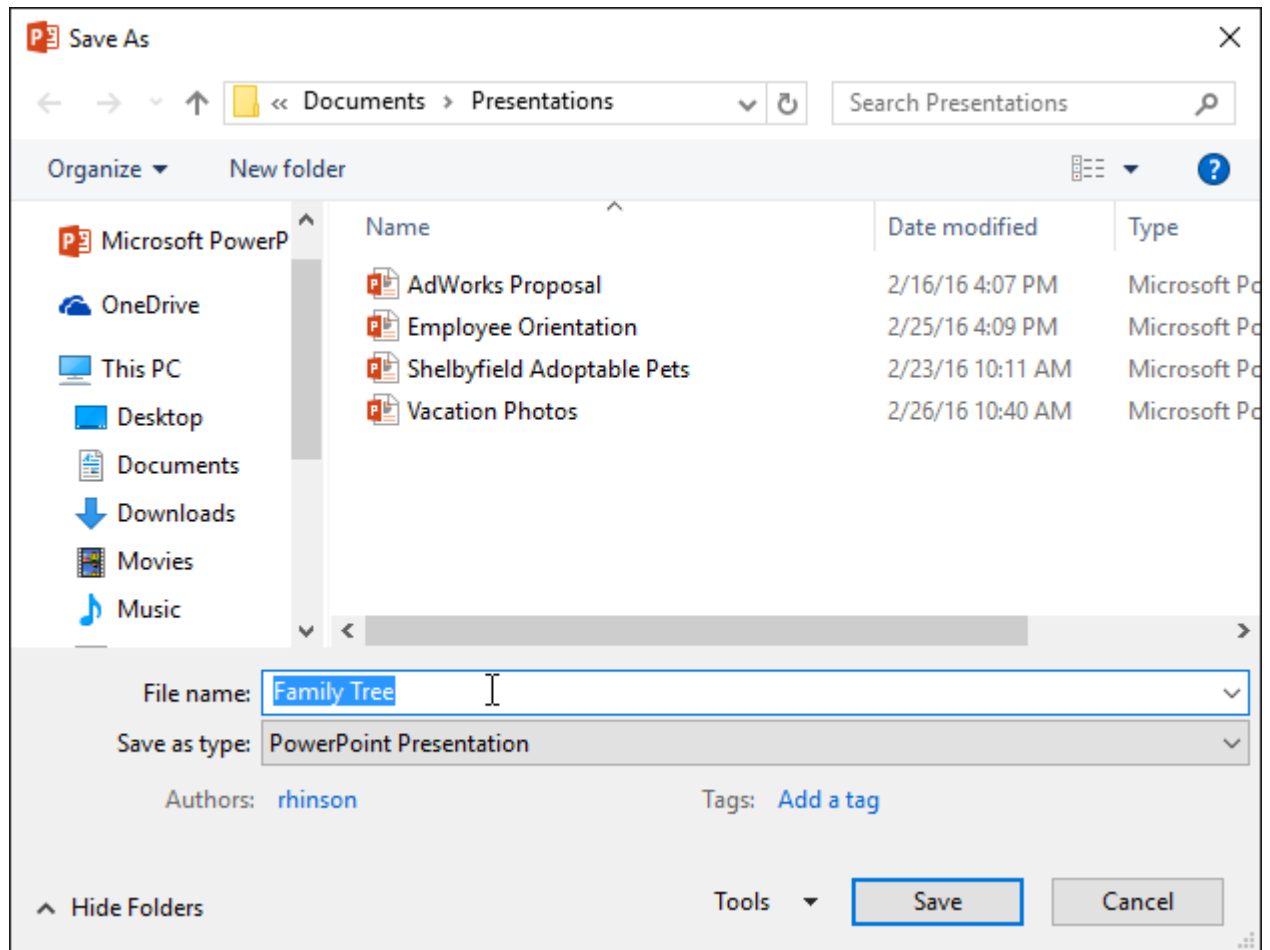
1. Click the **File** tab to access Backstage view.



2. Locate and select the **Convert** command.



3. The **Save As** dialog box will appear. Select the **location** where you want to save the presentation, enter a **file name**, and click **Save**.



4. The presentation will be converted to the newest file type.

Challenge!

1. Open our [practice presentation](#).
2. Notice that the presentation opens in **Compatibility Mode**. **Convert** it to the 2016 file format. If a dialog box appears asking if you would like to close and reopen the file in order to see the new features, choose **Yes**.
3. In Backstage view, **pin** a file or folder.


Ans. create your PowerPoint presentation on slides. You use layouts to organize the content on each slide. PowerPoint has several slide layouts from which to choose.

Themes are sets of colors, fonts, and special effects. Backgrounds add a colored background to your slides. You can add themes and backgrounds to your slides. After you complete your slides, you can run your presentation.

Create a Title Slide

When you start PowerPoint, PowerPoint displays the title slide in the Slide pane. You can type the title of your presentation and a subtitle on this slide. To enter text:

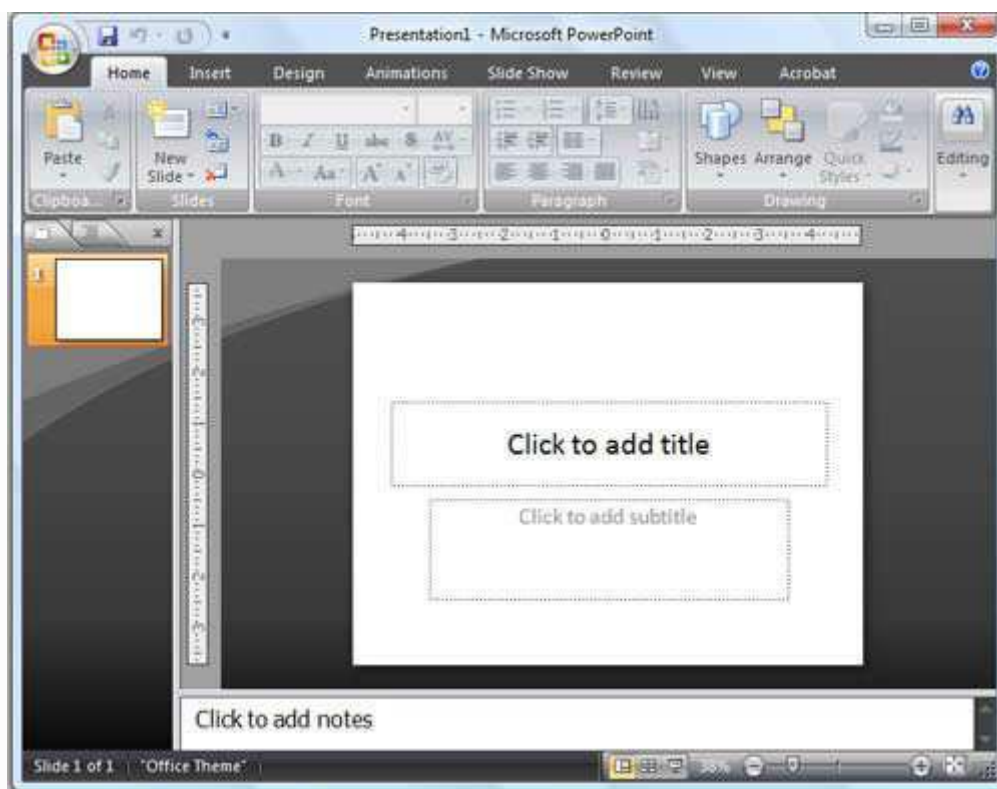
- Click and type the title of your presentation in the "Click to add title" area.
- Click and type a subtitle in the "Click to add subtitle" area.

