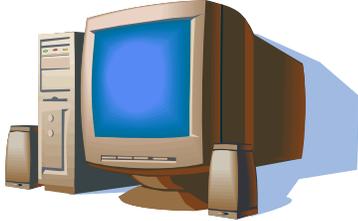




General Concepts (1.1)



Hardware, Software, Information Technology (1.1.1)

Understanding Hardware, Software, and Information Technology (IT):

A computer's *hardware* is a computer item you can physically see or touch. The *software* is a computer program that tells computer hardware how to operate. *Information Technology (IT)*, is the broad subject related to computers and managing and processing information.

Types of Computer (1.1.2)

Mainframe: A *mainframe* is a big, powerful, expensive computer that can support many users at the same time. Large businesses and organizations use mainframes.

Capacity: Enormous - the capacity of several hundred or even thousands of PCs.

Speed: Very fast - much, much faster than a PC.

Cost: Very, very expensive - can usually only be afforded by large organizations.

Users: Only used by large businesses and organizations.

Network Computer: A *network* is a group of computers that are connected so that they can share equipment and information. Most people on a network use *workstations*, which are simply PCs that are connected to the network. A *server* is a central computer where users on the network can save their files and information.

Capacity:

Workstation: Same as a PC, only needs an inexpensive network card.

Server: Greater than a PC, often more than 100GE.

Speed:

Workstation: Same as a PC.

Server: Generally faster than a PC, may use multiple CPUs.

Cost:

Workstation: Same as a PC.

Server: More expensive than a PC but not as costly as a mainframe.

Users:

Workstation: People in a networked office or organization.

Server: Generally a network administrator or engineer.

Personal Computer: A PC is a *personal computer*, originally designed by IBM way back in 1981. Many different companies make PCs, but all of them are IBM-compatible. This means that they will all run Microsoft Windows.

Capacity: Average hard disk size is 20 GB to 80 GB.

Speed: Fast. Average speed is from 1 GHz to 3 GHz.

Cost: Fairly inexpensive - under \$1,000 - and getting cheaper every day!

Users: Just about everyone uses a PC! Homes, offices, schools...

Mac: Developed by Apple, a Macintosh is a computer, but it is NOT a PC. Macs have a different operating system and use their own software and hardware.

Capacity: Average hard disk size is 20 GB to 80 GB.

Speed: Fast. Average speed is from 500 MHz to 2 GHz.

Cost: Fairly inexpensive, but usually more than an equivalent PC.

Users: Just about everyone, especially in the education and design fields.

Laptop: A *laptop*, or notebook, is a lighter and more portable version of a PC or Mac that can run on batteries.

Capacity: Average hard disk size is 10 GB to 40 GB.

Speed: Fast, but slightly less than a PC. Average speed is from 700 MHz to 2 GHz.

Cost: Fairly inexpensive, but more than an equivalent PC.

Users: People on the move, especially business people and students.

Personal Digital Assistant: A PDA, or *Personal Digital Assistant*, is a handheld computer that is generally used to keep track of appointments and addresses.

Capacity: Much smaller than a PC - 8 MB to 64 MB of storage space.

Speed: Much slower than a PC - 8 MHz to 266 MHz.

Cost: Expensive when compared to the capacities of a PC.

Users: Business people and others who need to be organized.

Main Parts of a Personal Computer (1.1.3)

Central Processing Unit (CPU): The computer's brain or heart, the CPU is a computer's main chip. The CPU is really nothing more than an incredibly fast and powerful calculator.

Hard Disk: The computer's main, long-term storing device. Unlike floppy disks and CD-ROMs, you typically cannot remove a hard disk.

Common Input Devices: The keyboard and mouse are two common input devices that you use to communicate with your computer. A scanner is another input device you can use to transfer information from a sheet of paper to your computer.

Common Output Devices: The monitor resembles a television set, and is where the computer displays information. If visible, your computer speakers allow your computer to play sounds. A printer is where a computer writes down information onto paper.

Memory: A computer's temporary storage place, where it gets its work done. For example, when you use a word processor to type a letter, the letter is stored in the computer's memory.

Peripheral Device: Everything outside of and connected to the system unit are called peripherals. You can add dozens of peripherals and accessories to make it more useful and fun. Common peripherals include printers, scanners, external hard drives, CD-ROM drives, and digital cameras. All peripherals are considered to be part of a computer's hardware.

Computer Performance (1.1.4)

CPU Speed: Arguably the single most important factor that determines a computer's performance is the speed of its CPU. The speed of the CPU is measured in megahertz (MHz) and gigahertz (GHz). The faster the CPU, the faster the computer.

RAM: The amount of RAM (Random Access Memory), or memory, is another very important factor in a computer's performance. Generally, the more RAM a computer has the better its performance.

Multitasking: Microsoft Windows can *multitask*, or run more than one program or task at a time—probably no different than your job. And, just like your job, the more programs or tasks you throw at Windows, the longer it takes to complete each one, and hence a drop in computer performance.

Hardware (1.2)

Central Processing Unit (1.2.1)

- **CPU (Central Processing Unit):** The CPU is also known as the computer chip or the microprocessor (or processor). It calculates and processes information and is measured in Gigahertz (GHz).

Memory (1.2.2)

- **Types of Memory (1.2.2.1):** There are two main types of memory on your computer:
RAM (random-access memory): Computer's main memory, which is used to process information (example: work with a file). This type of memory is volatile, which means unless it is saved, data disappears when you shut off the computer. You can read from it and write to it. Comparable to a notebook, which you can read and write in.
ROM (read-only memory): Computer's low-level memory, which is used to perform its most basic functions (example: start the computer). This memory is nonvolatile, which means data remains even when you shut off the computer. It's permanent. You can read from it, but you can't write to it. Comparable to a novel; you can only read it.

- **Measuring Memory (1.2.2.2):**

Bit: Short for *binary digit*, a bit is the smallest memory unit. Eight bits equal one byte.

Byte: Short for *binary digits eight*, one byte equals one character (letter, number, or symbol).

Kilobyte (K or KB): 1,024 bytes

Megabyte (M or MB): 1,048,576 bytes

Gigabyte (G or GB): 1,073,741,824 bytes

Terabyte (TB): 1,099,511,627,776 bytes

Input Devices (1.2.3)



Mouse: It acts as a handheld pointing device and controls the actions of that blinking item on your computer screen known as a *cursor*.



Keyboard: A keyboard lets you enter information and commands into a computer.



Trackball: A trackball is essentially a mouse lying on its back. To move the pointer, you rotate the ball with your thumb, your fingers, or the palm of your hand.



Scanner: converts images into digital information and stores it in a computer.



Touchpad: A touch pad is a small, touch-sensitive pad used as a pointing device on some portable computers.



Light pen: A light pen is similar to a mouse, except that with a light pen you can move the pointer and select objects on the display screen by directly pointing to the objects with the pen.



Joystick: Mostly used for computer games, a joystick is a lever that moves in all directions and usually controls some type of movement on the computer.



Digital camera: A digital camera lets you take pictures and transfer them to a computer.



Microphone: If your computer has a sound card (and most computers have one) you can plug in a microphone to digitally record sounds to your computer.

Output Devices (1.2.4)



Monitors: A computer's monitor looks and works a lot like a TV screen. The monitor is really only half of what makes text and images appear on the screen. The other half is the graphic card, or video/display adapter. The monitor plugs into the graphics card in the back of the computer.



Printers: Transfer processed information to printed page; main types of printers are: InkJet; Laser and color laser; Multifunction; Dot matrix; and Plotter.



Plotters: Plotters are special, very expensive printers that are used to create posters and blueprints.



Speakers: Speakers allow you to hear the sounds produced by the sound card.

Input/Output Devices (1.2.5)



Touchscreens: Touch screen monitors are another example of an input/output device; they display images (output) and also let users interact with the computer by pressing areas of the screen (input).

Storage Devices (1.2.6)

- **Memory Devices (1.2.6.1):** Memory devices are very useful for sharing or transporting information. They are also useful for backing up your information. A comparison of some of the most common storage devices appears below.

Storage Device	Speed	Capacity	Cost
Diskette	Very slow.	Very small – 1.44 Megabytes (MB).	Very cheap.
Zip disk	Significantly slower than most hard disks.	100 to 250 Megabytes (MB).	Expensive when compared to costs of other storage devices.
Jaz disk	Slower than most hard disks, but faster than a Zip disk.	2 Gigabytes (GB).	Fairly expensive when compared to costs of other storage devices.
CD-ROM	Much slower than a hard disk, but still faster than a diskette.	About 650 Megabytes (MB).	Very inexpensive.
DVD	Faster than a CD-ROM drive, but not as fast as a hard disk.	About 4 Gigabytes (GB), although future DVDs are rumored to hold up to 17 (GB).	Slightly more than a CD-ROM but still very inexpensive.
Internal Hard Disk	Very fast. Most hard disks have an average access speed of between 8 to 15 milliseconds (ms).	Enormous. Many hard disks have more than 200 Gigabytes (GB) of storage.	Byte for byte they are the most inexpensive way to store data.
External Hard Disk	Very fast, though normally slower than internal hard disks.	Enormous – same as internal hard disks.	Slightly more expensive than internal hard disks.

- **Formatting a Disk (1.2.6.2):** Formatting a disk prepares it for use, so that it can be read and used by the computer's operating system.

The Use of IT in Everyday Life (1.5)

Computers at Work (1.5.1)

- **People vs. Computers (1.5.1.1):** There are many differences between artificial and human intelligence, though each has its own niche and purpose in society. For example, computers are good for repetitive tasks, while humans think creatively and intuitively, which can't (yet) be replicated by computers.
- **Computers in Business (1.5.1.2):** Computers have changed a lot about the conduct of business. For example, online banking, airline booking systems, and administration systems are all available and improved with computers.
- **Computers in Government (1.5.1.3):** Governments are using computers to help store records, collect taxes, and some are even trying to make voting available electronically.
- **Computers in Healthcare (1.5.1.4):** Computers in healthcare make diagnosis and treatment much easier for the patient and doctor. Electronic files and administrative tasks are also easier using computers.
- **Computers in Education (1.5.1.5):** Computers are affecting how teachers and students interact, are making education more available with distance learning and online classes, and students are using them to do homework. Administrative tasks like timetabling and class scheduling are improved as well.
- **Computers at Home (1.5.1.6):** Computers make many home functions easier, such as banking, communication, and entertainment. Some companies even offer the option for *teleworking*, (working from home) to their employees.

Electronic World (1.5.2)

- **Electronic Mail (e-mail) (1.5.2.1):** E-mail is probably the most popular electronic concept. Millions of people across the world communicate using e-mail, where a message can be sent to another person instantly, to or from anywhere in the world. Another advantage with e-mail is that files can be sent to others as attachments to the message.
- **E-Commerce (1.5.2.2):** E-commerce is the concept of offering and purchasing goods and services through the Internet. Shopping over a Web site is just like shopping at their store – as you browse products, add the items you would like to purchase to your virtual shopping cart. When you are finished browsing and want to make a purchase, you must provide personal information, like your payment method, delivery type, and shipping address.
- **E-Commerce Advantages/Disadvantages (1.5.2.3):** Companies see the appeal in selling more products and services with less of an overhead cost, while people are choosing to avoid the crowds at malls and supermarkets altogether by shopping online. Then, in a few days, the item will be delivered to your door. Another advantage with e-shopping is that services are available 24 hours a day, and oftentimes there are more products available online than in the actual store.

Health and Safety, Environment (1.6)

Ergonomics (1.6.1)

- Practice good ergonomics when using the computer to prevent injury and increase production.

Health Issues (1.6.2)

- Computers are meant to increase productivity, but not at the expense of your health. Common injuries sustained from prolonged computer use are repetitive strain injury, eyestrain, and back problems.

Precautions (1.6.3)

- In addition to practicing good ergonomics, prevent broken equipment or bodily injury by keeping your workspace and walking areas clear and distributing electrical plug-ins wisely.

The Environment (1.6.4)

- **Environment (1.6.4.1):** Paper use and computer manufacturing affects the environment. Recycling paper and using low-energy computer settings help reduce the harmful effects of computer use.
- **Electronic Documents (1.6.4.2):** Sharing documents electronically through e-mail and networks helps reduce the amount of paper used.

Security (1.7)

Information Security (1.7.1)

- **Information Security (1.7.1.1):** In short, information security is taking measures to protect your computers and network systems from tampering by hackers or viruses. One of the most important steps an organization can take is to adopt an enforced information security policy.
- **Privacy Issues (1.7.1.2):** User ID: A user ID uniquely identifies the user on a network. Password: A password grants a user access to their individual account. Password policies are important because they are a main line of defense against attackers.
- **Backing up Data (1.7.1.3):** Backing up data and software makes recovering from a security breach or a natural disaster much easier. Network administrators usually back up a network's data from a centralized location, but individual users should also back up their own data on a regular basis.
- **Preventing Theft (1.7.1.4):** Always report the theft of a computer, PDA, or mobile phone immediately. It is a good idea to create a startup password for your electronic device, but it's an even better idea to password protect any sensitive files that are contained on the device.

Computer Viruses (1.7.2)

- **Viruses (1.7.2.1):** A virus is a small computer program created by a malicious programmer for the purpose of damaging other computers.
- **Anti-Virus Software (1.7.2.2):** The best way to prevent a virus infection is to install a virus-scanning program on your computer, so viruses are detected before they attack your computer.
- **Preventing Viruses (1.7.2.3):** You are the first line of defense against viruses: don't open messages or attachments that are unrecognizable.

Copyright and the Law (1.8)

Copyright (1.8.1)

- **Understanding Copyrights (1.8.1.1):** A copyright is a form of theft protection for the author or authors of an original work. Most software is copyright protected.
- **Understanding Copyright Issues (1.8.1.2):** Once a piece of software is copyright protected, you cannot distribute it or change it in any way without the permission of the copyright holder, usually the author or the company that wrote the software. It is not OK to copy a piece of software to a CD or diskette in order to hand it out to your friends or colleagues.
- **Three Classifications of Software (1.8.1.3):**
 - Freeware:** This software is available for free with few restrictions. Typically, you can distribute it as you please, modify it, or copy it. You cannot sell it or use it for your own profit.
 - Shareware:** This software is available for free, but only for a limited amount of time, or under limited conditions. You may get a trial version that does not contain all of the features of the actual pay-version of the program.
 - Proprietary:** This software is owned by a single person or company. There are many restrictions on the way these programs can be used and distributed.

Data Protection Legislation (1.8.2)

- Companies today collect and store an unprecedented amount of information about you. What they are allowed to do with that information is governed by laws determined by individual country.

Software (1.3)

Types of Software (1.3.1)

- There are two types of software you use on your computer: the operating system and other applications.
An Operating System: Loads automatically and controls just about everything on your computer.
An Application Program: Helps you accomplish a certain task, such as writing a letter, browsing the Internet, or playing a game.
New Software Versions and Releases: Come out periodically that add new features and improve components of a program. New versions also take advantage of ever-improving technology.

Operating System Software (1.3.2)

- **An Operating System:** Loads automatically and controls just about everything on your computer. Some of the most common operating systems include:
Windows XP Home and Professional: Windows XP (eXPerience) Home is designed for home and consumer computing and is the successor to Windows ME. Windows XP has the same technology found in Windows NT and 2000, so it's much more stable than earlier versions of Windows.
Linux: Linux is a newer UNIX-based operating system that is available for FREE on the Internet. Linux is a popular alternative to Microsoft Windows.

Applications Software (1.3.3)

- **Application software is used to perform specific tasks:**
A **word processor** is a program that lets you create documents.
A **spreadsheet** program organizes, calculates, and presents numbers.
A **database** program stores, manages, and organizes lists of information.
A **presentation** program is used to create professional slide shows.
A **Web browser** allows users to view Web pages on the Internet.
Accounting software helps manage finances and balance accounts.

Graphical User Interface (1.3.4)

- **Graphical User Interface, or GUI,** makes computers easier to operate by using pictures and icons to represent files and programs. GUIs allow computer users to point at pictures and icons and then click the icon to manipulate that program or file, thus the phrase point-and-click.

Systems Development (1.3.5)

- **Common Steps in Systems Development:** Computer programs and systems don't appear out of thin air; there are a series of procedures that are normally followed. The table below describes common procedures that are followed when developing computer programs.

Stage	Description
Define Requirements	Determine the purpose of the system, all inputs, outputs, and control mechanisms.
Feasibility Study	Determine if the system is practical.
System Design and Cost	Create an action plan or blueprint for creating the system, and determine how much the system will cost.
Programming/Product Development	Write the programs necessary for the system using a high-level programming language. Purchase any hardware required by the system.
Testing	Test the completed system using real data to identify bugs.
Implementation	Install the completed system and put it to use.
Training	Train users on how to use or operate the new system.
Monitoring and Maintenance	Problems usually arise soon after implementation that must be corrected. Computer systems often require upgrades and routine maintenance.

Networks (1.4)

LAN, WAN (1.4.1)

- **Understanding Types of Networks (1.4.1.1):**
LAN: Stands for Local Area Network and connects computers in the same geographic area or building, using cables.
WAN: Stands for Wide Area Network and connects computers across a large geographic area.
Client/Server Network: Files are stored on a single central computer, or server. More secure and expensive.

- **Network Advantages (1.4.1.2):** There are plenty of advantages in using a network:

Share Information: Networks allow you to share files and programs between everyone in the network.

Share Equipment: Computers connected to a network can share equipment to reduce costs. For example, rather than buying a printer for each computer, everyone can share one central network printer.

Use Network Software: Software designed for networks lets people send and receive electronic mail (e-mail) with other users on the network, schedule meetings with other users on the network, and share databases.

Intranet, Extranet (1.4.2)

- **Intranet (1.4.2.1):** An Intranet is a smaller version of the Internet that works within a company or organization.
- **Extranet (1.4.2.2):** A smaller version of the Internet that allows access to authorized outside users, such as business partners.

The Internet (1.4.3)

- **Internet (1.4.3.1):** The Internet is the largest computer network in the world, connecting millions of computers. People use it for many reasons, such as to make purchases, research information, or send e-mail.
- **World Wide Web (1.4.3.2):** The World Wide Web is a hypertext system that operates over the Internet. The hypertext is read by browsers, which display the web pages from web servers.

The Telephone Network in Computing (1.4.4)

- **Internet (1.4.4.1):** A modem is a device that translates a computer's ones and zeros into audio tones, so that it can transmit information over the phone lines to other modems.

PSTN: PSTN stands for *Public Switched Telephone Network*, and is nothing more than your everyday, ordinary telephone system based on copper wires. PSTN is often referred to as POTS, or plain old telephone service.

ISDN: ISDN stands for *Integrated Services Digital Network*. It's one of the older broadband connections. It's only twice as fast as a traditional modem and pretty much obsolete.

ADSL: ADSL (*Asymmetric Digital Subscriber Line*) modems take advantage of unused frequencies in the phone line, such as a pause in conversation.