If you do not wish to use the title slide, click the Delete Slide button  in the Slides group on the Home tab.

EXERCISE 1

Create a Title Slide

1. Open PowerPoint. You are presented with a title slide.



2. Enter the information shown here. Type **College Scholarships and Financial Aid** in the Click to Add Title text box. Type **Paying for College** in the Click to Add Subtitle text box.

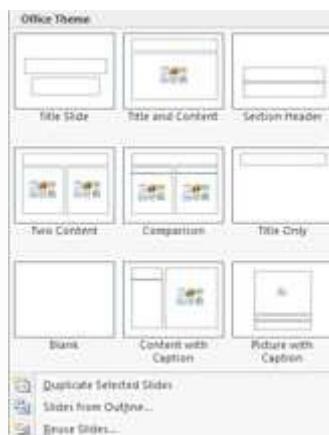
College Scholarships and Financial Aid

Paying for College

Create New Slides

After completing your title slide, you can create additional slides. To create a new slide:

1. Choose the Home tab.
2. Click the New Slide button **New Slide ▾** in the Slides group. The Office Theme dialog box appears and displays several layout templates.
3. Click the layout you want. The layout appears in the Slide pane of the PowerPoint window.



3. To add text, click inside the placeholder and type.
4. To add an additional slide to your presentation, do one of the following:
Right-click the slide layout. A menu appears. Click Layout and then click the layout you want.

Choose the Home tab, click the New Slide button **New Slide ▾**, and then choose the slide layout you want.

EXERCISE 2

Create New Slides

1. Choose the Home tab.
2. Click the New Slide button **New Slide ▾** in the Slides group. The Office Theme dialog box appears.

3. Click the Title and Content Layout. The slide appears on the Slides tab.







4. Enter the information shown here. Type **Here is what to do:** (including the colon) in the Click to Add Title text box. Type the bulleted text in the Content text box.

Here is what to do:

- Start saving early
- Apply for financial aid

Create an Outline

If you need to present the information in your slide in outline form, you can easily create an outline by using the Increase List Level button  to create a hierarchy.


1. Choose the Home tab.
2. Click the New Slide button  in the Slides group. The Office Theme dialog box appears.
3. Click the Title and Content layout.
4. Enter the information shown here. Click the Increase List Level button  in the Paragraph group to indent the bullets for Stafford Loans and PLUS Loans. If you ever need to decrease an indent, use the Decrease List Level button  in the Paragraph group.

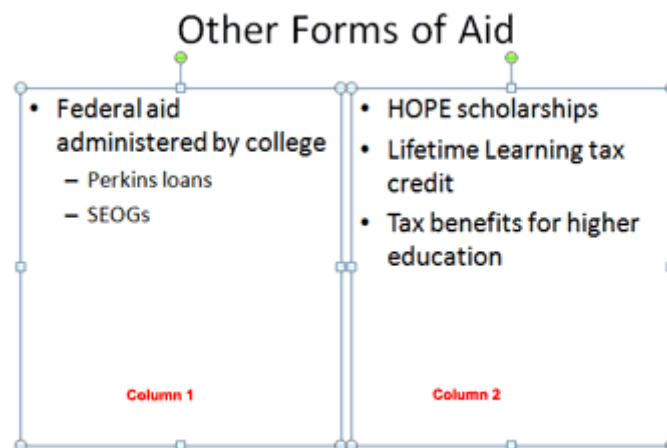
Where to Apply for Aid

- Pell grants
- Work study programs
- Federal loans
 - Stafford loans
 - PLUS loans

Use Two-Column Text

You can also place text in two separate columns.

1. Choose the Home tab.
2. Click the New Slide button  in the Slides group. The Office Theme dialog box appears.
3. Click the Two Content layout.
4. Enter the information shown here.



Make Changes to Your Slides

After creating a slide, if you want to add text:

1. Place the mouse pointer at the point at which you would like to add text.
2. Type the information you want to add.

If you would like to change text:


1. Select the text you want to change.
2. Type the new text.

You can use the Backspace key to delete text. You can also delete text by highlighting the text and pressing the Delete key.


Apply a Theme

A theme is a set of colors, fonts, and special effects. Themes provide attractive backgrounds for your PowerPoint slides.


To apply a theme to all of the slides in your presentation:

1. Choose the Design tab.
2. Click the More button  in the Themes group.
3. Click the design you want.

To apply a theme to selected slides:

1. Click the Slides tab, located on the left side of the window.
2. Hold down the Ctrl key and then click to select the slides to which you want to apply a theme.
3. Choose the Design tab.
4. Click the More button  in the Themes group.
5. Right-click the theme you want to apply. A menu appears.
6. Click Apply to Selected Slides. Excel applies the theme to the slides you selected.

You can add a dramatic effect to your theme by applying a background.

1. Choose the Design tab.
2. Click the Background Styles button  Background Styles ▾.
3. Click the background you want.

EXERCISE 3

Apply a Theme




1. Choose the Design tab.
2. Click the More button  in the Themes group.



3. Click the theme you want. PowerPoint applies the theme to all of the slides in your presentation.


Add a Background



1. Choose the Design tab.
2. Click the Background Styles button  Background Styles.
3. Click the background you want. PowerPoint applies the background to your slides.

Run Your PowerPoint Slide Show

After you create your slides, you can run your slide show:

1. Do any one of the following:
 - Press F5.
 - Choose the Slide Show tab. Click the From Beginning button  in the Start Slide Show group.
 - Click the Slide Show icon in the bottom-right corner of your screen.

Your slide show appears on your screen.

Navigating the Slide Show	
Task	Procedure
Go to the next slide.	Do one of the following: Press the Right Arrow key. Press the Enter key. Press the Page Down key. Left-click the slide.

Go to the previous slide.	Do one of the following: Press the Left Arrow key. Press the Backspace key. Press the Page Up key.
End the slide show and return to PowerPoint.	Press the Esc key.

EXERCISE 4

Run Your Slide Show

1. Press F5 to run the slide show.
2. Use the arrow keys on your keyboard to move forward and backward through your slides.
3. Use the Esc key to return to Normal view.

Q15. Write steps for creation of a set of PowerPoint slides that demonstrates your skill to use

the tools of PowerPoint. It should include the following things

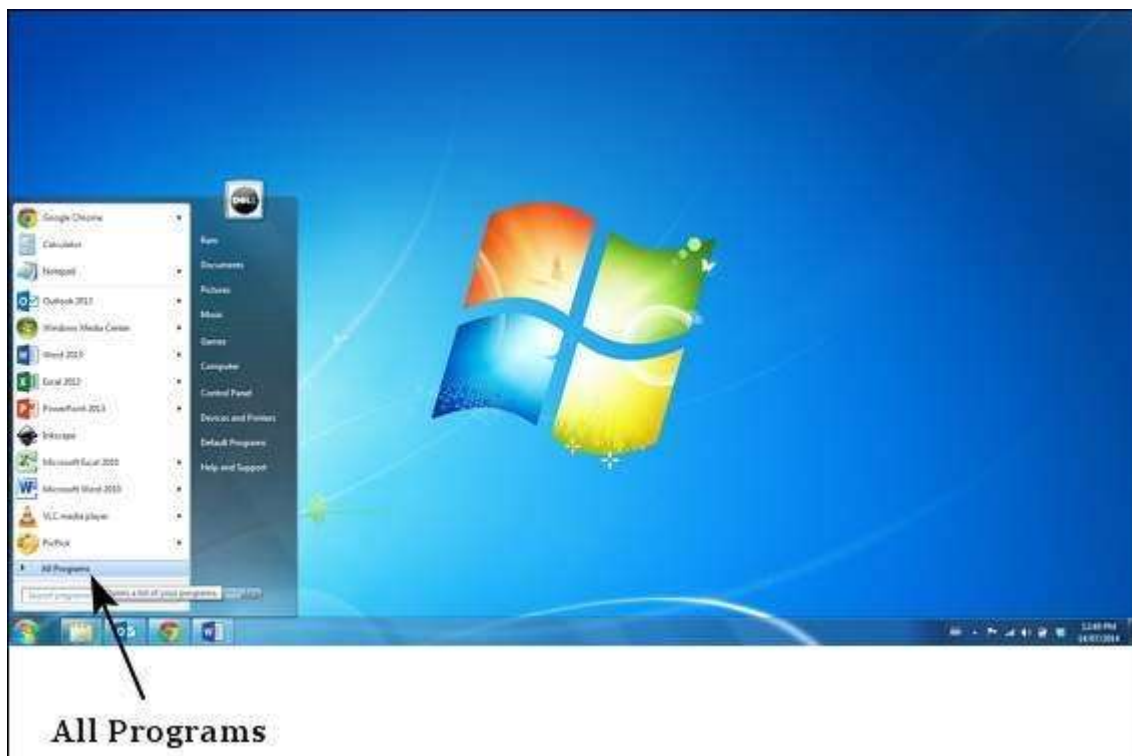
- **Title slide &bullet list**
- **Inserting Excel Sheet**
- **Clip art and Text**
- **Slide show effects**

Ans. In this chapter, we will understand how to get started with PowerPoint 2010. We will understand how to start PowerPoint 2010 application in simple steps. To access PowerPoint 2010, you must have Microsoft Office 2010 installed in your PC. Only Office 2010 Home and Student, Home and Business, Standard, Professional and Professional Plus packages have PowerPoint included in them. Other packages may have a viewer, but you cannot create presentations with them.

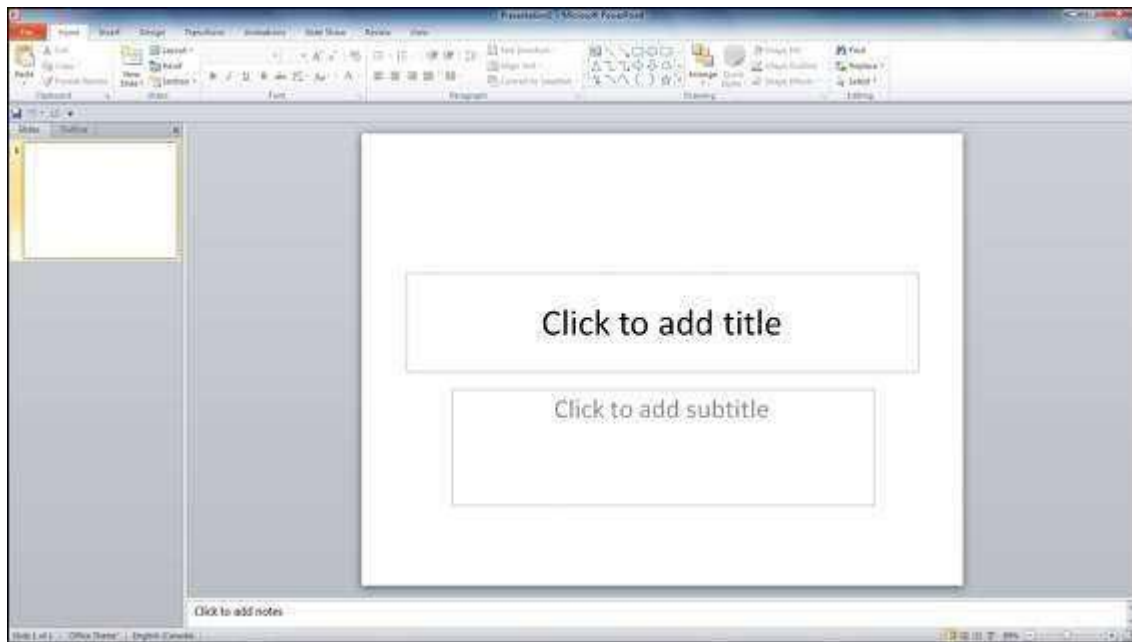
Step 1 – Click the **Start** button.



Step 2 – Click **All Programs** option from the menu.