- **Telephone Network Terms (1.4.4.2):** There are some terms you should know when signing up for Internet service over your telephone line.

Analog: Converts a computer's ones and zeros to tones that can then be transmitted over standard phone lines.

Digital: Uses binary ones and zeros to transmit data like a computer. Digital modems can transmit information much faster than analog modems.

Modem: A modem is a device that translates a computer's ones and zeros into audio tones, so that it can transmit information over the phone lines to other modems.

Transfer Rate: The transfer rate is measured in bits per second (kbit/s), or baud. Many dial-up modems transfer at 56 kbit/s.



Internet Explorer Screen

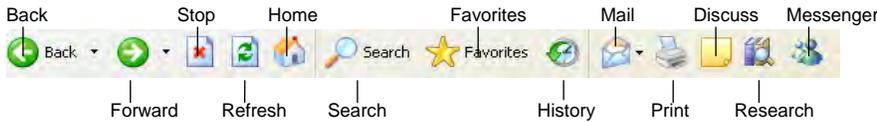


Keyboard Shortcuts

General

Help	<F1>
Toggle between full and regular sized windows	<F11>
Move to the next Web page item	<Tab>
Move to the last Web page item	<Shift> + <Tab>
Home Page	<Alt> + <Home>
Next Page	<Alt> + <→>
Previous Page	<Alt> + <←> or <Backspace>
Find on this Page	<Ctrl> + <F>
Refresh the Page	<F5>
Stop Download	<Esc>
New Location	<Ctrl> + <L>
New Window	<Ctrl> + <N>
Favorites Bar	<Ctrl> + <I>
Search Bar	<Ctrl> + <E>
History Bar	<Ctrl> + <H>
Switch Between Applications	<Alt> + <Tab>

Using the Application (7.1)



Concepts/Terms (7.1.1)

- Understanding the Internet (7.1.1.1):** The Internet is the largest computer network in the world. It consists of millions of computers all over the planet, all connected to one another.
- Understanding the World Wide Web (WWW) (7.1.1.1):** The World Wide Web is possible because of the Internet. The Web consists of millions of documents that are stored on hundreds of thousands of computers that are always connected to the Internet.
- Understanding Web Addresses (7.1.1.3):** Web addresses consist of four parts: a protocol, a domain name, a resource to be located, and an extension.

<http://www.customguide.com/index.htm>

Protocol	Domain Name	Resource	Extension
----------	-------------	----------	-----------

- Web Browser (7.1.1.4):** A Web browser is a program that allows your computer to view and navigate the World Wide Web.
- Search Engine (7.1.1.5):** Search engines are Web sites that are specially designed to help you find information stored on other sites on the World Wide Web.

Internet Terms (7.1.1.2 and 7.1.1.6):

HTTP: HTTP stands for *Hypertext Transfer Protocol*. It is a set of rules for transferring files on the World Wide Web.

URL: URL stands for *Uniform Resource Locator*. This is an address for a file that is located somewhere on the Internet.

Hyperlink: A *hyperlink* is a link from one word or image to another. Most commonly, a hyperlink will appear on a page as a blue underlined word or phrase, but they can also be images or animations.

ISP: ISP stands for *Internet Service Provider*. An ISP is a lot like a phone company, except instead of letting you make telephone calls to other people, an Internet Service Provider lets your computer connect to the Internet.

FTP: FTP stands for *File Transfer Protocol*. Much like HTTP, FTP is a set of rules for transferring files on the World Wide Web.

Cookie: A *cookie* consists of one or more pieces of information that are stored as text files on your computer. A Web server sends the cookie and the browser stores it.

- Cache:** You automatically request files when you look at a Web page. These files are stored in a cache. A *cache* is a temporary storage location in a subdirectory of your browser's main directory.

Address Bar

Move to Address Bar or Select Text	<Alt> + <D>
Display Typed Addresses	<F4>
Move cursor	<Ctrl> + <Z>
Cut	<Ctrl> + <X>
Add "www." and ".com" to typed text	<Ctrl> + <Enter>
Move through AutoComplete matches	<↑> + <↓>

Favorites

Add to Favorites	<Ctrl> + <D>
Organize Favorites	<Ctrl> +
Move item up	<Alt> + <↑>
Move item down	<Alt> + <↓>

Editing

Cut	<Ctrl> + <X>
Copy	<Ctrl> + <C>
Paste	<Ctrl> + <V>
Select all items	<Ctrl> + <A>

Security Considerations (7.1.2)

- **Understanding Secure Web Sites (7.1.2.1):**
Secure Web Site: Contains information not available to everyone.
User Name: A name, either assigned or chosen by the user, that a person must enter along with a password to gain access to a secure Web site.
Password: A group of characters (usually 4-16 depending on the site) used to determine whether or not the user trying to gain access to a secure Web site is who they claim to be.
- **Digital Certificate (7.1.2.2):** A digital certificate is like an online credit card that holds all of your information and presents it when you are conducting online business or any other online transaction that requires your personal information.
- **Encryption (7.1.2.3):** When you encrypt something, you are putting it into a code that only authorized people can understand. This prevents unauthorized users from accessing personal or confidential information.
- **Understanding Viruses (7.1.2.4):** A virus is a small computer program created by a malicious programmer for the purpose of damaging other computers. Most viruses are programmed to reproduce and infect more computers through file sharing, networks, or e-mail messages. The best way to prevent a virus infection is to install a virus-scanning program on your computer, so that viruses are detected before they attack your computer.
- **Understanding Fraud (7.1.2.5):** There is an increased risk of credit card fraud when making purchases online. There is a lot of personal information floating around out there in cyberspace and hackers are chomping at the bit to get a hold of your money.
- **Understanding Firewalls (7.1.2.6):** A *firewall* is a group of related programs that protect a private network from users from other networks.

First Steps with the Web Browser (7.1.3)

- **To Open Internet Explorer (7.1.3.1):** Click the **Start button** and select **Internet Explorer** from the menu.
- **To Change Your Home Page (7.1.3.2):** Go to the Web page that you want to set as your home page, select **Tools** → **Internet Options** from the menu and click the **Use Current button**. Or, type the address into the Address text box that appears in the Home page section.
- **To Display a Specific Web Page in a New Window (7.1.3.3):** Press **<Ctrl> + <N>**.
- **To Stop the Transfer of Web Page Information (7.1.3.4):** Click the  **Stop button** on the toolbar or press **<Esc>**.
- **To Refresh a Web Page (7.1.3.4):** Click the  **Refresh button** on the toolbar.
- **To Get Help (7.1.3.6):** Press **<F1>** to open the Microsoft Internet Explorer help window, type your question and press **<Enter>**.

Adjust Settings (7.1.4)

- **To Display or Hide a Toolbar (7.1.4.1):** Select **View** → **Toolbars** from the menu, or right-click a toolbar, and select the toolbar you want to view or hide.
- **To Display or Hide Web Page Images (7.1.4.2):** Select **Tools** → **Internet Options** from the menu and click the **Advanced** tab. Scroll down to the **Multimedia** section. Check or uncheck the multimedia elements that you want to show or hide. When you're finished, click **OK**.
- **To Return to a Web Address You Manually Typed into the Address Bar (7.1.4.3):** Click the  **Address bar** list arrow and select the desired Web address from the list of previously visited URLs.
- **To Delete the History of Visited Web Pages (7.1.4.4):** Select **Tools** → **Internet Options** from the menu. If necessary, click the **General** tab. In the History section, click the **Clear History button**. Click **Yes**. Then click **OK** to close the Internet Options dialog box.

Web Navigation (7.2)

Accessing Web Pages (7.2.1)

- **To Display a Specific Web Page (7.2.1.1):** Type the Web address in the Address bar and press **<Enter>**.
- **To Use a Hyperlink (7.2.1.2):** Click the hyperlink with the  pointer.
- **To Go Back and Forward Between Pages (7.2.1.3):** To go to the previous page, click the **Back button** on the toolbar. To go to the next page, click the **Forward button** on the toolbar.
- **To Complete a Web-based Form (7.2.1.4):** Enter the required information into the form. Click the **Submit button** when finished.

Using Bookmarks (7.2.2)

- **To Add a Web Page to Favorites (7.2.2.1):** Right-click anywhere on the Web page and select **Add to Favorites** from the shortcut menu.
- **To Go to a Favorite Web Page (7.2.2.2):** Select **Favorites** from the menu bar and then select the Web page you want to view from the menu.

Organizing Bookmarks (7.2.3)

- **To Create a New Favorite Folder (7.2.3.1):** Select **Favorites** → **Organize Favorites** from the menu. Click the **Create Folder button**. Rename the folder.
- **To Add Web Pages to a Favorite Folder (7.2.3.2):** Click and drag the Web page so that it is positioned over the desired folder. Then, release the mouse button.
- **To Delete a Web Page from your Favorites List (7.2.3.3):** Select the Web page and click the **Delete button**.

Web Searching (7.3)

Using a Search Engine (7.3.1)

- **To Select a Search Engine (7.3.1.1):** Type the Web address for the Search Engine in the Address bar and press **<Enter>**.
- **To Perform a Search (7.3.1.2):** Type the word or phrase you want to search for in the Web page's **Search** text box and press **<Enter>**.
- **To Perform an Advanced Search (7.3.1.3):** Click the search engine's **Advanced** or **Advanced Search** hyperlink. Enter the desired selection criteria into the appropriate text boxes. Click the **Search button**.
- **To Copy Data from a Web Page (7.3.1.4):** Select the item, press **<Ctrl> + <C>**, and paste the data.
- **To Save a Web Page (7.3.1.5):** Select **File** → **Save As** from the menu. Type a name in the File name text box. Click the **Save button**.
- **To Download a File (7.3.1.6):** Right-click the file and select **Save Target As** from the shortcut menu. Specify where to save the file, click **OK**.

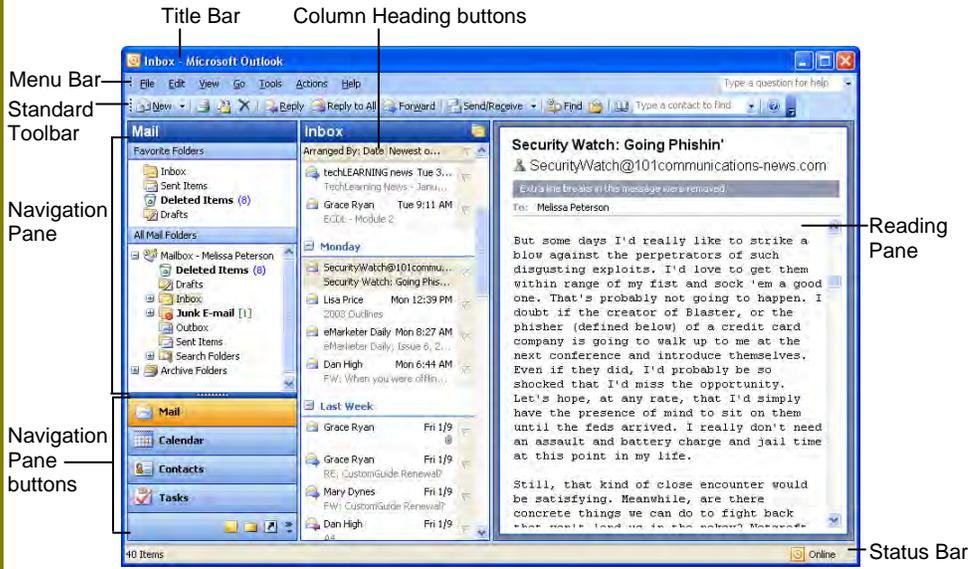
Preparation (7.3.2)

- **To Preview a Web Page: (7.3.2.1):** Select **File** → **Print Preview** from the menu.
- **To Change Page Orientation and Paper Size (7.3.2.2):** Select **File** → **Page Setup** from the menu and select the **Portrait** or **Landscape** orientation. Or click the **Size** list arrow and select a paper size from the list.
- **To Adjust Page Margins (7.3.2.3):** Select **File** → **Page Setup** from the menu and adjust the margins.

Printing (7.3.3)

- **To Change Print Output Options (7.3.3.1):** Select **File** → **Print** from the menu. Change the options in the Print dialog box.

Outlook 2003 Screen



The Navigation Pane



Contains mail-related folders, like your Inbox, Sent Items, and Search Folders. Use the Favorite Folders section at the top of the pane for easy access to frequently-used mail folders.



Enables you to view and schedule appointments, events, and meetings. View shared calendars and compare calendars by viewing them side by side.



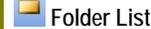
Use to store and keep track of addresses, phone numbers, and e-mail addresses.



Use to organize to-do lists by priority, track task progress, and delegate tasks.



Use like electronic Post-It® Notes to jot down information.

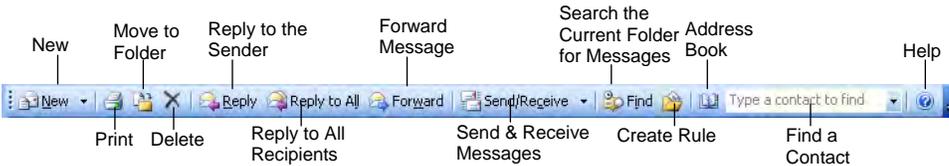


Displays a list of all your Outlook folders in the Navigation pane.



Add shortcuts to folders and locations in Outlook for quick access.

Using the Application (7.4)



Concepts/Terms (7.4.1)

Understanding E-mail Addresses (7.4.1.1):

E-mail addresses consist of three parts: a User Name, a Domain Name, and a Top Level Domain (TLD):

janedoe@anybusiness.com

User Name Domain Name Top Level Domain (TLD)

Understanding the Advantages of E-mail (7.4.1.2):

E-mail is fast. Most Web based e-mail is free and can be accessed anywhere there is a computer with an Internet connection.

Understanding netiquette (7.4.1.3):

Subject fields should be accurate so that the receiver is aware of the subject of a message before they even open it. Be brief with e-mail responses. Check spelling so that your e-mail is professional, and to prevent confusion.

Security Considerations (7.4.2)

Understanding Spam (7.4.2.1):

Spam is an unsolicited e-mail that was sent in bulk and without discrimination. Spams are usually commercial in nature. Most e-mail applications on the market these days contain features that allow you to filter e-mail content or to block the sender.

Understanding Viruses (7.4.2.2):

A virus is a program created by a programmer for the purpose of damaging other computers. Viruses are programmed to infect other computers through file sharing, networks, or e-mail.

Understanding Digital Signatures (7.4.2.3):

Attach digital signatures to documents and electronic messages in order to authenticate the sender and protect sensitive data.

First Steps with E-mail (7.4.3)

To Open the Inbox (7.4.3.2): Click the **Mail button** in the Navigation pane. Click the **Inbox** folder in the All Mail Folders section.

To Open a Message (7.4.3.3): Open the Inbox and click the message you want to read. Or double-click the message to open it in a window.

To Switch Between Open Messages (7.4.3.4): Click the message window's button on the Windows taskbar.

To Close a Message (7.4.3.5): Click the Close button on the title bar.

To Get Help (7.4.3.6): Press **<F1>** to open the Help task pane, type your question and press **<Enter>**.

Adjust Settings (7.4.4)

To Add a Field Heading (7.4.4.1): Right-click the column header, select **Field Chooser** from the shortcut menu, and drag the field name you want to the column heading row.

To Remove a Field Heading (7.4.4.1): Click and drag the **field heading** away from the column heading row until an X appears through it. Then, release the mouse button.

To View or Hide a Toolbar (7.4.4.2): Select **View → Toolbars** from the menu, or right-click a toolbar, and select the toolbar you want to view or hide.

Keyboard Shortcuts

Save	<Ctrl> + <S>
Print	<Ctrl> + <P>
Undo	<Ctrl> + <Z>
Cut	<Ctrl> + <X>
Copy	<Ctrl> + <C>
Paste	<Ctrl> + <V>
Check Spelling	<F7>
Check for Mail	<Ctrl> + <M> or <F9>
Save, Close, and Send	<Alt> + <S>
Reply	<Ctrl> + <R>
Reply to All	<Alt> + <L>
Address Book	<Ctrl> + <Shift> +
Help	<F1>
Switch Between Applications	<Alt> + <Tab>
New Item	<Ctrl> + <N>
New Message	<Ctrl> + <Shift> + <M>
New Appointment	<Ctrl> + <Shift> + <A>
New Contact	<Ctrl> + <Shift> + <C>
New Note	<Ctrl> + <Shift> + <N>
New Task	<Ctrl> + <Shift> + <K>

Messaging (7.5)

Read a Message (7.5.1)

- **To Flag a Message for Follow-Up (7.5.1.1):** Right-click the message and select **Follow Up** from the shortcut menu and select a flag color. Or, select **Add Reminder** from the shortcut menu and select a type of flag and due date in the dialog box. Click **OK** to apply the flag.
- **To Clear a Flagged Message (7.5.1.1):** Right-click the message and select **Follow Up** → **Clear Flag** from the shortcut menu.
- **To Mark an E-mail Message as Read or Unread (7.5.1.2):** Select an e-mail message from the Inbox. Select **Edit** from the menu and then choose an e-mail message status option.
- **To Open and Save an Attachment (7.5.1.3):** Double-click the attachment at the top of the message screen and save the open attachment.

Reply to a Message (7.5.2)

- **To Reply to the Message Sender (7.5.2.1):** Click the message, click the  **Reply button**, type your reply, and click the  **Send button** or press **<Alt> + <S>**.
- **To Reply to All Message Recipients (7.5.2.1):** Click the message, click the  **Reply to All button**, type your reply, and click the  **Send button** or press **<Alt> + <S>**.
- **To Delete the Original Message Copy (7.5.2.2):** Select the original message text and press the **<Delete>** key.

Send a Message (7.5.3)

- **To Create a Message (7.5.3.1 - 7.5.3.4):**
 1. Click the  **New button** or press **<Ctrl> + <N>**.
 2. Enter the e-mail address(es) in the **To:** box, or click the  **To button** to use the address book.
 3. Click the  **Cc: button** and enter the e-mail address(es) for whom you want to send a copy of the message.
 4. Enter the subject of the message in the **Subject** box.
 5. Enter the text of your message in the body of the message.
 6. Click the  **Send button** or press **<Alt> + <S>**.
- **To Send a Blind Carbon Copy (Bcc) (7.5.3.3):** Select **View** → **Bcc Field** from the menu. Click the  **Bcc: button** and enter the e-mail address(es) for whom you want to send a blind copy of the message.
- **To Check Your Spelling (7.5.3.5):** Select **Tools** → **Spelling** from the menu, or press **<F7>**.
- **To Attach a File (7.5.3.6):** Create a new message, click the  **Attach button** on the Standard toolbar in the Message window, select the file you want to send, and click **Insert**.
- **To Change a Message's Options (7.5.3.7):** Click the  **Options button** on the Standard toolbar in the Message window to specify:
 - + The level of importance of the message.
 - + The level of sensitivity of the message.
 - + Where replies should be sent to.
 - + If you want a read receipt to be delivered when the message is opened.
 - + If you want to encrypt the message.
- **To Send a Message Using a Distribution List (7.5.3.8):** Click the **New Mail Message button**. Click the **To button**. Click the **Show Names from the list arrow** and select **Contacts**, if necessary. Click the name of any distribution list in the Name list and click the **To button**. Then, click **OK**.
- **To Forward a Message (7.5.3.9):** Click the message, click the  **Forward button**, enter the e-mail address(es) in the **To:** box, enter additional comments in the body area of the message, and click the  **Send button** or press **<Alt> + <S>**.