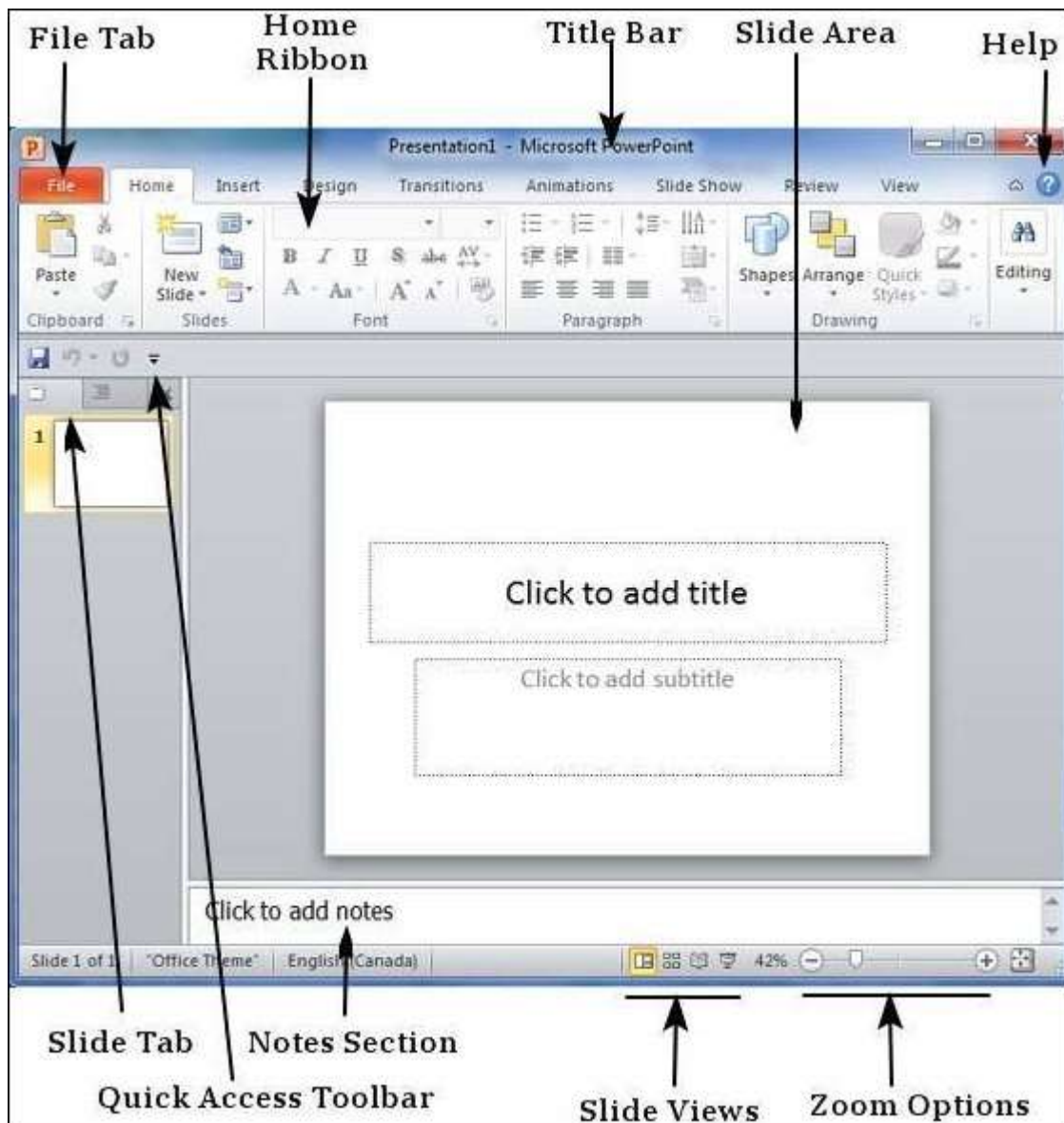


Step 3 – Search for **Microsoft Office** from the sub menu and click it.



Explore Windows in Powerpoint 2010

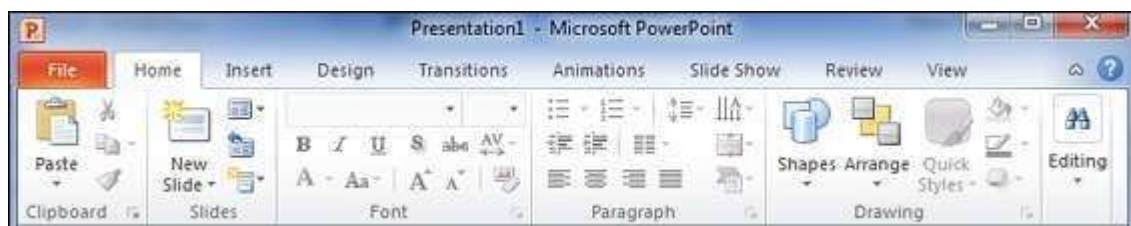
The following screenshot shows the various areas in a standard PowerPoint file. It is important to familiarize yourself with these areas as it makes learning and using PowerPoint easier.



File Tab

This tab opens the **Backstage** view which basically allows you to manage the file and settings in PowerPoint. You can save presentations, open existing ones and create new presentations based on blank or predefined templates. The other file related operations can also be executed from this view.

Ribbon



The ribbon contains three components –

- **Tabs** – They appear across the top of the Ribbon and contain groups of related commands. **Home, Insert, Page Layout** are examples of ribbon tabs.
- **Groups** – They organize related commands; each group name appears below the group on the Ribbon. For example, a group of commands related to fonts or a group of commands related to alignment, etc.
- **Commands** – Commands appear within each group as mentioned above.

Title Bar

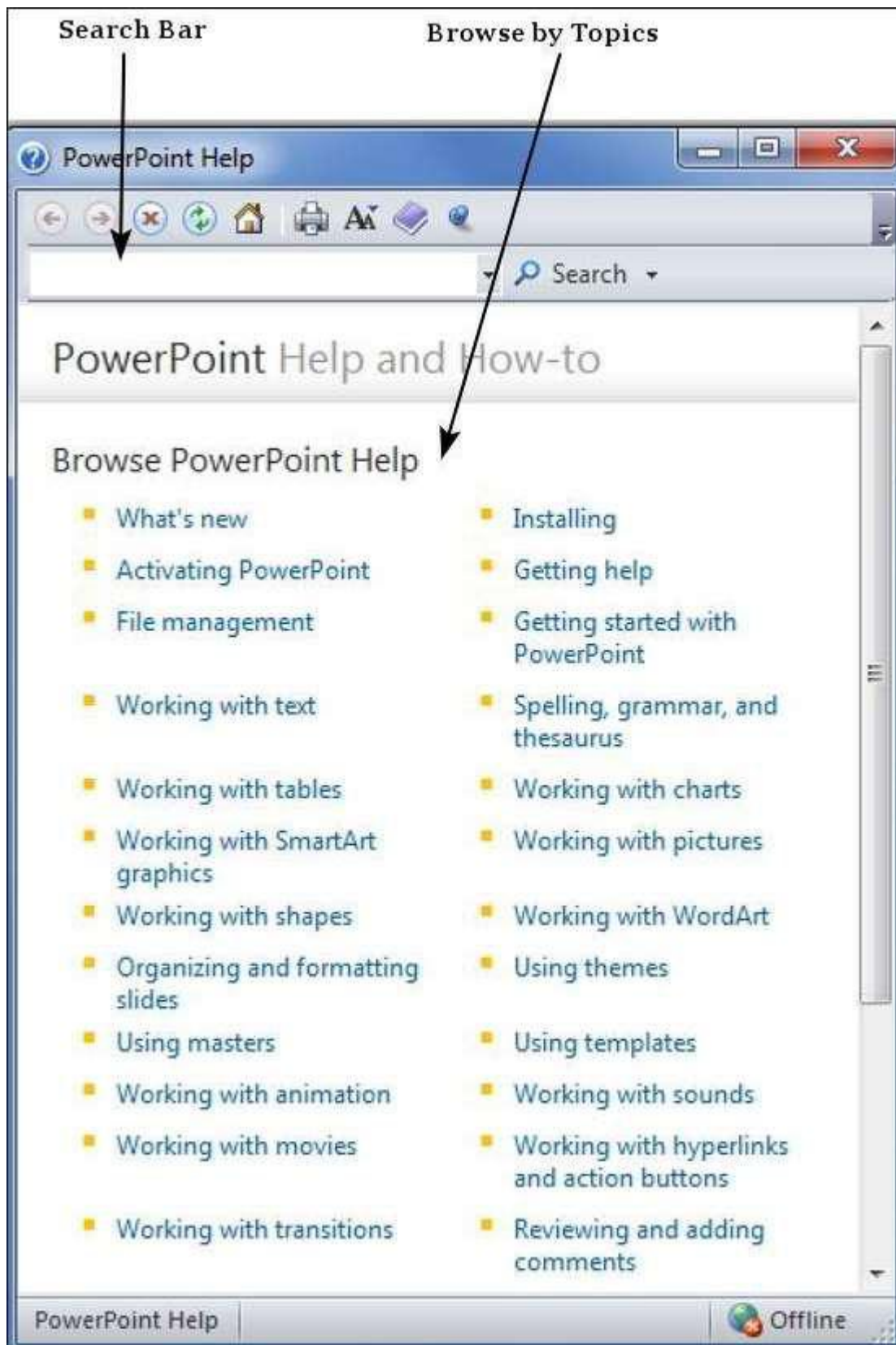
This is the top section of the window. It shows the name of the file followed by the name of the program which in this case is Microsoft PowerPoint.