Duplicate, Move, Delete (7.5.4)

- **To Duplicate (7.5.4.1 and 7.5.4.2):** Select the text or image. Click the  **Copy button** on the Standard toolbar, click where you want to add the duplicate text or image, and click the  **Paste button** on the Standard toolbar. Or, press **<Ctrl> + <C>** (copy) and **<Ctrl> + <V>** (paste).
- **To Move (7.5.4.1):** Select the text or image. Click the  **Cut button** on the Standard toolbar, click where you want to move the text or image and click the  **Paste button** on the Standard toolbar. Or, press **<Ctrl> + <X>** (cut) and **<Ctrl> + <V>** (paste).
- **To Delete Text (7.5.4.3):** Select the text and press the **<Delete>** key.
- **To Delete an Attachment (7.5.4.4):** Select the attachment and press the **<Delete>** key.

Mail Management (7.6)

Using Address Books (7.6.2)

- **To Create a Distribution List (7.6.2.1):** Click the  **New button list arrow** and select  **Distribution List**. Click **Select Members**, select a name in the list, click the **Members button** and repeat for each name to be added. Click **OK** and click **Save and Close**.
- **To Create a New Contact (7.6.2.2):** Click the  **New button** or press **<Ctrl> + <N>**.
- **To Delete a Contact (7.6.2.3):** Select the contact and press **<Delete>**.
- **To Add a Mail Contact (7.6.2.3):** Right-click the sender's address and select **Add to Outlook Contacts** from the shortcut menu.

Organizing Messages (7.6.3)

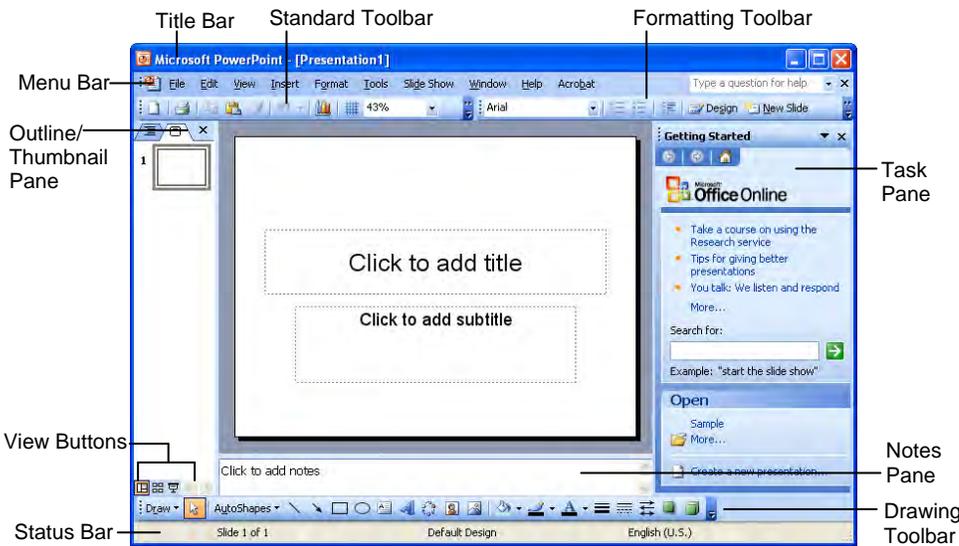
- **To Find a Message (7.6.3.1):** Click the  **Find button** on the toolbar. Enter the text you want to search for in the **Look for** text box. Check the **Search all text in the message** check box to search the actual text in your e-mail messages. Click the **Find Now button**.
- **To Create a New Folder (7.6.3.2):** Select **File** → **New** → **Folder** from the menu. Enter the folder's name in the **Name** text box. Specify what you want to keep in the new folder by making a selection from the **Folder contains** list. Specify where you want to keep the new folder by clicking the appropriate folder's icon. Click **OK**.
- **To Move an Item to a Different Folder (7.6.3.3):** Select the item, click the  **Move to Folder button** and select the destination folder. Or click and drag the item to the destination folder.
- **To Sort Messages:** Click the **column heading** you want to use to sort the Inbox.
- **To Delete a Message (7.6.3.5):** Select the message and press the **<Delete>** key.
- **To Restore a Deleted Message (7.6.3.6):** Find the message you just deleted, click the **Move to Folder button** on the toolbar, and select the **Move to Folder** option. Select **Inbox** and click **OK**.
- **To Empty the Deleted Items Folder (7.6.3.7):** Right-click the **Deleted Items button** on the Outlook Bar, select **Empty "Deleted Items" Folder** from the shortcut menu, and click **Yes**.

Prepare to Print (7.6.4)

- **To Preview an E-mail Message (7.6.4.1):** Select **File** → **Print Preview** from the menu.
- **To Change Print Output Options (7.6.4.2):** Select **File** → **Print** from the menu. Change the options in the Print dialog box.
- **To Print an E-mail Message (7.4.6.2):** Click the **Print button** on the toolbar to print using default settings.



PowerPoint 2003 Screen



Keyboard Shortcuts

General

- Open a Presentation <Ctrl> + <O>
- Save a Presentation <Ctrl> + <S>
- Print a Presentation <Ctrl> + <P>
- Close a Presentation <Ctrl> + <W>
- Undo <Ctrl> + <Z>
- Redo or Repeat <Ctrl> + <Y>
- New Slide <Ctrl> + <M>
- Help <F1>
- Switch Between Applications <Alt> + <Tab>

Navigation

- The Previous Slide <Page Up>
- The Next Slide <Page Down>
- The First Slide <Ctrl> + <Home>
- The Last Slide <Ctrl> + <End>

Slide Show Delivery

These shortcut keystrokes only work in Slide Show view.)

- End Slide Show <Esc>
- Display Specific Slide <Slide #> + <Enter>
- Toggle Screen Black
- Toggle Screen White <W>
- Pause Automatic Show <S>
- Show/Hide Pointer <A>
- Change Arrow to Pen <Ctrl> + <P>
- Change Pen to Arrow <Ctrl> + <A>
- Erase Screen Doodles <E>

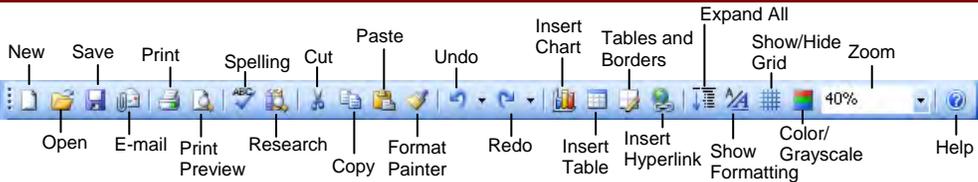
Editing

- Cut <Ctrl> + <X>
- Copy <Ctrl> + <C>
- Paste <Ctrl> + <V>
- Find <Ctrl> + <F>
- Replace <Ctrl> + <H>
- Select All <Ctrl> + <A>
- Duplicate <Ctrl> + <D>

Formatting

- Bold <Ctrl> +
- Italic <Ctrl> + <I>
- Underline <Ctrl> + <U>

Using the Application (6.1)



First Steps with Presentations (6.1.1)

- **To Open PowerPoint (6.1.1.1):** Click the **Start button** select **All Programs** and select **Microsoft Office PowerPoint 2003**.
- **To Open a Presentation (6.1.1.2):** Click the **Open button** on the Standard toolbar, or select **File** → **Open** from the menu, or press <Ctrl> + <O>.
- **To Create a New Presentation (6.1.1.3):** Click the **New button** on the Standard toolbar or select **File** → **New** from the menu.
- **To Save a Presentation (6.1.1.4):** Click the **Save button** on the Standard toolbar, or select **File** → **Save** from the menu, or press <Ctrl> + <S>.
- **To Save a Presentation with a Different Name (6.1.1.5):** Select **File** → **Save As** from the menu and enter a different name for the presentation.
- **To Save a Presentation in a Different File Type (6.1.1.6):** Select **File** → **Save As** from the menu, click the **Save as type** list arrow and select a file type from the list. (4.1.1.7): Click the worksheet tab.

- **To Switch Between Open Presentations (6.1.1.7):** Select **Window** from the menu bar and select the presentation you want to work on.
- **To Get Help (6.1.1.8):** Press <F1> to open the Help task pane, type your question and press <Enter>.
- **To Close a Presentation (6.1.1.9):** Click the **Close button** on the menu bar or select **File** → **Close** from the menu.

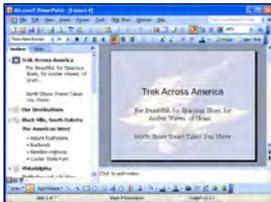
Adjust Settings (6.1.2)

- **To Use Zoom (6.1.2.1):** Click the **Zoom** list arrow on the Standard toolbar and select a magnification from the list.
- **To View or Hide a Toolbar (6.1.2.2):** Select **View** → **Toolbars** from the menu and select the toolbar you want to view or hide.
- **To Change the User Name (6.1.2.3):** Select **Tools** → **Options** from the menu and click the **General** tab. Enter the user name in the User information section.
- **To Change the Default Directory (6.1.2.3):** Select **Tools** → **Options** from the menu and click the **Save** tab. Enter the location where you want to save the files in the **Default file location** text box.

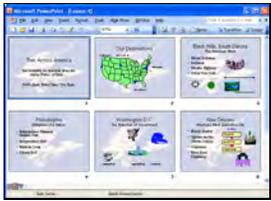
Developing a Presentation (6.2)

Presentation Views (6.2.1)

Understanding Presentation View Modes (6.2.1.1):



 **Normal View** includes panes for your presentation's outline, the current slide, and any notes for that slide. You will probably spend more time in Normal view than in any other view.

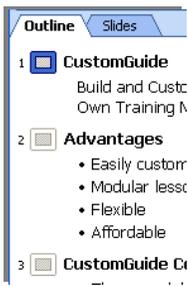


 **Slide Sorter View** displays all the slides in your presentation as *thumbnails* (itty-bitty pictures). Use Slide Sorter view when you want to rearrange the slides in your presentation and add transition effects between them.



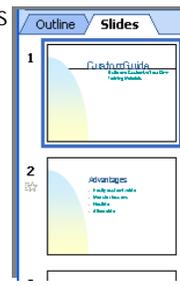
 **Slide Show View** displays your presentation as an electronic slide show. Use Slide Show view when you want to deliver your presentation.

Outline Tab



This tab focuses on the content of your presentation instead of its appearance. Use this when you want to develop your presentation

Slides Tab



This tab displays the slides in a presentation as thumbnails, making it easy to navigate through slides in your presentation. You can also rearrange, add,

- **To Switch Views (6.2.1.2):** Click one of the **view buttons** on the horizontal scroll bar or click the View menu and select a view from the menu.

Slides (6.2.2)

- **To Insert a Slide (6.2.2.1):** Click the  **New Slide** button on the Formatting toolbar or press **<Ctrl> + <M>** and select a layout you want to use in the task pane.
- **To Change Slide Layout (6.2.2.2):** Select **Format** → **Slide Layout** from the menu. Select a new layout from the Slide Layout task pane.
- **To Change the Slide Background (6.2.2.3):** Select **Format** → **Background** from the menu, select a color or fill effect from the Background Fill list arrow, and click **Apply** or **Apply to All**.

Using Design Templates (6.2.3)

- **To Apply a Design Template (6.2.3.1):** Click the  **Slide Design** button on the Formatting toolbar and select the template you want to use from the Slide Design task pane.
- **To Change the Design Template (6.2.3.2):** Click the  **Slide Design** button on the Formatting toolbar and select a different design from the Slide Design task pane.

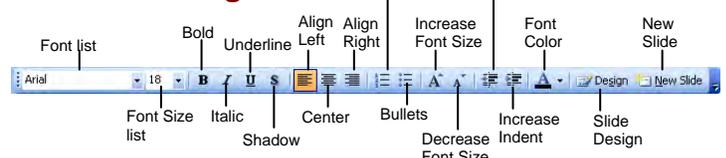
Master Slide (6.2.4)

- **To Edit the Slide Master (All Formatting Elements in a Presentation at Once) (6.2.4.1):** Select **View** → **Master** → **Slide Master** from the menu. Make changes to the slide layout as necessary.
- **To Enter Text in the Slide Footer (6.2.4.2):** Select **View** → **Header and Footer** from the menu. Click in the Footer text box and enter text. Click **Apply** to add to the current slide, click **Apply to All** to add to all slides.
- **To Enter Data in the Footer (6.2.4.3):** Select **View** → **Header and Footer** from the menu. Click the check box for the information you want to add:
 - Date and time:** Displays the date and time. Select the Fixed option to enter a static date.
 - Slide Number:** Displays the slide number. Click **Apply** (to apply the header and/or footer to the current slide) or **Apply to All** (to apply the header and/or footer to the entire presentation).



Text and Images (6.3)

The Formatting Toolbar

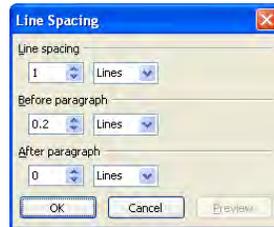


Text Input, Formatting (6.3.1)

- **To Edit Slide Content (6.3.1.2):** Click where you want to begin inserting new content and begin typing.
- **To Format Font Size and Type (6.3.1.3):** Select the text and change the font size by selecting the pt. size from the **12** **Font Size** list. Change the font type by selecting a font from the **Times New Roman** **Font** list on the Formatting toolbar.
- **To Format Selected Text (6.3.1.4):** Select the text and change the style of text by clicking the **B** **Bold** button, **I** **Italic** button, or **U** **Underline** button on the Formatting toolbar.
- **To Change Case (6.3.1.5):** Select the text you want to change. Select **Format** → **Change Case** from the menu. Select the case you want to change the text to in the Change Case dialog box and click **OK**.
- **To Change Text Color (6.3.1.6):** Select the text you want to change. Select **Format** → **Font** from the menu, click the **Color** list arrow and select a color in the Font dialog box. Or, click the  **Font Color** list arrow on the Formatting toolbar and select a color.
- **To Apply Shadow Effect to Text (6.3.1.7):** Select the text you want to apply formatting to. Click the **S** **Shadow** button on the Formatting toolbar, or select **Format** → **Font** from the menu and click the **Shadow** check box. Click **OK**.
- **To Change Paragraph Alignment (6.3.1.8):** Select the paragraph(s) and click the appropriate alignment button ( Align Left,  Align Center, or  Align Right) on the Formatting toolbar.

• To Adjust Line Spacing (6.3.1.9):

Select **Format** → **Line Spacing** from the menu. Change the amount in the **Before paragraph** section to adjust the amount of space before a bulleted or numbered item. Change the amount in the **After paragraph** section to adjust the amount of space after a bulleted or numbered item.



• **To Change the Bullet or Number List Style (6.3.1.10):** Select the bulleted or numbered list. Select **Format** → **Bullets and Numbering** from the menu. Click the tab of the list you want to change. Select a new bullet or number style and click **OK**.

• **To Use Undo or Redo (6.3.1.11):** To undo the last command, click the **Undo** button on the Standard toolbar, or press **<Ctrl> + <Z>**. To redo the last command, click the **Redo** button on the Standard toolbar, or press **<Ctrl> + <Y>**.

Pictures, Images (6.3.2)

• **To Insert a Picture (6.3.2.1):** Select **Insert** → **Picture** → **From File** from the menu, select the file, and click **Insert**.

• **To Insert a Clip Art Graphic (6.3.2.2):** Select **Insert** → **Picture** → **Clip Art** from the menu, type a name in the **Search for** box or select a clip art category from the task pane, and click to select and insert the graphic.

Duplicate, Move, Delete (6.3.3)

• **To Duplicate (6.3.3.1):** Select the text or image. Click the **Copy** button on the Standard toolbar, click where you want to add the duplicate text or image and click the **Paste** button on the Standard toolbar. Or, press **<Ctrl> + <C>** (copy) and **<Ctrl> + <V>** (paste).

• **To Move (6.3.3.2):** Select the text or image. Click the **Cut** button on the Standard toolbar, click where you want to move the text or image and click the **Paste** button on the Standard toolbar. Or, press **<Ctrl> + <X>** (cut) and **<Ctrl> + <V>** (paste).

• **To Resize an Object (6.3.3.3):** Click the object to select it and drag the object's sizing handles until the shape reaches the desired size. Hold down the **<Shift>** key while you drag to resize the object proportionally.

• **To Delete an Object (6.3.3.4):** Click the object to select it and press the **<Delete>** key.

Charts/Graphs, Drawn Objects (6.4)

Using Charts/Graphs (6.4.1)

• **To Create a Chart (6.4.1.1):** Click the **Insert Chart** button on the Standard toolbar. Enter chart data in the chart datasheet.

• **To Change a Chart Background (6.4.1.2):** Select the chart. Click the **Format Objects** button on the Chart toolbar. Click the **Patterns** tab and select a color from the Area section or click the **Fill Effects** button and select a background from the Fill Effects dialog box.

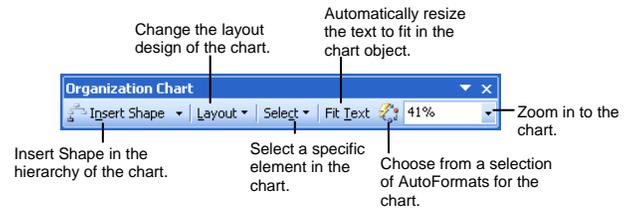
• **To Change Chart Object Colors (6.4.1.3):** Click the chart object you want to change, or click the **Chart Area** dropdown. Click the **Chart Objects** list arrow on the Chart toolbar and select a chart object from the list. Click the **Format Objects** button on the Standard toolbar. Change the color of the object in the Area section of the Format Data Series dialog box.

• **To Change Chart Type (6.4.1.4):** Select the chart. Click the **Chart Type** button list arrow on the Standard toolbar and select a chart type from the list.

Organization Charts (6.4.2)

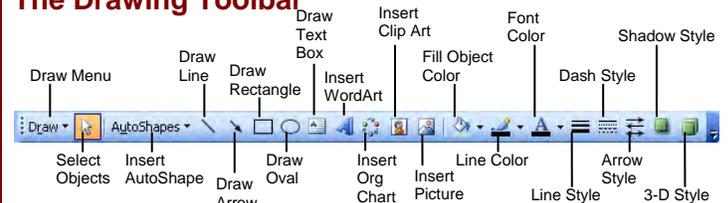
• **To Create an Organization Chart (6.4.2.1):** Select **Insert** → **Picture** → **Organization Chart** from the menu.

• **To Change an Organization Chart (6.4.2.2):** Use the Organization Chart toolbar to modify the structure of an organization chart.
To Move a Box: Click the box you want to move. Drag the **box** to its new position and release the mouse button.



• **To Remove Organization Chart Boxes (6.4.2.3):** Click the box to select it and press the **<Delete>** key.
To Add a Box to an Organization Chart: On the organization chart, click the location where you want to add your new box. Click the **Insert Shape** button on the Organization Chart toolbar and select the type of shape you want to insert. Enter the text in the new box and click outside the box when you're finished.

The Drawing Toolbar



Drawn Objects (6.4.3)

• **To Draw an Object (6.4.3.1):** Click the object you want to draw on the Drawing toolbar and draw your shape by clicking on the slide with the + pointer and dragging until the shape reaches the desired size. Hold down the **<Shift>** key while you drag to draw a perfectly proportioned shape.

• **To Add a Text Box (6.4.3.1):** Click the **Text Box** button on the Drawing toolbar and click with the + pointer and drag until the shape reaches the desired size. Then click in the box and start typing.

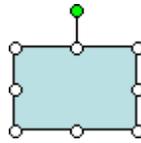
• **To Format a Drawing Object (6.4.3.2):** Select the object and select **Format** → **AutoShape** from the menu, or right-click the object you want to format and select **Format AutoShape** from the shortcut menu. Format the background color of the shape in the Fill area of the dialog box. Format the properties of the line or the outline of the shape in the Line section of the dialog box.



• **To Change Arrow Style (6.4.3.3):** Select the line, then click the **Arrow Style** button on the Drawing toolbar and select the arrow style you want.

• **To Add a Shadow (6.4.3.4):** Select the object, click the **Shadow** button on the Drawing toolbar, and select the shadow effect you want to use.

- **To Rotate an Object by 90 Degrees (6.4.3.5):** Select the object, click the **Draw** button on the Drawing toolbar, select **Rotate or Flip**, and select **Rotate Right 90°** or **Rotate Left 90°**.



To Free Rotate an Object: Select the object and click and drag the object's green free rotate handle to rotate the object.

- **To Flip an Object (6.4.3.5):** Select the object, click the **Draw** button on the Drawing toolbar, select **Rotate or Flip**, and select **Flip Horizontal** or **Flip Vertical**.
- **To Align an Object (6.4.3.6):** Select the object(s) that you want to align. Click the **Draw** button on the Drawing toolbar, select **Align or Distribute**, and select the **Relative to Slide** option. Click the **Draw** button on the Drawing toolbar, select **Align or Distribute**, and select how you want to align or distribute the selected objects in relation to the slide.
- **To Resize an Object (6.4.3.7):** Click the object or chart to select it and drag its sizing handles until the shape reaches the desired size. Hold down the **<Shift>** key while you drag to resize the object proportionally. Or, right-click the object and select **Format Picture** from the shortcut menu. Click the **Size** tab and change the size of the object.
- **To Layer Objects (6.4.3.8):** Select the object. Right-click the object, select **Order** and select **Bring to Front** or **Send to Back** from the shortcut menu.

Duplicate, Move, Delete (6.4.4)

- **To Duplicate an Object (6.4.4.1):** Select the object. Click the **Copy** button on the Standard toolbar, click where you want to add the duplicate object and click the **Paste** button on the Standard toolbar. Or, press **<Ctrl> + <C>** (copy) and **<Ctrl> + <V>** (paste).
- **To Move an Object (6.4.4.2):** Select the object. Click the **Cut** button on the Standard toolbar, click where you want to move the object and click the **Paste** button on the Standard toolbar. Or press **<Ctrl> + <X>** (cut) and **<Ctrl> + <V>** (paste).
- **To Delete an Object (6.4.4.3):** Click the object to select it and press the **<Delete>** key.

Slide Show Effects (6.5)

Preset Animation (6.5.1)

- **To Add an Animation Scheme (6.5.1.1):** Select **Slide Show** → **Animation Schemes** from the menu and select the animation scheme you want from the task pane.

Transitions (6.5.2)

- **To Add Slide Transitions (6.5.2.1):** Switch to **Slide Sorter View** and select the slide(s) where you want to add a transition. To select multiple slides, hold down the **<Shift>** key as you click each slide. Click the **Transition** **Slide Transition** button on the Slide Sorter toolbar and select the transition effect you want to use from the task pane.



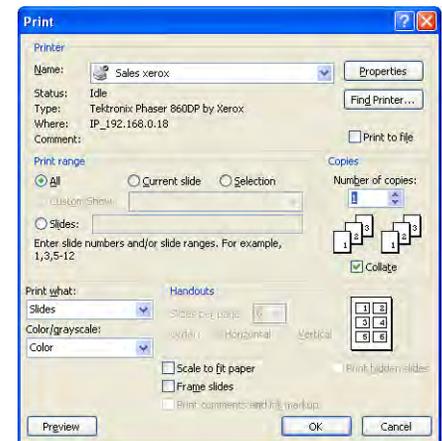
Prepare Outputs (6.6)

Preparation (6.6.1)

- **To Select Output Format (6.6.1.1):** Select **File** → **Page Setup** from the menu. Click the **Slides sized for** list arrow and select the output format of the presentation.
- **To Spell-check a Presentation (6.6.1.2):** Select **Tools** → **Spelling** from the menu.
- **To Add Presentation Notes (6.6.1.3):** Click in the Notes pane in Normal view and enter notes for the slide. Or, select **View** → **Notes Page** from the menu and enter notes in the notes text box.
- **To Change a Slide's Orientation (6.6.1.4):** Select **File** → **Page Setup** from the menu and select Portrait or Landscape.
- **To Change Paper Size (6.6.1.4):** Select **File** → **Page Setup** from the menu and change the paper size.
- **To Duplicate Slides (6.6.1.5):** Select the slide(s). Click the **Copy** button on the Standard toolbar, click where you want to add the duplicate slides and click the **Paste** button on the Standard toolbar. Or press **<Ctrl> + <C>** (copy) and **<Ctrl> + <V>** (paste).
- **To Move Slides (6.6.1.5):** Select the slide(s). Click the **Cut** button on the Standard toolbar, click where you want to move the slides and click the **Paste** button on the Standard toolbar. Or press **<Ctrl> + <X>** (cut) and **<Ctrl> + <V>** (paste).
- **To Delete a Slide (6.6.1.6):** Select the slide in Slide Sorter view or the Slide tab in Normal view. Press **<Delete>** or right-click the slide and select **Delete Slide** from the shortcut menu.

Printing (6.6.2)

- **To Print a Presentation (6.6.2.1):** Click the **Print** button on the Standard toolbar, or select **File** → **Print** from the menu, or press **<Ctrl> + <P>**.
- **To Specify Print Job Options (6.6.2.1):** Open the Print dialog box. To specify which slides to print: Click the **Slides** option and enter the slide numbers or slide range. To print a specific aspect of a presentation: Click the **Print what** list arrow and select Slides, Handouts, Notes Pages, or Outline View from the list.

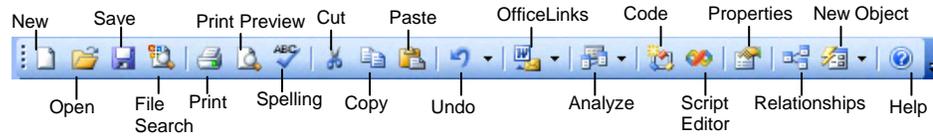


Deliver a Presentation (6.6.3)

- **To Hide/Show Slides (6.6.3.1):** Switch to Slide Sorter view and select the slide(s) you want to hide. To select multiple slides, press and hold down the **<Ctrl>** key as you click each slide. Right-click a slide and select **Hide Slide** from the shortcut menu. The slide is still saved in the presentation, but won't appear in the presentation slide show. Repeat to show the slide.
- **To Present a Slide Show (6.6.3.2):** Click the **Slide Show** **View** button on the horizontal scroll bar.



Using the Application (5.1)

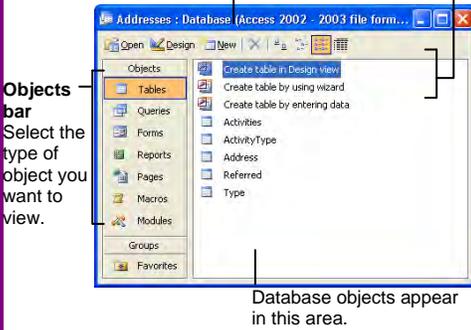


Database Concepts (5.1.1)

Understanding Databases: (5.1.1.1): In its simplest form, a database is a collection of information that is organized into a list.

Understanding Database Objects: (5.1.1.2)

Create a new object by clicking the **New** button... ...or by using a Wizard.



- Tables** store related data in rows (records) and columns (fields).
- Queries** view, filter, calculate, change, sort, and examine the data stored in tables.
- Forms** are custom screens that provide an easy way to enter and maintain data in a table or query.
- Reports** present data from a table or query in a printed format—no data entry.
- Pages** are forms saved as Web pages so that the database can be accessed over the Internet.
- Macros** automate common tasks and can be invoked by clicking a button or pressing a shortcut key.
- Modules** are groups of procedures that are written in Visual Basic used to automate tasks.

- **Understanding primary keys (5.1.1.3)**
Each record in a table should have a primary key that uniquely identifies it and prevents duplicate records. Primary keys are also important in relating tables in a database.
- **Understanding an index (5.1.1.4)**
Indexed fields help Access find and sort information quickly, especially in large tables.

- **Understanding table relationships (5.1.1.5):** When a relationship between tables is established, you can create queries, reports, and forms that include data from multiple tables.
- **Understanding relationship rules (5.1.1.6)** It is important to follow rules, such as don't use duplicate field names, use multiple tables, and break up information as much as possible, to make sure table relationships are valid.

First steps with databases (5.1.2)

- **To Open PowerPoint (5.1.2.1):** Click the **Start** button select **All Programs** and select **Microsoft Office Access 2003**.
- **To Open a Database (5.1.2.2):** Click the **Open** button on the Standard toolbar, or select **File** → **Open** from the menu, or press **<Ctrl> + <O>**.
- **To Create a New Database (5.1.2.3):** Click the **New** button on the Standard toolbar or select **File** → **New** from the menu. Click the **Blank database** link in the New File task pane, give the database a name and click **Create**.
- **To Save a Database (5.1.2.4):** Click the **Save** button on the **Standard** toolbar, or select **File** → **Save** from the menu, or press **<Ctrl> + <S>**.
- **To Get Help (5.1.2.5):** Press **<F1>** to open the Help task pane, type your question and press **<Enter>**.
- **To Close a Database (5.1.2.6):** Click the **Close** button on the Database Window or select **File** → **Close** from the menu.

Adjust settings (5.1.3)

- **To Change Views (5.1.3.1):** Click the **View** button on the toolbar.
- **To View or Hide a Toolbar (5.1.3.2):** Select **View** → **Toolbars** from the menu and select the toolbar you want to view or hide.

Keyboard Shortcuts

General

- Open a Database **<Ctrl> + <O>**
- Close a Database **<Ctrl> + <W>**
- Print Current View **<Ctrl> + <P>**
- Delete **<Delete>**
- Undo **<Ctrl> + <Z>**
- Help **<F1>**
- New Record **<Ctrl> + <+ >**
- Delete Record **<Ctrl> + <- >**
- Save Record **<Shift> + <Enter>**
- Cancel Changes **<Esc>**
- Insert Date **<Ctrl> + < ; >**
- Insert Time **<Shift> + <Ctrl> + <: >**
- Insert Value from Same Field in Previous Record **<Ctrl> + <' > (Apostrophe)**
- Check Spelling **<F7>**
- Switch Between Applications **<Alt> + <Tab>**

Navigation—Go To:

- Next Field **<Tab>**
- Previous Field **<Shift> + <Tab>**
- Next Screen **<Page Down>**
- Previous Screen **<Page Up>**
- First Record **<Ctrl> + <↑ >**
- Last Record **<Ctrl> + <↓ >**

Editing

- Cut **<Ctrl> + <X>**
- Copy **<Ctrl> + <C>**
- Paste **<Ctrl> + <V>**
- Find **<Ctrl> + <F>**
- Replace **<Ctrl> + <H>**
- Select All **<Ctrl> + <A>**

Design View

- Properties **<Alt> + <Enter>**
- Open object in Design View **<Ctrl> + <Enter>**
- Shift focus to a subsection **<Ctrl> + <Tab>**
- Save object **<Ctrl> + <S>**

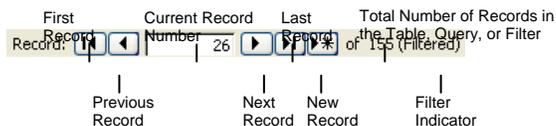
Tables (5.2)

Main Operations (5.2.1)

- **To Create a New Table Using a Wizard (5.2.1.1):** Click **Tables** in the Objects bar and double-click the **Create table by using wizard** icon. Follow the onscreen instructions.
- **To Create a New Table from Scratch (5.2.1.1):** Click **Tables** in the Objects bar and double-click the **Create table in Design view** icon. Type a field name for the first column you want to create in the **Field Name** column, press **<Tab>**, click the **Data Type** list arrow, and select the data type for the field. Repeat as necessary to add new fields to the table. Close the table window, click **Yes** to save the table, enter a table name, and click **OK**.
- **To Add a New Record (5.2.1.2):** Click the **New Record** button on the Navigation bar.
- **To Delete a Record (5.2.1.2):** Select the record and click the **Delete Record** button on the toolbar, or select **Edit** → **Delete Record** from the menu.
- **To Add a Field (5.2.1.3):** In Datasheet view: Right-click a column header and select **Insert Column** from the shortcut menu. In Design view: Enter the field information in an empty row in the top pane of the view.
- **To Modify a Record (5.2.1.4):** Click the field you want to edit and make the changes.
- **To Delete Record Data (5.2.1.5):** Select the data you want to delete and press the **<Delete>** key.
- **To Use Undo (5.2.1.6):** To undo the last command, click the **Undo** button on the Standard toolbar, or press **<Ctrl>** + **<Z>**.
- **To Navigate in a Table (5.2.1.7):** Use the Navigation Bar found on the horizontal scrollbar near the bottom of most windows.

The Navigation Bar

(Found on the horizontal scrollbar near the bottom of most windows.)



- **To Delete a Table (5.2.1.8):** Select the table in the Database Objects dialog box and press **<Delete>**.
- **To Save a Table (5.2.1.9):** Click the **Save** button on the **Standard** toolbar, or select **File** → **Save** from the menu, or press **<Ctrl>** + **<S>**.
- **To Close a Table (5.2.1.9):** Click the **Close** button on the Title bar or select **File** → **Close** from the menu.

Define Keys (5.2.2)

- **To Define a Primary Key (5.2.2.1):** Display the table in Design view, and click in the field that you want to set as the primary key. If such a field doesn't exist you will have to create it. (AutoNumber fields make great primary keys.) Click the **Primary Key** button on the toolbar.
- **To Index a Field (5.2.2.2):** Display the table in Design view, and click a field you want to index. Click the **Indexed** box. Click the list arrow and select one of the following:
 - Yes (Duplicates OK)** if you want to allow multiple records to have the same data in this field.
 - Yes (No Duplicates)** if you want to ensure that no two records have the same data in this field).

Table Design/Layout (5.2.3)

- **To Change Field Properties (5.2.3.1):** Display the table in Design view and click the field in the field list. Click the **Format** box in the Field Properties pane. Click the **Format** list arrow and select a format for the field's data type. The table below displays a description of the formats available for each field data type.

Data Type	Description
Text (Default)	Stores text, numbers, or a combination of both, up to 255 characters long.
Memo	Stores long text entries—up to 64,000 characters long.
Number	Stores numbers that can be used in calculations.
Date/Time	Stores dates, times, or both.
Currency	Stores numbers and symbols that represent money.
AutoNumber	Automatically fills in a unique number for each record.
Yes/No	Stores only one of two values, such as Yes or No.
OLE Object	Stores objects created in other programs, such as a graphic, Excel spreadsheet, or Word document.
Hyperlink	Stores clickable links to Web pages on the Internet or files on a network.
Lookup Wizard	A wizard that helps you create a field whose values are selected from another table, query, or list of values.

- **Understanding Field Size (5.2.3.2):** The Field Size property determines the maximum amount of information that can be stored in a text or number field. There are several reasons you might want to change the size of a field:
 - Changing the field size reduces data entry errors.
 - Access can process smaller field sizes more quickly.
 - Smaller field sizes require less hard drive storage space.
- **To Create a Validation Rule (5.2.3.3):** Display the table in Design view and click the field in the field list. Click the **Validation Rule** box in the Field Properties section. Enter an expression you want to use to validate the field's data. Click the **Validation Text** box in the Field Properties section. Type the text that Access will display when the user tries to enter incorrect data for the field.

Validation Rule	Data Type	Description
<100	Number/Currency	Must be less than 100.
<=100	Number/Currency	Must be equal to or less than 100.
Between 1 and 10	Number	Must be between 1 and 10.
<>0	Number	Must not equal 0.
<01/01/2004	Date/Time	Must be a date before 01/01/2004.
> = Date()	Date/Time	Must be today's date or later.
< = Date()	Date/Time	Must be today's date or earlier.
"Business" Or "Pleasure" Or "Other"	Text	Must be Business or Pleasure or Other.
Like "??"	Text	Must have 2 characters.
Like "####"	Number	Must have 4 numbers.

- **To Change Table Column Width (5.2.3.4):** Display the table in Datasheet view. Place the cursor over the right edge of the column heading, so the cursor appears like this . Click and drag the **column border** to the desired width.
- **To Move a Table Column (5.2.3.5):** Display the table in Datasheet view. Click the **column heading** for the column you want to move. Click and drag the **column heading** to the desired location.

Table Relationships (5.2.4)

To Create a Table Relationship (5.2.4.1):

1. Click the **Relationships** button on the toolbar.
2. If necessary, open the Show Tables window by clicking the **Show Table** button. Then select the table, click the **Add** button, and repeat for each table. Click **Close** when finished.
3. Find the related table fields. Drag the field from one table and drop it on the related field in the second table. Make sure that the field names are correct.



4. (5.2.4.3) Click the **Enforce Referential Integrity** box to avoid creating "orphan" data. This occurs if a link between tables is deleted, or if a field that links the tables is deleted.

If you want to change the "join type" between the tables, click the **Join Type** button, select the type of join and click **OK**.

5. Click **Create** to create the relationship, then close the Relationships window and save your changes.
- **To Delete a Table Relationship (5.2.4.2):** Open the **Relationships** window. Click the **join line** that connects the tables and press **<Delete>**.