Slide Area

This is the area where the actual slide is created and edited. You can add, edit and delete text, images, shapes and multimedia in this section.

Help

The Help Icon can be used to get PowerPoint related help anytime you need. Clicking on the "?" opens the PowerPoint Help window where you have a list of common topics to browse from. You can also search for specific topics from the search bar at the top.



Zoom Options

The zoom control lets you zoom in for a closer look at your text. The zoom control consists of a slider that you can slide left or right to zoom in or out, you can click on

the - and + buttons to increase or decrease the zoom factor. The maximum zoom supported by PowerPoint is 400% and the 100% is indicated by the mark in the middle.

Slide Views

The group of four buttons located to the left of the Zoom control, near the bottom of the screen, lets you switch between PowerPoint views.

- **Normal Layout view** – This displays page in normal view with the slide on the right and a list of thumbnails to the left. This view allows you to edit individual slides and also rearrange them.
- **Slide Sorter view** – This displays all the slides as a matrix. This view only allows you to rearrange the slides but not edit the contents of each slide.
- **Reading View** – This view is like a slideshow with access to the Windows task bar in case you need to switch windows. However, like the slideshow you cannot edit anything in this view.

Notes Section

This sections allows you to add notes for the presentation. These notes will not be displayed on the screen during the presentation; these are just quick reference for the presenter.

Quick Access Toolbar

The Quick Access Toolbar is located just under the ribbon. This toolbar offers a convenient place to group the most commonly used commands in PowerPoint. You can customize this toolbar to suit your needs.

Slide Tab

This section is available only in the Normal view. It displays all the slides in sequence. You can **add**, **delete** and **reorder** slides from this section.

Backstage View in Powerpoint 2010

In Office 2010, Microsoft replaced the traditional file menu with the new **Backstage** view. This view not only offers all the menu items under the file menu, but additional details which makes management of your files a lot easier.

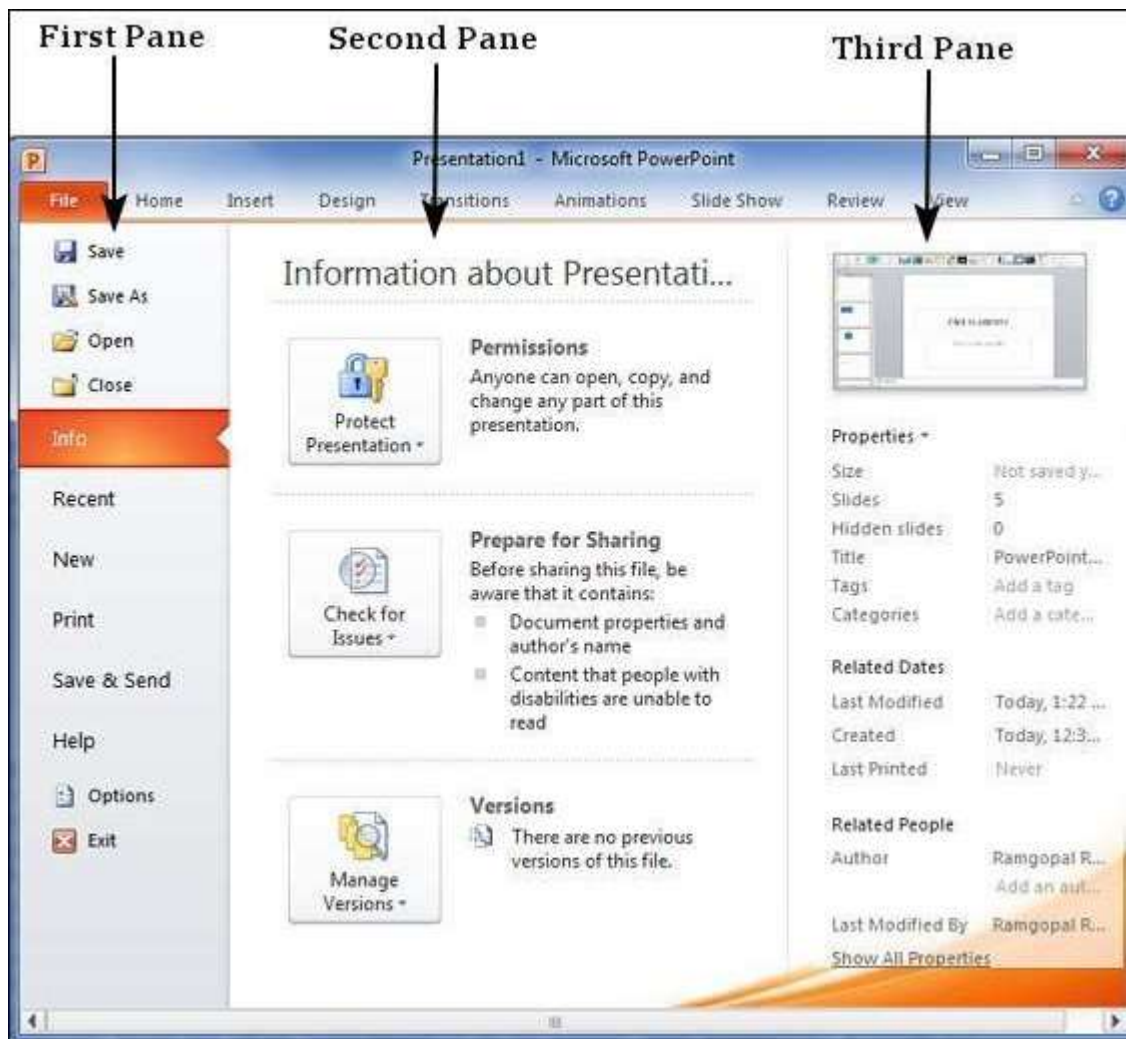
Accessing Backstage View

You can access the Backstage view simply by clicking on the File tab. You can exit this view by clicking on any tab (including the File tab again). You can also press the '**Esc**' button on the keyboard.



Organization of Backstage View

The backstage view has three sections or panes.



- **First Pane** – This is the commands pane which consists of all the commands you would typically find in the file menu of older versions. You also have the **Options** menu which lets you edit the options on the program like customizing the ribbon.

Various commands under the first pane are described in the table below –

S.No	Command & Description
1	<p>Save</p> <p>This allows you to save a new file or an existing file in standard format. If you are working on a previously saved file this will save the new changes in the same file format. If you are working on a new file, this command would be similar to the Save As command.</p>
2	<p>Save As</p> <p>Allows you to specify the file name and the file type before saving the file.</p>

3	Open Allows you to open new PowerPoint files.
4	Close Allows you to close an existing file.
5	Info Displays the information about the current file.
6	Recent Lists series of recently viewed or edited PowerPoint files.
7	New Allows you to create a new file using blank or pre-defined templates.
8	Print Allows you to select the printer settings and print the presentation.
9	Save & Send Allows you to share your presentation with larger audience via emails, web, cloud services, etc.
10	Help Provides access to PowerPoint Help.

In this chapter, we will understand how to get started with PowerPoint 2010. We will understand how to start PowerPoint 2010 application in simple steps. To access PowerPoint 2010, you must have Microsoft Office 2010 installed in your PC. Only Office 2010 Home and Student, Home and Business, Standard, Professional and Professional Plus packages have PowerPoint included in them. Other packages may have a viewer, but you cannot create presentations with them.

Step 1 – Click the **Start** button.



Step 2 – Click **All Programs** option from the menu.



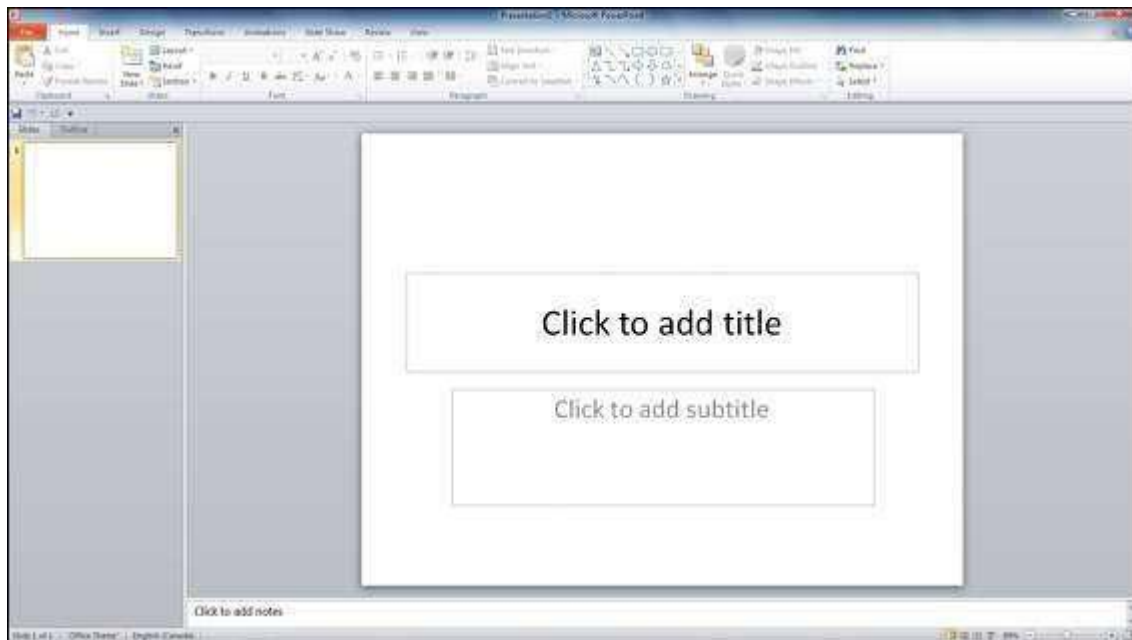
Step 3 – Search for **Microsoft Office** from the sub menu and click it.



Step 4 – Search for **Microsoft PowerPoint 2010** from the submenu and click it.

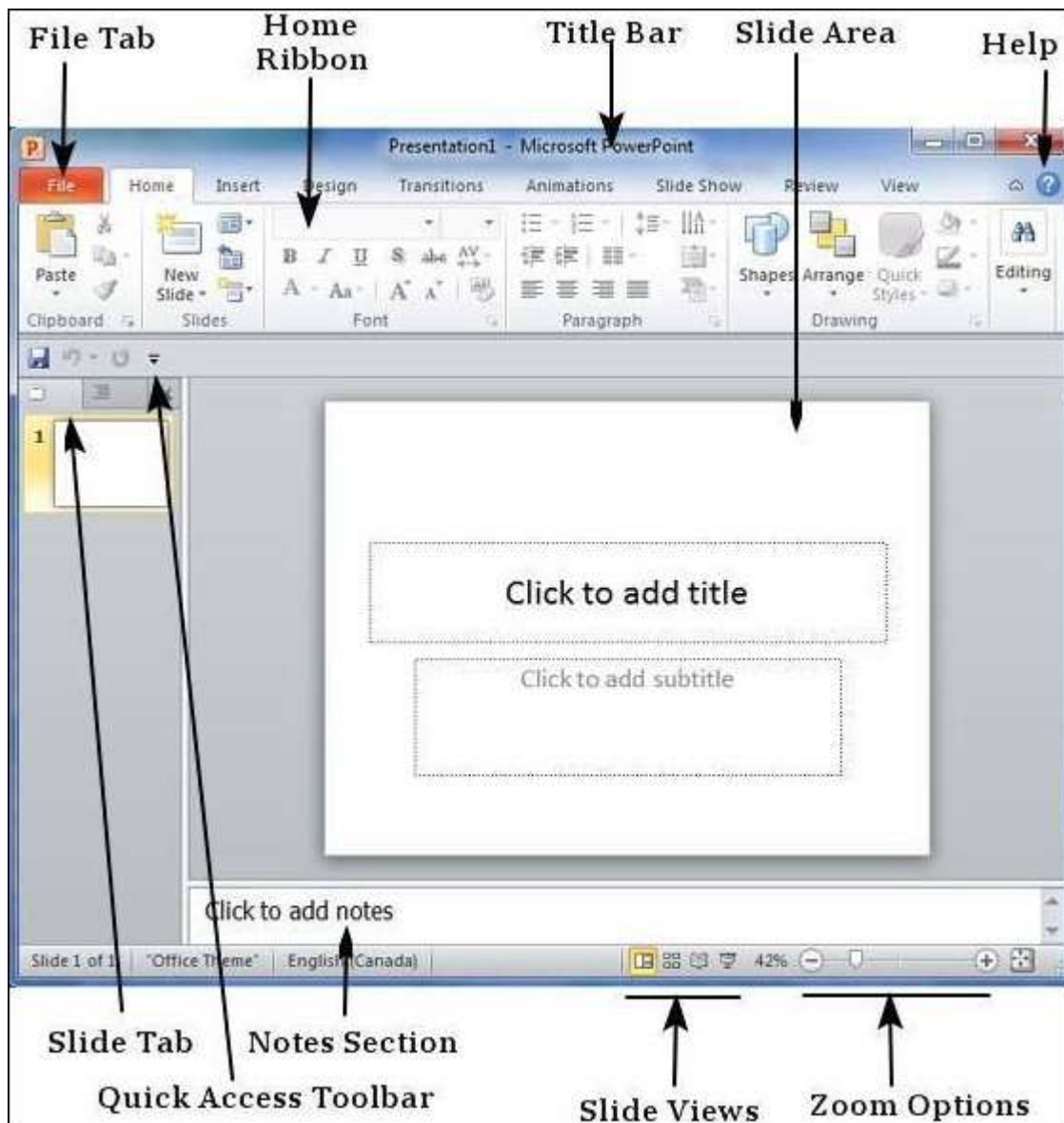


This will launch the Microsoft PowerPoint 2010 application and you will see the following presentation window.



Explore Windows in Powerpoint 2010

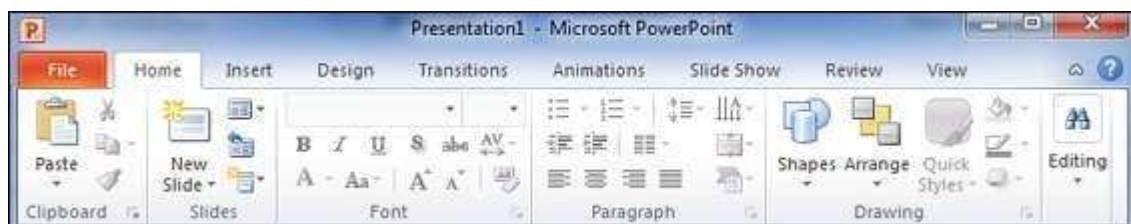
The following screenshot shows the various areas in a standard PowerPoint file. It is important to familiarize yourself with these areas as it makes learning and using PowerPoint easier.