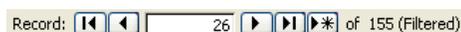
Forms (5.3)

Working with Forms (5.3.1)

- **To Open a Form (5.3.1.1):** Click the **Forms** button in the Object bar and double-click the form.
- **To Create and Save a Form (5.3.1.2):** Click the **Forms** button on the Objects bar. Click the **New** button on the toolbar to create the form from scratch or double-click a **Create form in Design view** icon to create a form step by step.
- **To Create a Form Using a Wizard (5.3.1.2):** Click **Forms** in the Objects bar and double-click the **Create form by using wizard** icon. Follow the onscreen instructions.
- **To Use a Form for Data Entry (5.3.1.3 and 5.3.1.4):** Use the Record Navigation buttons near the bottom of the form to move between each record. When you find the record, click in the fields in the form and change the record data.

The Navigation Bar

(Found on the horizontal scroll bar near the bottom of the form window.)



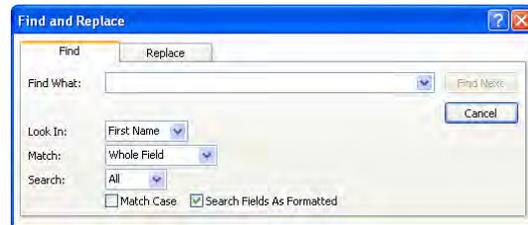
- **To Modify Headers and Footers in a Form (5.3.1.5):** Open the form in Design view. Expand the Form Header or Form Footer area. Click the **Label** button in the Toolbox. Click in the header or footer area and type the text.

- **To Delete a Form (5.3.1.6):** Select the form in the Database Window and press **<Delete>**.
- **To Save a Form (5.3.1.7):** Click the **Save** button on the **Standard** toolbar, or select **File** → **Save** from the menu, or press **<Ctrl> + <S>**.
- **To Close a Form (5.3.1.7):** Click the **Close** button on the Title bar or select **File** → **Close** from the menu.

Retrieving Information (5.4)

Main Operations (5.4.1)

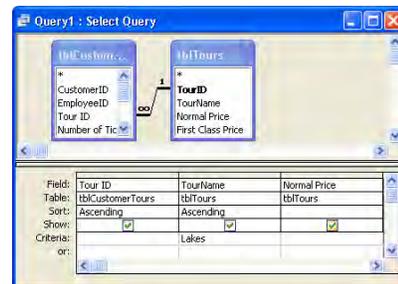
- **To Find Information in a Table (5.4.1.1):** Place the cursor in the field that contains the value you want to search for, then click the **Find** button on the toolbar or press **<Ctrl> + <F>**. Type the value you want to search for in the **Find What** box and click **Find Next**. Click **Find Next** until you've found what you're looking for.



- **To Filter by Selection (5.4.1.2):** Place the cursor in the record and field that matches the selection criterion and click the **Filter By Selection** button on the toolbar.
- **To Filter by Form (5.4.1.2):** Click the **Filter by Form** button on the toolbar. Click the **list arrow** next to the field that contains the selection criterion and select the value you want the filtered records to match. You can use more than one field to filter data. Click the **Apply Filter** button to activate the filter.
- **To Remove a Filter (5.4.1.3):** Click the **Remove Filter** button on the toolbar.

Queries (5.4.2)

The Design Query Window



- **To Create a Query (5.4.2.1):** Click **Queries** in the Objects bar and double-click the **Create query in Design view** icon. Select the table you want to query and click **Add**. Repeat for all the tables you want to add to the query. Click **Close** when you're finished. Find the field you want to query (use the scroll bars) and drag the field down to the QBE grid. Repeat until you have added all the fields you want to include in the query. If you want to filter records, enter the criteria in the Criteria row. Close the query window, click **Yes** to save the query, enter a query name, and click **OK**.
- **To Create a Query Using a Wizard (5.4.2.1):** Click **Queries** in the Objects bar and double-click the **Create query by using wizard** icon. Follow the onscreen instructions

- **To Add Criteria to a Query (5.4.2.2):** Use the table of operators below to enter criteria:

Operator	Example	Description
=	"=MN"	Finds records equal to MN.
< >	<>"MN"	Finds records not equal to MN.
<	<10	Finds records less than 10.
< =	<=10	Finds records less than or equal to 10.
>	>10	Finds records greater than 10.
> =	>=10	Finds records greater than or equal to 10.
AND	>=10 AND < >5	Finds records greater than or equal to 10 AND not equal to 5.
OR	>=10 OR < >5	Finds records greater than or equal to 10 OR not equal to 5.

- **To Edit Query Criteria (5.4.2.3):** Open the query in Design view. Click in the Criteria row of the field you want to edit. Enter or delete the field criteria in the row.
- **To Edit a Query (5.4.2.4):**
To Add fields: Drag the field from the field list onto the design grid.
To Move fields: Position the pointer over the field (the mouse changes to ) and then click and drag the field to a new location.
To Delete fields: Click the top of the field you want to delete (the mouse changes to ) and press <Delete>.
To Hide or Unhide Fields: Select or deselect the **Show** check box under the field to display or hide the field.
- **To Run a Query (5.4.2.5):** Double-click the Query in the Database Window.
- **To Delete a Query (5.4.2.6):** Select the query in the Database Window and press <Delete>.
- **To Save a Query (5.4.2.7):** Click the  **Save button** on the **Standard** toolbar, or select **File** → **Save** from the menu, or press <Ctrl> + <S>.
- **To Close a Query (5.4.2.7):** Click the  **Close button** on the Title bar or select **File** → **Close** from the menu.

Sort Records (5.4.3)

- **To Sort Information (5.4.3.1):** Place the cursor in the field that you want to sort by and click either the  **Sort Ascending** or  **Sort Descending button** on the toolbar. Or, right-click the field and select **Sort Ascending** or **Sort Descending** from the shortcut menu.

Reports (5.5)

Working with Reports (5.5.1)

- **To Create a Report (5.5.1.1):** From the Database Window, click the **Reports** icon in the Objects bar and click the **New** button. Select the type of report you want to create. Select the table or query you want to use for the report and click **OK**. Click the **Save** button to save the report.



- **To Create a Report Using a Wizard (5.5.1.1):** Click **Reports** in the Objects bar and double-click the  **Create report by using wizard icon**. Follow the onscreen instructions.
- **To Rearrange a Report (5.5.1.2):** Click the **object** and hold down the mouse button, drag the object to a new location and then release the mouse button to drop the object.
- **To Group Records (5.5.1.3):** Display the report in Design view. Click the  **Sorting and Grouping button** on the Report Design toolbar. Click the **Field/ Expression** box, click the list arrow and select a field for grouping records. Click the corresponding **Sort Order** box, click the list arrow and select the desired sort order. Select any Group Properties you want to use in the Group Properties area. Repeat for each Field/Expression you want to use to group and sort your data.
- **To Present Specific Fields in a Grouped Report (5.5.1.4):** Display the report in Design view. Select the control and click the  **Properties button** on the toolbar. Click the **Data** tab and click in the **Record Source** box. Click the **Build** button and use the Expression Builder to create the expression, then click **OK** when you're finished. Close the Properties dialog box.
- **To Use Headers/Footers (5.5.1.5):** Open the report in Design view. Expand the Report Header or Report Footer area. Click the  **Label button** in the Toolbox. Click in the header or footer area and type the text.
- **To Delete a Report (5.5.1.6):** Select the report in the Database Window and press <Delete>.
- **To Save a Report (5.5.1.7):** Click the  **Save button** on the **Standard** toolbar, or select **File** → **Save** from the menu, or press <Ctrl> + <S>.
- **To Close a Report (5.5.1.7):** Click the  **Close button** on the Title bar or select **File** → **Close** from the menu.

Prepare Outputs (5.6)

Prepare to Print (5.6.1)

- **To Preview an Object (5.6.1.1):** Click the  **Print Preview button** on the toolbar.
- **To Change Report Orientation (5.6.1.2):** In Print Preview, select **File** → **Page Setup** from the menu. Click the **Page** tab and select the Portrait or Landscape option.
- **To Change Paper Size (5.5.1.2):** In Print Preview, select **File** → **Page Setup** from the menu. Click the **Page** tab. Click the **Paper Size** list arrow and select a size from the list.

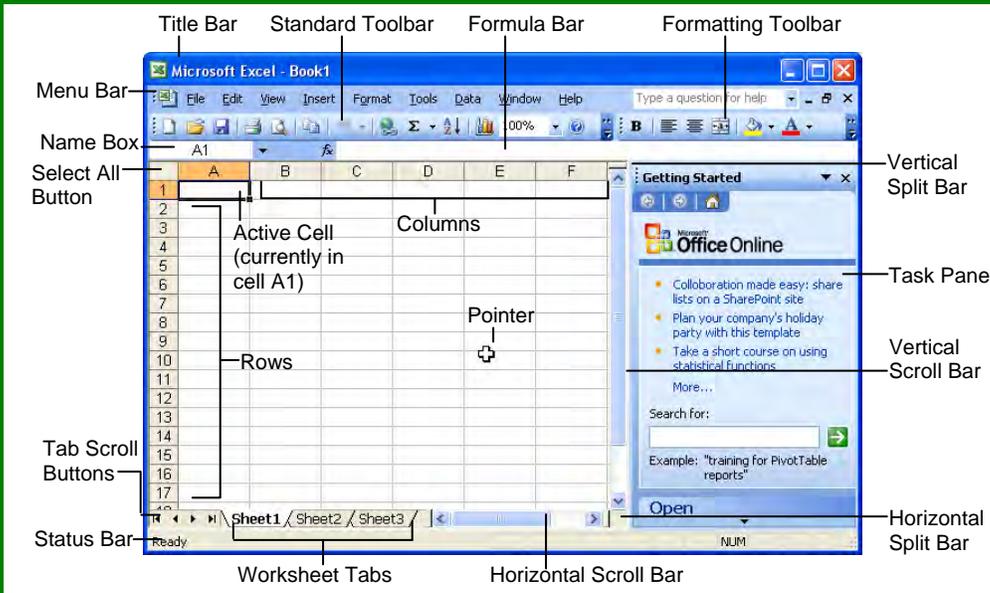
Print Options (5.6.1)

- **To Print a Page, Records of a Table (5.6.2.1):** Open the table you want to print. Click the  **Print button** on the Standard toolbar, or select **File** → **Print** from the menu, or press <Ctrl> + <P>. Choose to print the whole table, specific pages, or selected records in the Print Range section of the dialog box.
- **To Print Records in Form Layout (5.6.2.2):** Open the table you want to print. Click the  **Print button** on the Standard toolbar, or select **File** → **Print** from the menu, or press <Ctrl> + <P>. Select what you want to print in the Print Range section of the dialog box.
- **To Print a Query (5.6.2.3):** Open the query you want to print. Click the  **Print button** on the Standard toolbar, or select **File** → **Print** from the menu, or press <Ctrl> + <P>.
- **To Print a Report (5.6.2.4):** Open the report you want to print. Click the  **Print button** on the Standard toolbar, or select **File** → **Print** from the menu, or press <Ctrl> + <P>. Select what you want to print in the Print Range section of the dialog box.



Excel 2003 Screen

Keyboard Shortcuts



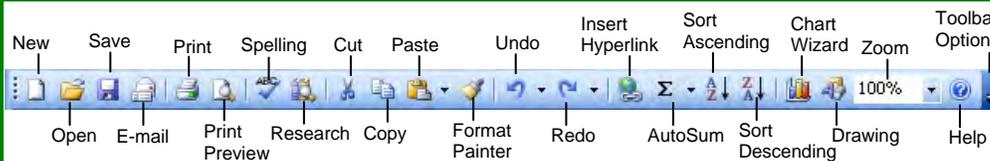
General

Open a Workbook	<Ctrl> + <O>
Save a Workbook	<Ctrl> + <S>
Print a Workbook	<Ctrl> + <P>
Close a Workbook	<Ctrl> + <W>
Undo	<Ctrl> + <Z>
Redo or Repeat	<Ctrl> + <Y>
Help	<F1>
Switch Between Applications	<Alt> + <Tab>

Navigation—Go To:

Move between unlocked cells	<Tab>
Up One Screen	<Page Up>
Down One Screen	<Page Down>
To cell A1	<Ctrl> + <Home>
To the Last Cell with Data	<Ctrl> + <End>
Open the Go To Dialog Box	<F5>
Left to end or beginning of next block	<Ctrl> + <←>
Right to end or beginning of next block	<Ctrl> + <→>
Up to end or beginning of next block	<Ctrl> + <↑>
Down to end or beginning of next block	<Ctrl> + <↓>

Using the Application (4.1)



First Steps with Spreadsheets (4.1.1)

- To Open Excel (4.1.1.1):** Click the **Start button** select **All Programs** and select **Microsoft Office Excel 2003**.
- To Open a Workbook (4.1.1.2):** Click the **Open button** on the Standard toolbar, or select **File → Open** from the menu, or press **<Ctrl> + <O>**.
- To Create a New Workbook (4.1.1.3):** Click the **New button** on the Standard toolbar or select **File → New** from the menu.
- To Save a Workbook (4.1.1.4):** Click the **Save button** on the Standard toolbar, or select **File → Save** or press **<Ctrl> + <S>**.
- To Save a Workbook with a Different Name (4.1.1.5):** Select **File → Save As** from the menu and enter a different name for the workbook.
- To Save a Workbook in a Different File Type (4.1.1.6):** Select **File → Save As** from the menu and select a file type from the **Save as type** list.
- To Switch Between Open Workbooks (4.1.1.7):** Select **Window** from the menu bar and select the workbook you want to work on.
- To Switch Between Worksheets (4.1.1.7):** Click the worksheet tab.

- To Get Help (4.1.1.8):** Press **<F1>** to open the Help task pane, type your question in normal English, and click the **Search button**.
- To Close a Workbook (4.1.1.9):** Click the **Close button** on the menu bar or select **File → Close** from the menu.

Adjust Settings (4.1.2)

- To Use Zoom (4.1.2.1):** Click the **90%** **Zoom** list arrow on the Standard toolbar and select a magnification from the list.
- To View or Hide a Toolbar (4.1.2.2):** Select **View → Toolbars** from the menu and select the toolbar you want to view or hide.
- To Freeze Panes (4.1.2.3):** Split the window into panes, then select **Window → Freeze Panes** from the menu.
- To Split a Window (4.1.2.3):** Drag either the vertical or horizontal split bar (located on the vertical or horizontal scroll bars), or move the cell pointer to the cell below the row and to the right of the column you want to split and select **Window → Split** from the menu.
- To Change the User Name (4.1.2.4):** Select **Tools → Options** from the menu and click the **User Information** tab. Enter the user name in the name box.

Editing

Cut	<Ctrl> + <X>
Copy	<Ctrl> + <C>
Paste	<Ctrl> + <V>
Clear Cell Contents	<Delete>
Edit Active Cell	<F2>
Absolute Reference	<F4>

Formatting

Bold	<Ctrl> +
Italics	<Ctrl> + <I>
Underline	<Ctrl> + <U>

Cells (4.2)

Insert Data (4.2.1)

- **To Enter Data in a Cell (4.2.1.1):** Select the cell, click the **Formula bar**, edit the cell contents, and press **<Enter>** when you're finished.

Select Cells (4.2.2)

- **To Select a Cell (4.2.2.1):** Select the cell you want to edit by clicking it with the mouse pointer or by using the keyboard arrow keys.
- **To Select a Cell Range (Using the Mouse) (4.2.2.1):** Click the first cell of the range and drag the mouse pointer to the last cell of the range.
- **To Select a Cell Range (Using the Keyboard) (4.2.2.1):** Make sure the active cell is the first cell of the cell range, then press and hold down the **<Shift>** key while using the arrow keys to move the mouse pointer to the last cell of the range.
- **To Select an Entire Worksheet (4.2.2.1):** Click the **Select All button** where the column and row headings meet.
- **To Select a Row (4.2.2.2):** Click the row heading, or click and drag the range of rows you want to select. To select multiple non-adjacent rows, press and hold the **<Ctrl>** key while clicking the row headings.
- **To Select a Column (4.2.2.3):** Click the column heading, or click and drag the range of columns you want to select. To select multiple non-adjacent columns, press and hold the **<Ctrl>** key while clicking the column headings.

Rows and Columns (4.2.3)

- **To Insert a Column or Row (4.2.3.1):** Right-click the selected row or column heading(s) to the right of the column or below the row you want to insert and select **Insert** from the shortcut menu. Or, select **Insert** → **Rows** or **Columns** from the menu.
- **To Delete a Row or Column (4.2.3.2):** Select the row or column heading(s) and select **Edit** → **Delete** from the menu. Or, right-click the selected row or column heading(s) and select **Delete** from the shortcut menu.
- **To Adjust Column Width (4.2.3.3):** Drag the right border of the column header. Double-click the **column border** to AutoFit the column to its contents.
- **To Adjust Row Height (4.2.3.3):** Drag the bottom border of the row header. Double-click the **row border** to AutoFit the row according to its contents.

Edit Data (4.2.4)

- **To Edit a Cell's Contents (4.2.4.1):** Select the cell, click the **Formula bar**, edit the cell contents, and press **<Enter>** when you're finished.
- **To Undo and Redo (4.2.4.2):** Click the **Undo button** on the Standard toolbar or press **<Ctrl> + <Z>**. To redo the last command, click the **Redo button** on the Standard toolbar, or press **<Ctrl> + <Y>**.

Duplicate, Move, Delete (4.2.5)

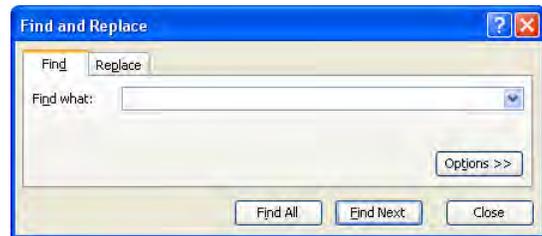
- **To Duplicate (4.2.5.1):** Click the **Copy button** on the Standard toolbar, click where you want to add the duplicate cells and click the **Paste button** on the Standard toolbar. Or press **<Ctrl> + <C>** (copy) and **<Ctrl> + <V>** (paste).
- **To Copy Using AutoFill (4.2.5.2):** Position the pointer over the fill handle at the bottom-right corner of the selected cell, then click and drag to fill the cells.
- **To Move (4.2.5.3):** Click the **Cut button** on the Standard toolbar, click where you want to move the text or image and click the **Paste button** on the Standard toolbar. Or press **<Ctrl> + <X>** (cut) and **<Ctrl> + <V>** (paste).

- **To Move or Copy Cells using Click and Drag (4.2.5.3):** Select the cell(s) you want to move or copy and position the pointer over any border of the selected cell(s), then drag to the destination cells. Hold down the **<Ctrl>** key while you click and drag to copy the cells.

- **To Delete Cell Contents (4.2.5.4):** Select the cell or cell range and press the **<Delete>** key.

Search and Replace (4.2.6)

- **To Find Text (4.2.6.1):** Select **Edit** → **Find** from the menu or press **<Ctrl> + <F>**.
- **To Find and Replace Text (4.2.6.2):** Select **Edit** → **Replace** from the menu, or press **<Ctrl> + <H>**.



Sort Data (4.2.7)

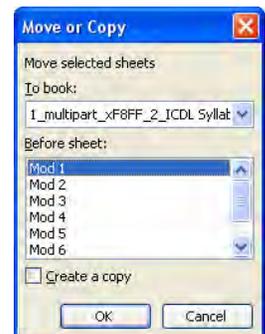
- **To Sort Data (4.2.7.1):** Move the cell pointer to the column you want to use to sort the list. Click either the **Sort Ascending button** or **Sort Descending button** on the Standard toolbar. To sort by multiple columns, make sure the cell pointer is located within the list and select **Data** → **Sort** from the menu. Select the first field you want to sort by from the **Sort by** list and select Ascending or Descending order. Repeat to sort by additional fields.



Cells (4.2)

Handling Worksheets (4.3.1)

- **To Insert a New Worksheet (4.3.1.1):** Select **Insert** → **Worksheet** from the menu or right-click on a worksheet tab, select **Insert** from the shortcut menu, and select **Worksheet** from the Insert dialog box.
- **To Rename a Worksheet (4.3.1.2):** Double-click the worksheet tab, enter a new name for the worksheet, and press **<Enter>**.
- **To Delete a Worksheet (4.3.1.3):** Select **Edit** → **Delete Sheet** from the menu or right-click on the tab and select **Delete** from the shortcut menu.
- **To Copy a Worksheet (4.3.1.4):** Open the worksheet you want to copy. Select **Edit** → **Move or Copy Sheet** from the menu or right-click on the tab and select **Move or Copy** from the shortcut menu. Make sure the workbook to which you want to copy the worksheet appears in the To book box. Click the **Create a copy** check box and click **OK**.
- **To Move a Worksheet (4.3.1.5):** Open the worksheet you want to copy. Select **Edit** → **Move or Copy Sheet** from the menu or right-click on the tab and select **Move or Copy** from the shortcut menu. Make sure the workbook to which you want to move the worksheet appears in the To book box and click **OK**.



Formulas and Functions (4.4)

Formatting (4.5)

Arithmetic and Logical Formulas (4.4.1)

- **To Enter a Formula (4.4.1.1):** Select the cell where you want to insert the formula, press **=** (the equals sign), and enter the formula using values, cell references, operators, and functions. Press **<Enter>** when you're finished.

Operator	Purpose	Example
+	Performs addition between values	=4+3
-	Performs subtraction between values	 =A1-B1
*	Performs multiplication between values	 =B1*2
/	Performs division between values	 =A1/C2

- **Formula Errors (4.4.1.2):** If an error occurs in a formula, an error value will appear in a cell. The list below displays common error values in formulas.

Error value	Description
#####	The numeric value is too wide to display within the cell.
#VALUE!	The mathematical formula references a text entry instead of a numerical entry.
#DIV/0!	You tried to divide a number by zero.
#NAME?	You entered text in a formula that Excel doesn't recognize.
#N/A	A value is not available to a function or a formula.
#REF!	Occurs when a cell reference is not valid.
#NUM!	Occurs when an invalid argument is in a worksheet formula.
#NULL!	You specified an intersection of two ranges in a formula that do not intersect.

Cell Referencing (4.4.2)

- **To Reference a Cell in a Formula (4.4.2.1):** Type the cell reference (for example, "B5") or simply click the cell you want to reference.
- **To Create an Absolute Cell Reference (4.4.2.1):** Absolute cell references are preceded by \$ signs in a formula. Press **<F4>** after selecting a cell range to make it an absolute reference.

Working with Functions (4.4.3)

- **To Use Functions in Formulas (4.4.3.1):** Click the  **Insert Function button** on the Formula bar. In the Insert Function dialog box, select the function you want to use. To search for a function, type a description in the "Search for a function" box. Or, click the **Or select a category** list arrow and select a function category to view. Select the function and click **OK**. Make sure the cell range in the formula is correct and press **<Enter>**.

Function	Description	Example
Sum:	Adds the values in the cell range.	=SUM(B7:B10)
Average:	Averages the values in the cell range.	=AVERAGE(A2:A7)
Minimum:	Finds the smallest value in the cell range.	=MIN(B7:B10)
Maximum:	Finds the largest value in the cell range.	=MAX(B7:B10)
Count:	Counts the number of cells containing numbers in the cell range.	=COUNT(B7:B10)

To Create an IF Formula

- (4.4.3.2):** Click the  **Insert Function button** on the Formula bar. Click the **Select a category** list arrow and select **Logical**. Select the **IF** function and click **OK**. Enter the arguments for the IF function and click **OK**.

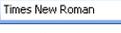
The Formatting Toolbar



Numbers/Dates (4.5.1)

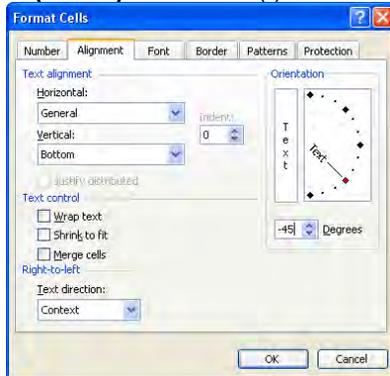
- **To Format Values (4.5.1.1):** Select the cell(s) you want to format and click  **Comma Style button**,  **Increase Decimal button**, or the  **Decrease Decimal button** on the Formatting toolbar.
- **To Format Dates (4.5.1.2):** Select the cell(s) you want to format. Select **Format** → **Cells** from the menu. Click **Date** in the Category list. Select a date format from the Type list and click **OK**.
- **To Format Currency Symbols (4.5.1.3):** Select the cell(s) you want to format and click the  **Currency Style button** on the Formatting toolbar.
- **To Format Percentages (4.5.1.4):** Select the cell(s) you want to format and click the  **Percent Style button** on the Formatting toolbar.

Contents (4.5.2)

- **To Format Text (4.5.2.1):** Change the font type by selecting a font from the  **Font** list on the Formatting toolbar. Change the font size by selecting the pt. size from the  **Font Size** list.
- **To Format Text Style (4.5.2.2):** Change the style of text by clicking the  **Bold button**,  **Italic button**, or  **Underline button** on the Formatting toolbar. Or select **Format** → **Cells** from the menu. Click the **Font** tab and change the formatting of the cell in the dialog box.
- **To Change Font Color (4.5.2.3):** Select the text, click the  **Font Color button list arrow** on the Formatting toolbar, and select the font color you want.
- **To Apply Cell Shading (4.5.2.3):** Select the cell(s), click the  **Fill Color button list arrow** on the Formatting toolbar, and select the shading you want.
- **To Use the Format Painter to Copy Formatting (4.5.2.4):** Select the cell(s) with the formatting options you want to copy, click the  **Format Painter button** on the Standard toolbar, and select the cell(s) where you want to apply the copied formatting.
- **To Apply Text Wrapping (4.5.2.5):** Select the cells to which you want to apply text wrapping. Select **Format** → **Cells** from the menu. Click the **Alignment** tab and click the **Wrap text** check box. Click **OK**.

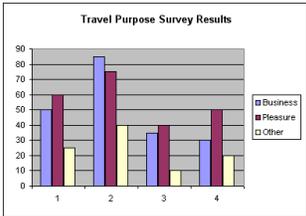
Alignment, Border Effects (4.5.3)

- **To Change Cell Alignment (4.5.3.1):** Select the cell(s) and click the appropriate alignment button (Align Left, Center, Align Right) on the Formatting toolbar.
- **To Center a Cell Range Title (4.5.3.2):** Select the cell(s) and click the **Merge and Center button** on the Formatting toolbar.
- **To Adjust Cell Orientation (4.5.3.3):** Select the cell(s) and select **Format** → **Cells** from the menu. Click the **Alignment** tab. Click and drag the rotation angle in the preview arc, or type it in the Degrees box.
- **Adding Borders (4.5.3.4):** Select the cell(s), click the **Borders button list arrow** on the Formatting toolbar, and select the border you want.



Charts/Graphs (4.6)

Using Charts/Graphs (4.6.1)

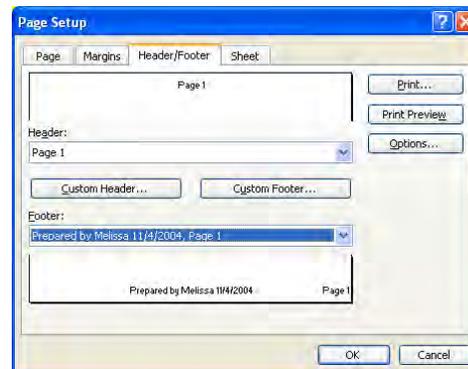
- **To Create a Chart (4.6.1.1):** Select the cell range that contains the data you want to chart and click the **Chart Wizard button** on the Standard toolbar. Select the chart type and click **Next**. Verify the cell range and click **Next**. Adjust the chart options and click **Next**. Specify where you want to place the chart (as an embedded object or on a new sheet) and click **Finish**.
- 
- | Category | Business | Pleasure | Other |
|----------|----------|----------|-------|
| 1 | 50 | 60 | 25 |
| 2 | 85 | 75 | 40 |
| 3 | 40 | 40 | 10 |
| 4 | 35 | 55 | 20 |
- **To Add a Title to a Chart (4.6.1.2):** Select **Chart** → **Chart Options** from the menu. Click in the Chart title box and enter the chart title. Click **OK**.
 - **To Change a Chart Background (4.6.1.3):** Select the chart. Click the **Format Objects button** on the Chart toolbar. Click the **Patterns** tab and select a color from the Area section or click the **Fill Effects button** and select a background from the Fill Effects dialog box.
 - **To Change Chart Object Colors (4.6.1.4):** Click the cell object you want to change, or click the **Chart Area** **Chart Objects list arrow** and select a chart object from the list on the Chart toolbar. Click the **Format Objects button** on the Chart toolbar. Change the color of the object in the Area section of the Format Data Series dialog box.
 - **To Change Chart Type (4.6.1.5):** Select the chart. Click the **Chart Type button list arrow** on the Chart toolbar and select a chart type from the list.
 - **To Duplicate and Move Charts (4.6.1.6):** Select the chart and click the **Cut button** or the **Copy button** on the Standard toolbar. To paste the chart, select the destination cell(s) and click the **Paste button** on the Standard toolbar.
 - **To Resize Charts (4.6.1.7):** Click and drag the chart sizing handle to the size you want.
 - **To Delete Charts (4.6.1.7):** Click the chart to select it and press the **<Delete>** key.



Prepare Outputs (4.7)

Worksheet Setup (4.7.1)

- **To Change Page Margins (4.7.1.1):** Select **File** → **Page Setup** from the menu, click the **Margins** tab and adjust the margins.
- **To Change Page Orientation (4.7.1.2):** Select **File** → **Page Setup** from the menu, click the **Page** tab and select the orientation.
- **To Fit Contents on Pages (4.7.1.3):** Select **File** → **Page Setup** from the menu, click the **Page** tab. Click the **Fit to** option and select the page area you want to print the workbook on.
- **To Add or View a Header or Footer (4.7.1.4):** Select **View** → **Header and Footer** from the menu.
- **To Add Fields in the Header and Footer (4.7.1.5):** Select **View** → **Header and Footer** from the menu. Click the **Header** list arrow and select an option from the list, or click the **Footer** list arrow and select an option from the list. Previews of the header and footer appear in the dialog box.



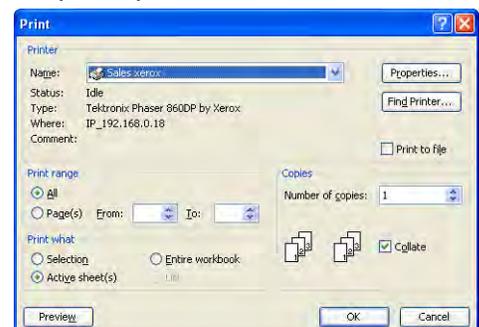
Preparation (4.7.2)

- **Checking Calculations (4.7.2.1):** Before you print or distribute your workbook, it is important that you double-check all of the text and calculations used within each worksheet. Errors can make you look unprofessional, and you will waste paper if you have to print the workbook more than once.
- **To Preview a Worksheet (4.7.2.2):** Click the **Print Preview button** on the Standard toolbar, or select **File** → **Print Preview** from the menu.
- **To Show/Hide Gridlines (4.7.2.3):** Select **File** → **Page Setup** from the menu and click the **Sheet** tab. Add or remove the check mark in the **Gridlines** check box.
- **To Print Row or Column Titles (4.7.2.4):** Select **File** → **Page Setup** from the menu and click the **Sheet** tab. Specify which row(s) or column(s) should appear at the top and/or left of every page in the appropriate boxes under the Print Titles section.

Printing (4.7.3)

- **To Print a Worksheet (4.7.3.1):**

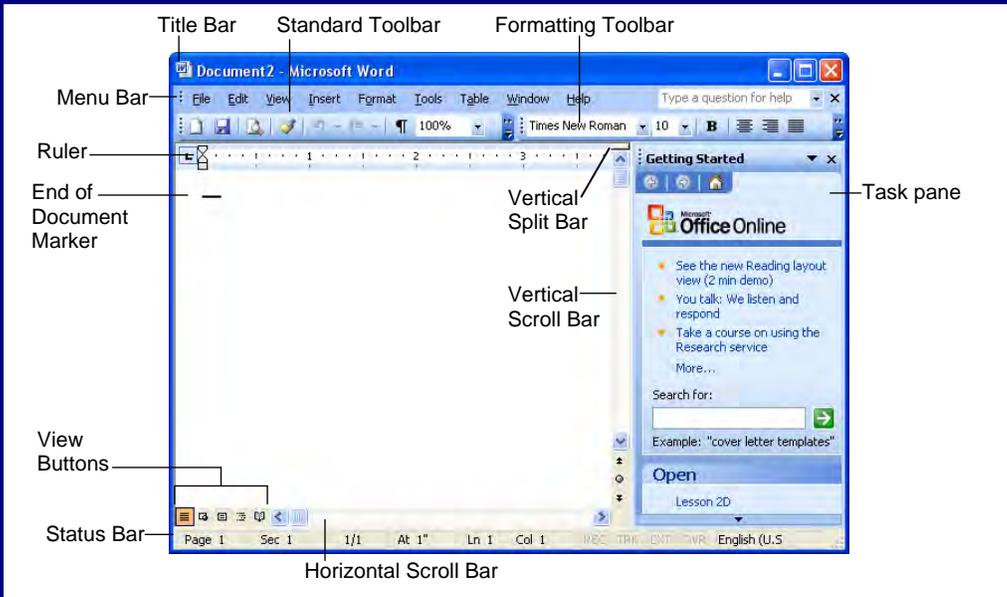
Click the **Print button** on the Standard toolbar, or select **File** → **Print** from the menu, or press **<Ctrl> + <P>**. Specify what you want to print in the **Print what** section.





Word 2003 Screen

Keyboard Shortcuts



General

Open a Document	<Ctrl> + <O>
Save a Document	<Ctrl> + <S>
Print a Document	<Ctrl> + <P>
Close a Document	<Ctrl> + <W>
Undo	<Ctrl> + <Z>
Redo or Repeat	<Ctrl> + <Y>
Help	<F1>
Switch Between Applications	<Alt> + <Tab>

Navigation—Go To:

Up One Screen	<Page Up>
Down One Screen	<Page Down>
Beginning of a Line	<Home>
End of a Line	<End>
Beginning of Document	<Ctrl> + <Home>
End of Document	<Ctrl> + <End>
Open the Go To Dialog Box	<F5>

Editing

Cut	<Ctrl> + <X>
Copy	<Ctrl> + <C>
Paste	<Ctrl> + <V>
Overtyping Mode	<Insert>

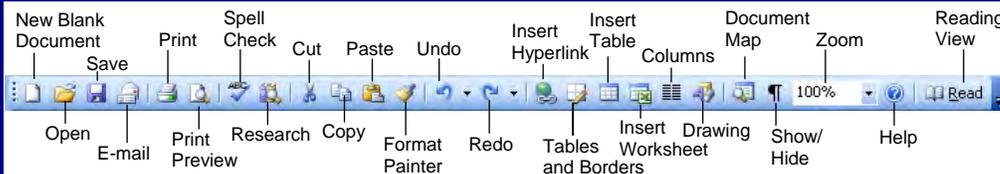
Formatting

Bold	<Ctrl> +
Italics	<Ctrl> + <I>
Underline	<Ctrl> + <U>
Align Left	<Ctrl> + <L>
Center	<Ctrl> + <E>
Align Right	<Ctrl> + <R>
Justify	<Ctrl> + <J>

Text Selection

To Select:	Do This:
A Word	Double-click the word
A Sentence	Press and hold <Ctrl> and click anywhere in the sentence
A Line	Click in the selection bar next to the line
A Paragraph	Triple-click the paragraph
Everything	<Ctrl> + <A>

Using the Application (3.1)



First Steps with Word Processing (3.1.1)

- To Open Word (3.1.1.1):** Click the **Start button** select **All Programs** and click **Microsoft Office Word 2003**.
- To Open a Document (3.1.1.2):** Click the **Open button** on the Standard toolbar, or select **File** → **Open** from the menu, or press <Ctrl> + <O>.
- To Create a New Document (3.1.1.3):** Click the **New Blank Document button**, or press <Ctrl> + <N>.
- To Save a Document (3.1.1.4):** Click the **Save button** on the Standard toolbar, or select **File** → **Save**, or press <Ctrl> + <S>.
- To Save a Document with a Different Name (3.1.1.5):** Select **File** → **Save As** from the menu and enter a different name for the file.
- To Save a Document in a Different File Type (3.1.1.6):** Select **File** → **Save As** from the menu, click the **Save as type** list arrow and select a file type from the list.
- To Switch Between Open Documents (3.1.1.7):** Select **Window** from the menu bar and select the document you want to work on.
- To Get Help (3.1.1.8):** Press <F1> to open the Help task pane, type your question and press <Enter>.
- To Close a Document (3.1.1.9):** Click the **Close button** on the menu bar or select **File** → **Close** from the menu.