File Tab

This tab opens the **Backstage** view which basically allows you to manage the file and settings in PowerPoint. You can save presentations, open existing ones and create new presentations based on blank or predefined templates. The other file related operations can also be executed from this view.

Ribbon



The ribbon contains three components –

- **Tabs** – They appear across the top of the Ribbon and contain groups of related commands. **Home, Insert, Page Layout** are examples of ribbon tabs.
- **Groups** – They organize related commands; each group name appears below the group on the Ribbon. For example, a group of commands related to fonts or a group of commands related to alignment, etc.
- **Commands** – Commands appear within each group as mentioned above.

Title Bar

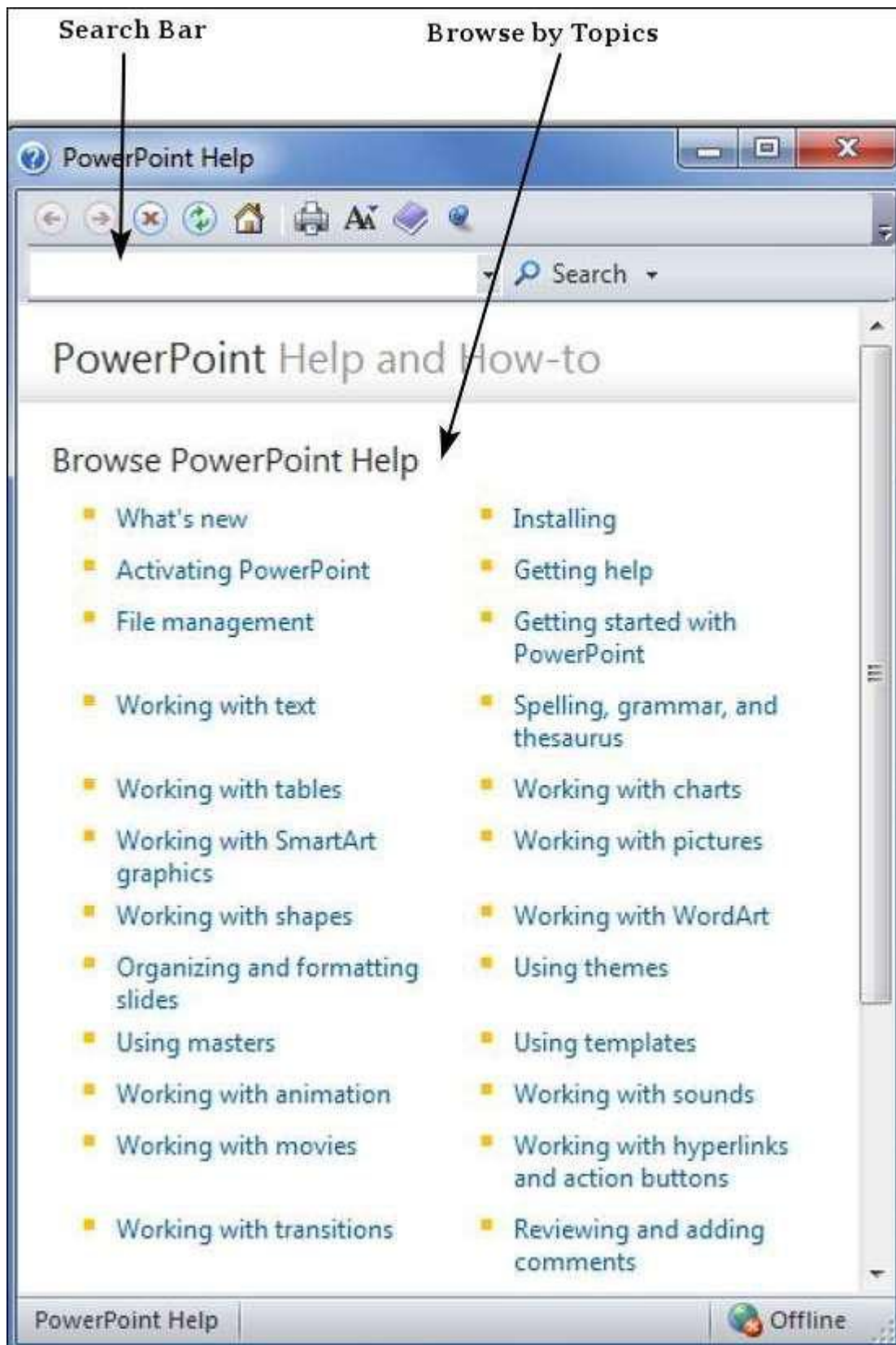
This is the top section of the window. It shows the name of the file followed by the name of the program which in this case is Microsoft PowerPoint.

Slide Area

This is the area where the actual slide is created and edited. You can add, edit and delete text, images, shapes and multimedia in this section.

Help

The Help Icon can be used to get PowerPoint related help anytime you need. Clicking on the "?" opens the PowerPoint Help window where you have a list of common topics to browse from. You can also search for specific topics from the search bar at the top.



Zoom Options

The zoom control lets you zoom in for a closer look at your text. The zoom control consists of a slider that you can slide left or right to zoom in or out, you can click on

the - and + buttons to increase or decrease the zoom factor. The maximum zoom supported by PowerPoint is 400% and the 100% is indicated by the mark in the middle.

Slide Views

The group of four buttons located to the left of the Zoom control, near the bottom of the screen, lets you switch between PowerPoint views.

- **Normal Layout view** – This displays page in normal view with the slide on the right and a list of thumbnails to the left. This view allows you to edit individual slides and also rearrange them.
- **Slide Sorter view** – This displays all the slides as a matrix. This view only allows you to rearrange the slides but not edit the contents of each slide.
- **Reading View** – This view is like a slideshow with access to the Windows task bar in case you need to switch windows. However, like the slideshow you cannot edit anything in this view.

Notes Section

This sections allows you to add notes for the presentation. These notes will not be displayed on the screen during the presentation; these are just quick reference for the presenter.

Quick Access Toolbar

The Quick Access Toolbar is located just under the ribbon. This toolbar offers a convenient place to group the most commonly used commands in PowerPoint. You can customize this toolbar to suit your needs.