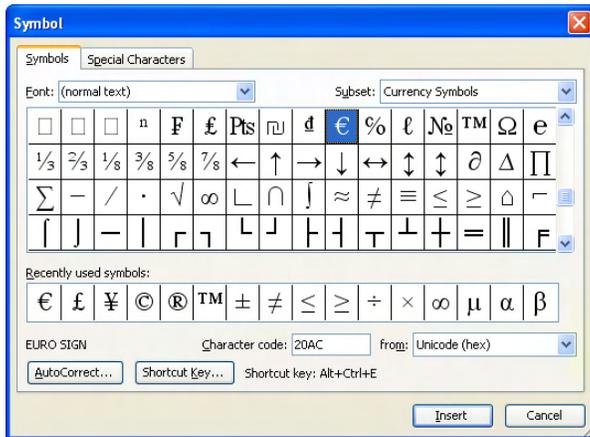
Adjust Settings (3.1.2)

- To Switch Views (3.1.2.1):** Click one of the **View buttons** on the horizontal scroll bar (see the back side for more information about Views).
- To Use Zoom (3.1.2.2):** Click the **Zoom** list arrow on the Standard toolbar and select a magnification from the list.
- To View or Hide a Toolbar (3.1.2.3):** Select **View** → **Toolbars** from the menu, or right-click a toolbar, and select the toolbar you want to view or hide.
- To Display Hidden Characters (3.1.2.4):** Click the **Show/Hide button** on the Standard toolbar.
- To Change the User Name (3.1.2.5):** Select **Tools** → **Options** from the menu and click the **User Information** tab. Enter the user name in the name box.
- To Change the Default Directory/Folder (3.1.2.5):** Select **Tools** → **Options** from the menu and click the **File Locations** tab. Click the **Documents** file type and click the **Modify button**. Navigate to the location and click **OK**.

Main Operations (3.2)

Insert Text (3.2.1)

- **To Insert Symbols or Special Characters (3.2.1.2):** Select **Insert** → **Symbol** from the menu. Select a character or symbol from the dialog box.



Select Text (3.2.2)

- **To Select Text (3.2.2.1):**

To Select:	Do This:
A Word	Double-click the word
A Sentence	Press and hold <Ctrl> and click anywhere in the sentence
A Line	Click in the selection bar next to the line
A Paragraph	Triple-click the paragraph
Everything	<Ctrl> + <A>

Edit Data (3.2.3)

- **To Edit Text (3.2.3.1):** Place the insertion point where you want to insert new text and begin typing. To type over existing text, press the **<Insert>** key and begin typing.
- **To Undo (3.2.3.2):** Click the **Undo** button on the Standard toolbar or press **<Ctrl>** + **<Z>**.

Duplicate, Move, Delete (3.2.4)

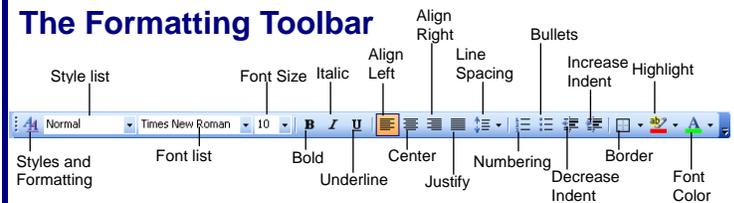
- **To Duplicate (3.2.4.1):** Select the text. Click the **Copy** button on the Standard toolbar, click where you want to add the duplicate text and click the **Paste** button on the Standard toolbar. Or press **<Ctrl>** + **<C>** (copy) and **<Ctrl>** + **<V>** (paste).
- **To Move (3.2.4.2):** Select the text or image. Click the **Cut** button on the Standard toolbar, click where you want to move the text or image and click the **Paste** button on the Standard toolbar. Or press **<Ctrl>** + **<X>** (cut) and **<Ctrl>** + **<V>** (paste).
- **To Move Text using Click and Drag (3.2.4.2):** Select the text you want to move, click and drag the text to the destination, and release the mouse button.
- **To Delete Text (3.2.4.3):** Select the text and press the **<Delete>** key.

Search and Replace (3.2.5)

- **To Find Text (3.2.5.1):** Select **Edit** → **Find** from the menu or press **<Ctrl>** + **<F>**.
- **To Find and Replace Text (3.2.5.2):** Select **Edit** → **Replace** from the menu, or press **<Ctrl>** + **<H>**.

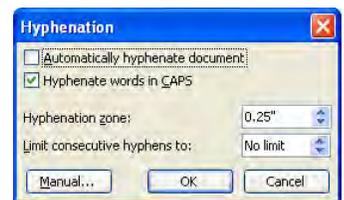
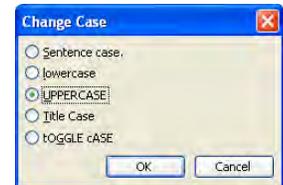
Formatting (3.3)

The Formatting Toolbar



Text Formatting (3.3.1)

- **To Format Selected Text (3.3.1.1 and 3.3.1.2):**
 - Change the font type by selecting a font from the **Font list** on the Formatting toolbar.
 - Change the font size by selecting the pt. size from the **Font Size list**.
 - Change the style of text by clicking the **Bold** button, **Italic** button, or **Underline** button on the Formatting toolbar.
- **To Apply Subscript/Superscript Formatting (3.3.1.3):** Select the text you want to apply the formatting to. Select **Format** → **Font** from the menu and click the **Subscript** or **Superscript** check box. Click **OK**.
- **To Change Case (3.3.1.4):**
 - Select the text you want to change.
 - Select **Format** → **Change Case** from the menu. Select the case you want to change the text to in the Change Case dialog box and click **OK**.
- **To Change Text Color (3.3.1.5):** Select the text you want to change. Select **Format** → **Font** from the menu and select a text color in the Font dialog box. Or, click the **Font Color** button list arrow and select a color from the list.
- **To Copy Formatting with the Format Painter (3.3.1.6):** Select the text with the formatting you want to copy. Click the **Format Painter** button on the Standard toolbar and drag the Format Painter pointer across the text to which you want to apply the formatting. To apply the formatting multiple times, double-click the **Format Painter** button.
- **To Apply a Style (3.3.1.7):** Select the text to which you want to apply the style. Click the **Style list** arrow on the Formatting toolbar and select a style from the list.
- **To Use Automatic Hyphenation (3.3.1.8):** Select **Tools** → **Language** → **Hyphenation** from the menu. Check the **Automatically hyphenate document** check box. Click **OK**.



Paragraph Formatting (3.3.2)

- **To Insert/Remove Paragraph Marks (3.3.2.1):** Press the **<Enter>** key to insert a new paragraph. Use regular deletion methods to delete a paragraph.
- **To Insert a Line Break (3.3.2.2):** Place the insertion point where you want to start a new line. Press **<Shift>** + **<Enter>**.
- **To Change Paragraph Alignment (3.3.2.3):** Select the paragraph(s) and click the appropriate alignment button (**Left**, **Center**, **Right**, or **Justify**) on the Formatting toolbar.
- **To Indent a Paragraph (3.3.2.4):** Click the **Increase Indent** button on the Formatting toolbar, or click and drag the **Left Indent marker** on the ruler. Or, select **Format** → **Paragraph** from the menu and change the indent in the Indentation section of the dialog box.

To Change Paragraph Line Spacing (3.3.2.5):

Select **Format** → **Paragraph** from the menu, click the **Line Spacing** list arrow, and select the spacing option. This changes the space between lines in a paragraph.



To Change Paragraph Spacing (3.3.2.6):

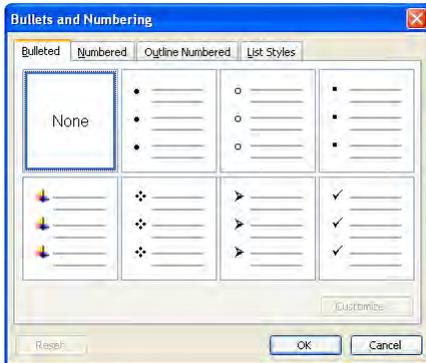
Select **Format** → **Paragraph** from the menu, change the space in the **Before** and **After** boxes. This changes the space between paragraphs.

To Add a Tab Stop (3.3.2.7): Choose the type of tab you want to insert from the **Tab** selector box and click on the ruler to add the tab. Or select **Format** → **Tabs** from the menu and create tabs in the Tabs dialog box.

To Adjust a Tab Stop (3.3.2.7): Click and drag the **Tab** stop to the new position on the ruler. For exact measurements, select **Format** → **Tabs** from the menu and modify the tabs in the Tabs dialog box.

To Remove a Tab Stop (3.3.2.7): Drag the **Tab** stop from the ruler to remove it.

To Create a Bulleted or Numbered List (3.3.2.8): Select the paragraph(s) you want to bullet or number, and click the **Bullets** button or the **Numbering** button on the Formatting toolbar.



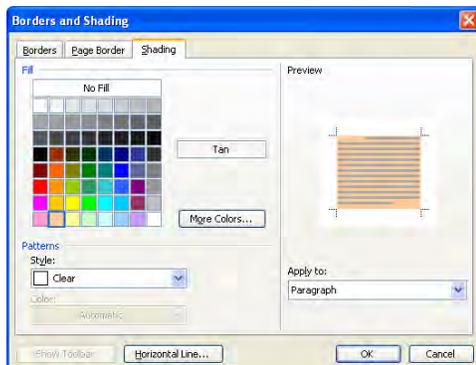
To Change the Bulleted or Numbered List Style (3.3.2.9):

Select the bulleted or numbered list. Select **Format** → **Bullets and Numbering** from the menu. Click the tab of the list you want to change. Select a new bullet or number style and click **OK**.

To Add a Paragraph Border (3.3.2.10): Select the paragraph and select a border from the **Border** button list arrow on the Formatting toolbar.

To Add Paragraph Shading (3.3.2.10):

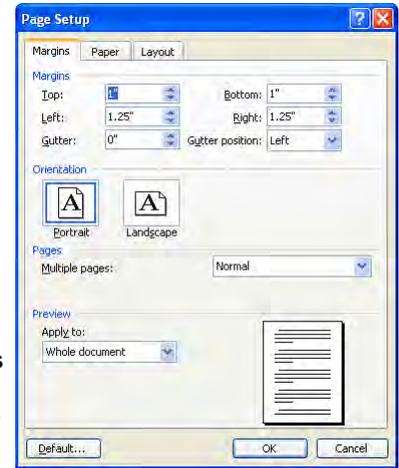
Select the paragraph and select **Format** → **Borders and Shading** from the menu. Click the **Shading** tab. Click the **Apply to list** arrow and select **Paragraph**. Select a color from the Fill section and click **OK**.



Document Formatting (3.3.3)

To Change Document Orientation (3.3.3.1):

Select **File** → **Page Setup** from the menu, click the **Margins** tab and select the orientation.



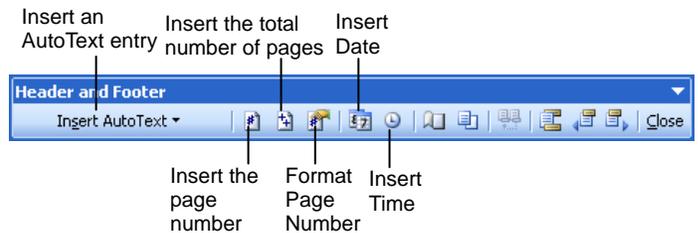
To Change Paper Size (3.3.3.1): Select **File** → **Page Setup** from the menu, click the **Paper** tab. Click the **Paper size** list arrow and select a paper size.

To Change a Document's Margins (3.3.3.2): Select **File** → **Page Setup** from the menu, click the **Margins** tab and adjust the margins.

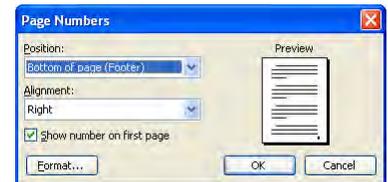
To Insert a Manual Page Break (3.3.3.3): Place the insertion point where you want to insert the page break and press **<Ctrl> + <Enter>**.

To Add or View a Document Header or Footer (3.3.3.4): Select **View** → **Header and Footer** from the menu.

To Add Fields in the Header and Footer (3.3.3.5): Display the header and place the insertion point where you want to insert the field. Click the desired field button on the Header and Footer toolbar.

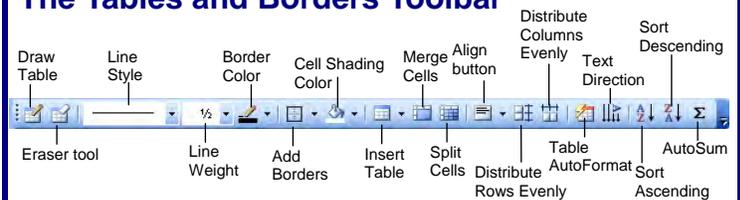


To Add Automatic Page Numbering (3.3.3.6): Select **Insert** → **Page Numbers** from the menu. Select how you want the page numbers to appear in the Page Numbers dialog box.



Objects (3.4)

The Tables and Borders Toolbar



Tables (3.4.1)

To Create a Table (3.4.1.1): Click the **Insert Table** button on the Standard toolbar and select the number of columns and rows from the grid. Or, select **Table** → **Insert** → **Table** from the menu and specify the number of columns and rows you want in the dialog box. Or, click the **Draw Table** button on the Tables and Borders toolbar and draw the borders of the cells in the table.

To Insert Text in a Table (3.4.1.2): Click in a table cell and begin typing.

- **To Select a Table (3.4.1.3):** Select **Table** → **Select** from the menu and select the table item you want to select.

To Select: **Do This:**

A Row Click to the left of the row.

A Column Click the column's top border (the pointer will change to a ↓.)

A Cell Click the left edge of the cell.

Entire Table Click the  move handle next to the table (must be in Print Layout View.)

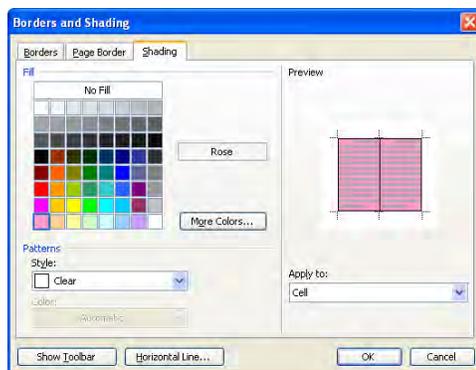
- **To Insert a Column or Row (3.4.1.4):** Select the column or row where you want the new column or row to be inserted. Click the **right mouse** button and select **Insert Columns** or **Insert Rows** from the shortcut menu, or select **Table** → **Insert** → **Columns** or **Rows** from the menu.

- **To Delete a Column or Row (3.4.1.4):** Select the column or row, click the **right mouse** button and select **Delete Columns** or **Delete Rows** from the shortcut menu, or select **Table** → **Delete** → **Columns** or **Rows** from the menu.

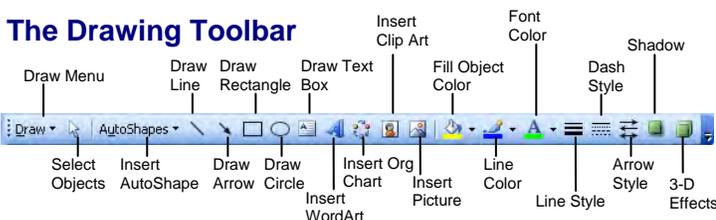
- **To Adjust Column Width or Row Height (3.4.1.5):** Drag the right border of the column, or drag the bottom border of the row. Right-click the border to AutoFit the column or row according to its contents.

- **To Modify Table Borders (3.4.1.6):** Drag the right border of the column, or drag the bottom border of the row. Double-click the border to AutoFit the column or row according to its contents.

- **To Add Cell Shading (3.4.1.7):** Select **Format** → **Borders and Shading** from the menu. Click the **Shading** tab. Click the **Apply to list arrow** and select **Cell**. Select a color from the Fill section and click **OK**.



The Drawing Toolbar



Pictures, Images, Charts (3.4.2)

- **To Insert a Picture (3.4.2.1):** Select **Insert** → **Picture** → **From File** from the menu, navigate to and select the file, and click **Insert**.
- **To Insert a Clip Art Graphic (3.4.2.1):** Select **Insert** → **Picture** → **Clip Art**, search by keyword, click the graphic's list arrow, and select **Insert**.
- **To Select a Picture (3.4.2.2):** Click a picture to select it.
- **To Duplicate (3.4.2.3):** Select the image. Click the  **Copy** button on the Standard toolbar, click where you want to add the duplicate image and click the  **Paste** button on the Standard toolbar. Or press **<Ctrl> + <C>** (copy) and **<Ctrl> + <V>** (paste).
- **To Duplicate an Object using Click and Drag (3.4.2.4):** Select the object you want to move and press and hold the **<Ctrl>** while you click and drag the object to the destination, and release the mouse button.

- **To Move (3.4.2.4):** Select an image. Click the  **Cut** button on the Standard toolbar, click where you want to move the text or image and click the  **Paste** button on the Standard toolbar. Or press **<Ctrl> + <X>** (cut) and **<Ctrl> + <V>** (paste).

- **To Move an Object using Click and Drag (3.4.2.4):** Select the object you want to move, click and drag the object to the destination, and release the mouse button.

- **To Resize an Object (3.4.2.5):** Click the object to select it and drag the object's sizing handles until the shape reaches the desired size.

- **To Delete an Object (3.4.2.6):** Click the object to select it and press the **<Delete>** key.

Mail Merge (3.5)

Concept and Practice (3.5.1)

1. **Select the main document:** Select **Tools** → **Letters and Mailings** → **Mail Merge Wizard** from the menu, select the type of main document type you want to use, and click **Next**.
2. **Open the main document:** Specify how you want to set up your letters and click **Next**.
3. **Open the data file:** Specify the list of recipients you want to use (and enter the recipients if necessary) and click **Next**.
4. **Insert data fields:** Place the insertion point where you want to insert the mail merge information in the Main Document and click the appropriate item(s) in the mail merge task pane. Click **Next** when you're finished.
5. **Preview the mail merge:** Browse the merged letters and click **Exclude** to exclude a letter. Click **Next** when you're finished.
6. **Merge the letter and data file:** Specify where you want to send the merged letters (directly to the printer or to individual document files).

Prepare Outputs (3.6)

Preparation (3.6.1)

- **Proofreading Documents (3.6.1.1):** Proofreading is very important. If you send out a document with formatting or textual errors, people may get the impression that you are careless and unprofessional.
- **To Correct a Spelling Error (3.6.1.2):** Right-click the error to bring up a suggestion menu. Or click the  **Spelling and Grammar** button on the Standard toolbar to review spelling errors in the whole document.
- **To Add Words to the Dictionary (3.6.1.3):** Right-click the word and select **Add to Dictionary** from the shortcut menu.
- **To Preview a Document (3.6.1.4):** Click the  **Print Preview** button on the Standard toolbar or select **File** → **Print Preview** from the menu.

Printing (3.6.2)

- **To Choose Print Options (3.6.2.1):** Select **File** → **Print** from the menu. Select your print specifications (specific pages, number of copies) in the Print range section of the Print dialog box.

- **To Print a Document (3.6.2.2):** Click the  **Print** button on the Standard toolbar, or select **File** → **Print** from the menu, or press **<Ctrl> + <P>**.





Parts of a Typical Window (2.2.1)

Menu bar
Click these words to display command menus.