Slide Tab

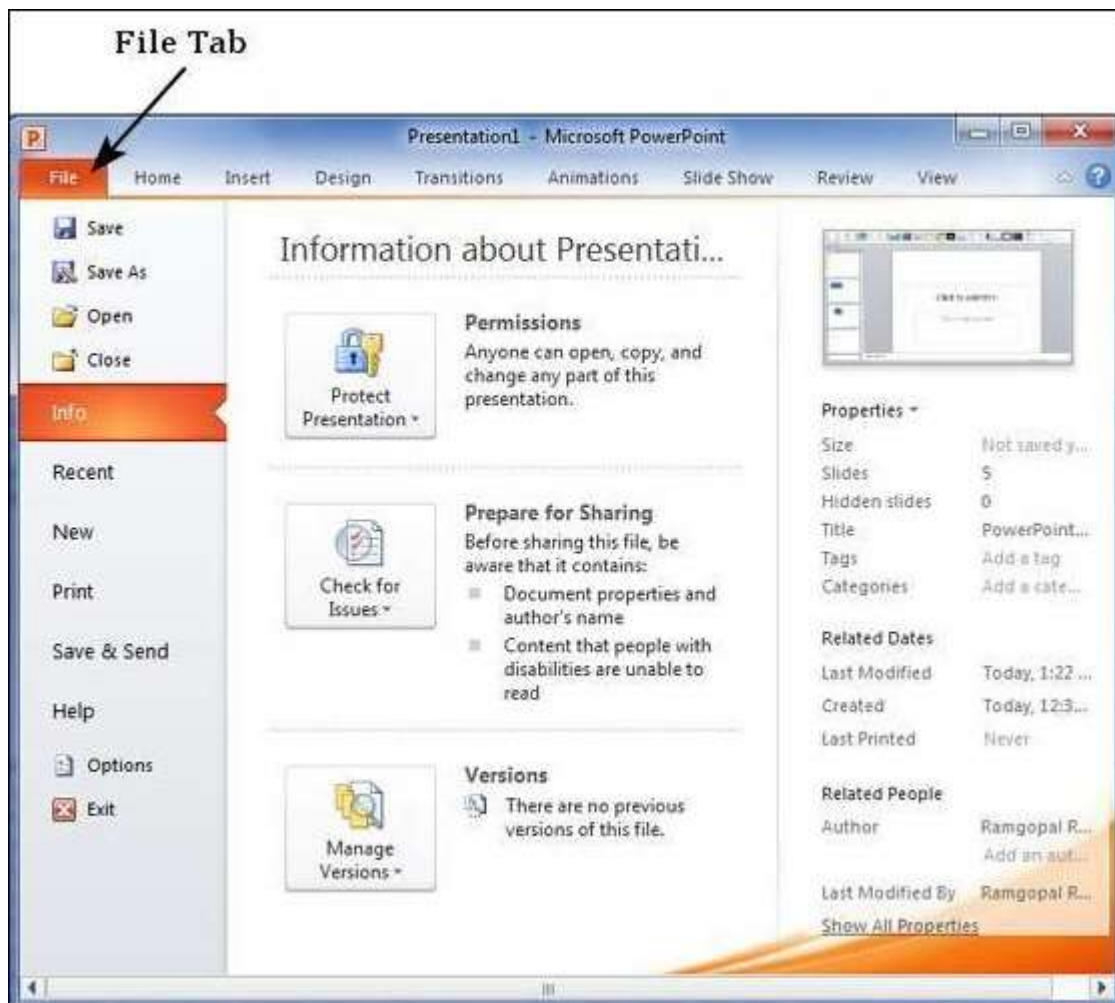
This section is available only in the Normal view. It displays all the slides in sequence. You can **add**, **delete** and **reorder** slides from this section.

Backstage View in Powerpoint 2010

In Office 2010, Microsoft replaced the traditional file menu with the new **Backstage** view. This view not only offers all the menu items under the file menu, but additional details which makes management of your files a lot easier.

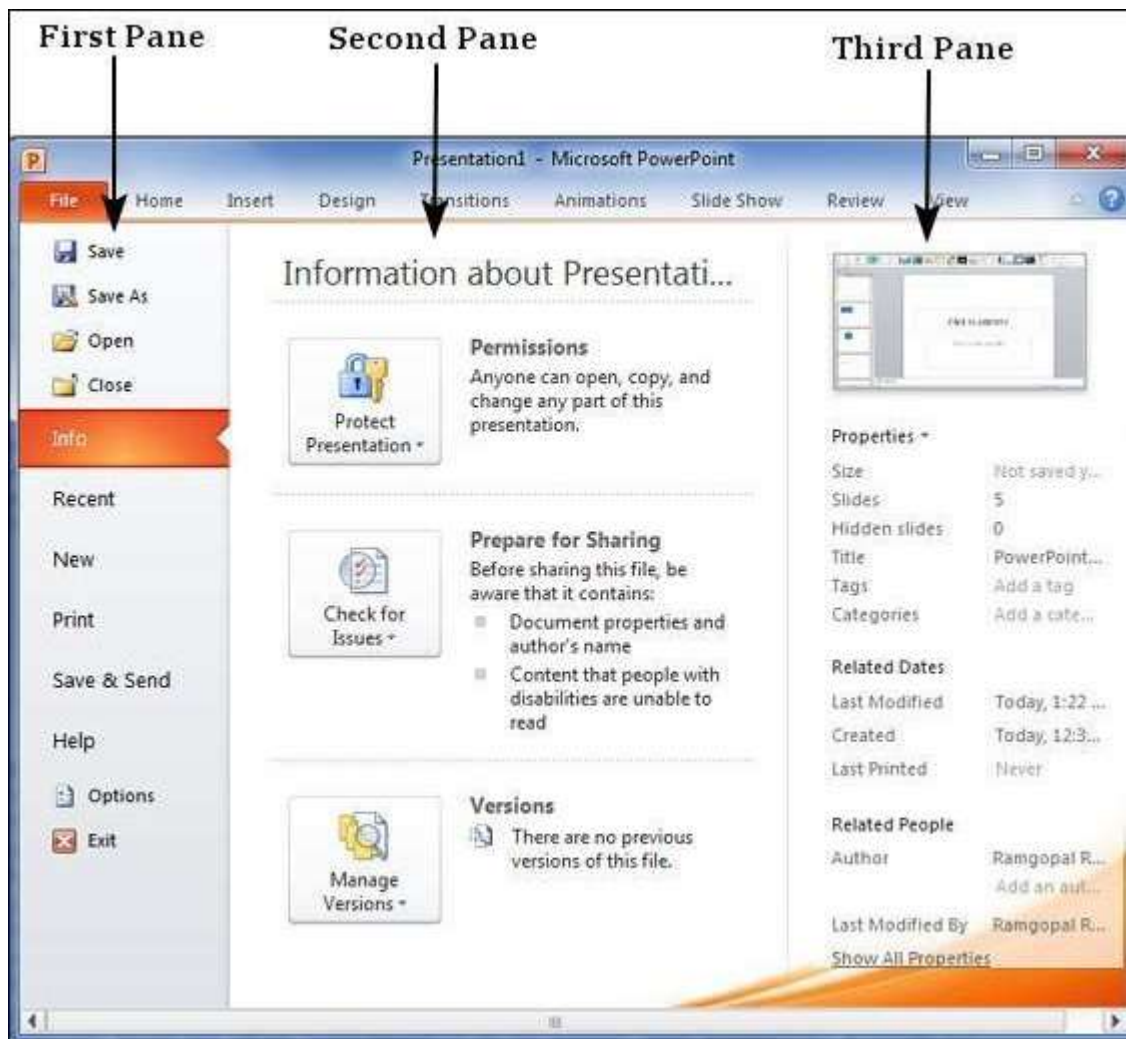
Accessing Backstage View

You can access the Backstage view simply by clicking on the File tab. You can exit this view by clicking on any tab (including the File tab again). You can also press the '**Esc**' button on the keyboard.



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