Title bar
Click and drag to move the window.

Minimize button
Click to shrink or minimize the window.

Close button
Click to close the window.

Maximize button
Click to make the window fill the entire screen. If the window already fills the entire screen, click the

Restore button
to restore the window to its original size.

Toolbar
Buttons for commonly used commands. Move the pointer over a button for a couple seconds to see what it does.

Click to move up the page.

Click to move down the page.

Click and drag to change the window's size.

Move the pointer on your computer's screen by pushing the mouse across your desk.

Click: Press the left mouse button once. Click to use a program's menus and toolbars and to select items.

Double-click: Press the mouse button twice in rapid succession. Double-click to open items.

Right-click: Press the right mouse button. Right-click an item to display a list of commands that you can do to the item.

For Help, press F1

Keyboard Shortcuts

General

Open menu	<Alt> + Letter
Help	<F1>
Toggle between open applications	<Alt> + <Tab>
Switch between open applications	<Alt> + <Esc>
Display Start menu	<Ctrl> + <Esc>
Display shortcut menu for selected	<Shift> + <F10>
Minimize all open windows	<Win> + <M>

Dialog Box Commands

Confirm and close a dialog box (OK)	<Enter>
Cancel and close a dialog box (Cancel)	<Esc>
Move to next field	<Tab>
Move to the previous field	<Shift> + <Tab>

Using the Application

The current user name.

Your Web browser and e-mail programs appear here.

Your frequently used programs appear here.

All Programs: Menu of every program installed on your computer.

My Documents: Provides a convenient location to save your files.

My Recent Documents: Files you recently worked on.

My Pictures: Provides a location to save your photos and graphics.

My Music: Provides a convenient location to save MP3 files.

My Computer: Access the drives, folders, and files on your computer.

Open the Windows Control Panel.

Set default programs for files.

Show installed printers or add one.

Get help on how to use Windows.

Find a file on your computer.

Run a program.

Log off or shut down the computer.

Editing

Cut	<Ctrl> + <X>
Copy	<Ctrl> + <C>
Paste	<Ctrl> + <V>
Undo	<Ctrl> + <Z>
Delete	<Delete>

Navigation

Up one screen	<Page Up>
Down one screen	<Page Down>
Beginning of a line	<Home>
End of a line	<End>
Skip through words	<Ctrl> + <Left>, <Right>
Skip through paragraphs	<Ctrl> + <Up>, <Down>

Computer Environment (2.1)

First Steps with the Computer (2.1.1)

- To Start the Computer (2.1.1.1):** Press the Power button on your computer. Make sure the power on your monitor is also on.
- To Shut Down the Computer (2.1.1.2):** Click the **Start button** and select **Shut Down** from the Start menu. Click the **What do you want your computer to do?** list arrow and select **Shut Down** from the list. Click **OK**.

- To Restart the Computer (2.1.1.3):** Click the **Start button** and select **Shut Down**. Click the **What do you want your computer to do?** list arrow and select **Restart** from the list. Click **OK**.
- To Shut Down a Non-Responding Application (2.1.1.4):** Press <Ctrl> + <Alt> + <Delete> and click the **Task Manager button**. In the Windows Task Manager dialog box, click the Applications tab, select the frozen application and click the **End Task button**.

Basic Information and Operations (2.1.2)

- **To View System Information (2.1.2.1):** Select **Start** → **Control Panel** from the menu. Click the **Performance and Maintenance** category and click the **System** icon.
- **To Change the Date and/or Time (2.1.2.2):** Double-click the **clock** on the taskbar. Adjust the date and time using the calendar and clock controls and click **OK**.
- **To Adjust Your Computer's Volume (2.1.2.2):** Select **Start** → **All Programs** → **Accessories** → **Entertainment** → **Volume Control** from the menu. Change the volume as necessary.
- **To Change Desktop Configuration (2.1.2.2):** Right-click a blank area on the desktop and select **Properties** from the shortcut menu. Change the desktop theme, resolution settings or screen saver.
- **To Add a Keyboard Language (2.1.2.3):** Click the **Start button** and select **Control Panel** from the menu. Click the **Date, Time, Language, and Regional Options** category and click the **Add other languages** task. Click the **Details button** in the Regional and Language Options dialog box. Click the **Add button** and select the language and layout you want to use in the Add Input Language dialog box. Click **OK**.



- **To Change the Keyboard Language (2.1.2.3):** Click the **Start button** and select **Control Panel** from the menu. Click the **Date, Time, Language, and Regional Options** category and click the **Regional and Language options** icon. Click the **Language** tab and click the **Details button**. Click the **Default input language** list arrow and select the language you want to use. Click **OK**.



- **To Format Disks (2.1.2.4):** From My Computer or Windows Explorer, right-click the disk drive and select **Format**. Select the formatting options you want to use and click **Start**.
- **To Install an Application (2.1.2.5):** Insert the application installation CD. Click the **Start button**, select **Control Panel** and click the **Add or Remove Programs** category. Click the **Add New Programs button** and click the **CD or Floppy button**. (Most applications are automatically installed when the installation CD is inserted.)
- **To Remove an Application (2.1.2.5):** Click the **Start button**, select **Control Panel** and click the **Add or Remove Programs** category. Click the **Change or Remove Programs button** and select the program you want to remove and click the **Remove button**.
- **To Use the Print Screen Key (2.1.2.6):** Press **<Print Scrn>** to take a picture of the entire screen. Or, Press **<Alt> + <Print Scrn>** to take a picture of the active window. Place your insertion point in the program in which you want to paste the image. Press **<Ctrl> + <V>** to paste the image.
- **To Get Help (2.1.2.7):** Click the **Start button** and select **Help and Support** from the menu.

Text Editing (2.1.3)

- **To Start WordPad (2.1.3.1):** Select **Start** → **All Programs** → **Accessories** → **WordPad** from the menu.
- **To Save a File (2.1.3.2):** Click the **Save button** on the Standard toolbar, or select **File** → **Save**, or press **<Ctrl> + <S>**.
- **To Close WordPad (2.1.3.3):** Click the **Close button** on the title bar or select **File** → **Exit** from the menu.

Desktop (2.2)

Work with Icons (2.2.1)

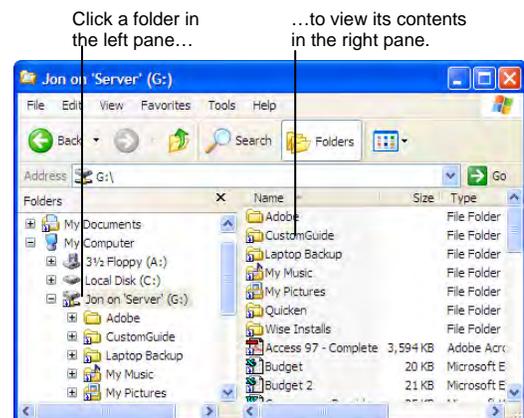
- **Desktop Icons (2.2.1.1):** In Windows XP, most icons are found under the Start menu. The **Recycle Bin** is where deleted files and folders are stored.
- **Select and Move Desktop Icons (2.2.1.2):** Click an icon to select it. Click and drag an icon to move it.
- **Open an Item from the Desktop (2.2.1.3):** Double-click an item to open it or to launch the application shortcut.
- **To Create a Shortcut to a File or Folder (2.2.1.4):** Drag the file or folder to the desktop with the **right mouse button** and select **Create Shortcut Here** from the shortcut menu.

Work with Windows (2.2.2)

- **Identify the Parts of a Window (2.2.2.1):** The diagram on the first page identifies common parts of a window.
- **Working with Windows (2.2.2.2):**
 - ▢ **Maximize button:** Click to make the window fill the entire screen.
 - ▢ **Restore button:** Click to restore the window to its original size.
 - ▢ **Minimize button:** Click to shrink or minimize the window.
 - ▢ **Close button:** Click to close the window.
- **To Switch Between Open Windows (2.2.2.3):** Click the window's button on the taskbar.

Managing Files (2.3)

Windows Explorer



- ▢ This folder contains hidden subfolders. Click to display those hidden folders.
- ▢ This folder's subfolders are displayed. Click to hide subfolders.

Concepts (2.3.1)

- **Hierarchical Structure (2.3.1.1):** Your computer is organized in a hierarchy of drives and folders. As shown in the image above, click the **expand** and **contract** buttons to view the hierarchy of folders in the computer.

- **System Storage Devices (2.3.1.2):** A computer uses these devices to store files and folders:

Hard Disk: Hard disks are permanently hidden inside your computer. Your computer's hard disk is its main filing cabinet—where it stores almost all of its programs and files.

Diskette: Diskettes are the square plastic things that look like coffee coasters. Floppy drives can't hold a lot of information, but they're ideal for moving small files between computers.

CD-ROM: Compact discs, or CD-ROMs, look like the audio discs you play in your stereo. CD-ROMs are inexpensive and they can store a lot of information, which is why they're used to install software for games and programs with a lot of multimedia. Unlike floppy or hard disks, most CD-ROMs can only read information—you can't save anything on them.

Network Drive: Network drives appear to be similar to hard disks when you see them in My Computer. But really, network drives are just folders saved on a computer within the network. Therefore, their size depends on the capacity of the host computer.

Directories/Folders (2.3.2)

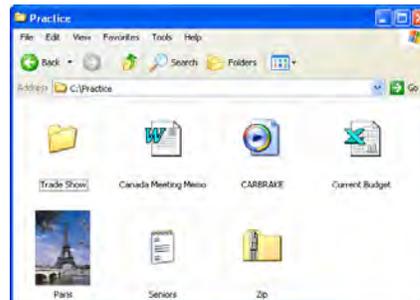
- **To Open a File or Folder (2.3.2.1):** Double-click the file or folder.
- **To Create a Folder (2.3.2.2):** Select the  **Make a new folder** task from the File and Folder Tasks menu, or, right-click any empty area in the window and select **New** → **Folder** from the shortcut menu. Type a name for the folder and press **<Enter>**.
- **To View a File or Folder's Properties (2.3.2.3):** Right-click the file or folder and select **Properties** from the shortcut menu.

Working with Files (2.3.3)

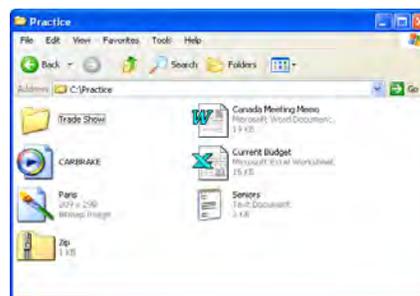
- **Common File Types (2.3.3.1):** Some of the most common file types you will use include:
 - Word Document (.doc):** This is a document created in Microsoft Word, a word processing program. Word documents normally have a .DOC extension.
 - Excel Workbook (.xls):** This is a spreadsheet created with Microsoft Excel. Excel spreadsheets normally have a .XLS extension.
 - Access Database (.mdb):** This is a database created with Microsoft Access. Access databases normally have a .MDB extension.
 - PowerPoint Presentation (.ppt):** This is a presentation created with Microsoft PowerPoint. PowerPoint presentations normally have a .PPT extension.
 - Image Files (.gif, .jpg):** Image files are stored in a number of different formats, such as the .GIF or JPG. GIF files are used for images with a few colors, such as vector graphics, while JPG files are used for images with millions of colors, like photographs.
 - Audio Files (.mp3, .wav):** Audio files are stored in a number of different formats, such as the .WAV or .MP3 file.
 - Video Files (.mpg, .wmv):** Video files are also stored in a number of different formats, such as .WMV, .MPG, and .AVI.
 - Compressed Files (.zip):** Compressed files or folders take up less space on a hard disk, and are easier to transfer over a network. Windows can create compressed files, but they can also be compressed by a third party, such as a program called WINZIP.
- **Temporary Files:** These files are created by Windows or other programs and are deleted when no longer used.

- **To Count Files in a Folder (2.3.3.2):** Right-click the folder and select **Properties** from the shortcut menu. Find the number of files (including files in subfolders) and the number of subfolders in the **Contains** section of the Properties dialog box.

- **To Count Files of the Same File Type (2.3.3.2):** Select the files of the same file type you want to count. Right-click the selected files and select **Properties** from the shortcut menu. Find the number of files selected at the top of the Properties dialog box, and the type of selected files in the **Type** section of the Properties dialog box.
- **To Change File Status (2.3.3.3):** Right-click the file. Select **Properties** from the shortcut menu. Check the status you want: **Read-only** or **Hidden**. Click **OK**.
- **To Change How Items are Displayed (2.3.3.4):** Select **View** from the menu and select from one of the five view modes (Thumbnails, Tiles, Icons, List, or Details).



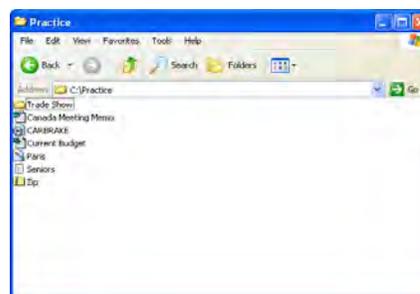
Thumbnails view allows you to view a thumbnail of image files in the folder. For example, a preview of the Paris.bmp file is shown, instead of just the .bmp file icon.



Tiles view displays the file type icon and details about the file, such as the file size and type. For pictures, the height and width of the pixels is shown.



Icons view displays large file type icons of all the files in the folder.



List view displays small file type icons of all the files in the folder. This view allows you to see more files at a time.



Details view allows you to view details about the file, such as the size, type, and when it was last modified. You can view more file details by right-clicking a column heading and selecting a property from the shortcut menu.

- **To Change How Items are Sorted (2.3.3.4):** Select **View** → **Details** from the menu. Click the **column heading** you want to use to sort the window. Click the column heading again to sort in reverse order.
- **Understanding File Extensions (2.3.3.5):** File Extensions help the computer identify files. They are not shown by default.
- **To Rename a File or Folder (2.3.3.6):** Click the folder to select it, click the  **Rename this folder** task in the File and Folder Tasks menu, or, right-click the file and select **Rename** from the shortcut menu. Type a name for the folder and press **<Enter>**.

Duplicate, Move (2.3.4)

- **To Select Multiple Adjacent Files (2.3.4.1):** Click the first file you want to select. Then press and hold down the **<Shift>** key while you click the last file in the group you want to select.
- **To Select Multiple Non-Adjacent Files (2.3.4.1):** Hold down the **<Ctrl>** key while you click the files you want to select.
- **Move/Copy a File or Folder (Drag and Drop Method) (2.3.4.2 and 2.3.4.3):** Move a file or folder by clicking it and dragging it to the desired location. Hold down the **<Ctrl>** key while you drag to copy the file or folder.
- **Move/Copy a File or Folder (Toolbar Method) (2.3.4.2 and 2.3.4.3):** Select the file or folder, select  **Move this file** or  **Copy this file** from the File and Folder Tasks menu, and select a destination for the file or folder from the dialog box.
- **Saving Backup Files (2.3.4.4):** You should always save a backup copy of your files so that you don't lose your work in the face of tragedy.

Delete, Restore (2.3.5)

- **To Delete a File or Folder (2.3.5.1):** Click the file and press **<Delete>** or right-click the file or folder and select **Delete** from the shortcut menu. Click **Yes** to confirm the deletion.
- **To Restore a Deleted File (2.3.5.2):** Double-click the Recycle Bin on the Desktop to open it. Select the file and click  **Restore this file** from the Recycle Bin Tasks menu.
- **To Empty the Recycle Bin (2.3.5.3):** Right-click the Recycle Bin and select **Empty Recycle Bin** from the shortcut menu.

Searching (2.3.6)

- **To Find a File (2.3.6.1):** Click the **Start button** and select **Search** from the Start menu. Enter the search conditions and where to look. Click **Search** to start searching for the file(s).
- **To Search by Criteria (2.3.6.2):** You can also search for files using other criteria—using the **Containing text** box or by clicking the **Search Options** link.
- **To Open a Recent File (2.3.6.3):** Click the **Start button**, select **My Recent Documents** and select the file you want to open.

Compressing Files (2.3.7)

- **File Compression (2.3.7.1):** Compressed files reduce the amount of storage space required to save the files.
- **To Compress a File/Folder (2.3.7.2):** Right-click the file or folder. Select **Send To** → **Compressed (zipped) Folder** from the shortcut menu. A new  compressed folder appears with the name of the file or folder.
- **To Extract a Compressed File/Folder (2.3.7.3):** Right-click the compressed folder. Select **Extract All** from the shortcut menu. Follow the wizard's instructions to indicate where you want to save the extracted files. Click **Finish** to complete the extraction.

Viruses (2.4)

Concepts (2.4.1)

- **Understanding Viruses (2.4.1.1):** A virus is a type of program that can replicate itself by making copies of itself. The main criterion for classifying a piece of executable code as a virus is that it spreads itself by means of 'hosts'.
- **Spreading Viruses (2.4.1.2):** A virus can only spread from one computer to another when its host is taken to the uninfected computer, for instance by a user sending it over a network or carrying it on a removable disk. Viruses can spread to other computers by infecting files on a network file system or a file system that is accessed by another computer.
- **Understanding Virus Scanning (2.4.1.3):** The best way to prevent a virus infection is to install a virus-scanning program on your computer, so that viruses are detected before they attack your computer.
- **Disinfecting Viruses (2.4.1.4):** If your computer is infected with a virus, it's not the end of the world. A virus-scanning program can not only prevent a virus infection, it can also "disinfect" a computer that has a virus. This means that it can remove the virus from the computer.

Handling Viruses (2.4.2)

- **To Check for Viruses Manually (2.4.2.1):** Right-click the drive, folder, or file you want to scan and select **Scan with (the installed virus-scanning program)** from the shortcut menu.
- **Updating Virus-Scanning Software (2.4.2.2):** Anti-virus programs usually update virus definitions at regular intervals via the Internet. Generally, these updates are quite reliable, but it doesn't hurt to double check. The virus definitions portion of the program should tell you when the application was last updated, and when your anti-virus subscription expires.

Print Management (2.5)

Setup (2.5.1)

- **To Change the Default Printer (2.5.1.1):** Open the Printers folder by clicking the **Start button** and selecting **Printers and Faxes**. Right-click the desired printer and select **Set as Default Printer** from the shortcut menu.
- **To Install a Printer (2.5.1.2):** Open the Printers folder by clicking the **Start button** and selecting **Printers and Faxes**. Click the **Add a Printer** task from the Printer Tasks menu. Click **Next**. Specify how the printer is connected (local or network) and click **Next**. Follow the wizard's instructions to verify the printer's information, such as location and its make and model. Click **Next**. (Optional) Specify whether you want to use the printer as the default printer and assign a name to the printer. Click **Next**. Specify whether or not you would like a test page to be printed and click **Finish**.

Print Outputs (2.5.2)

- **To Print a Document (2.5.2.1):** Open the file you want to print. Click the  **Print button** on the Standard toolbar.
- **To View Print Job Progress (2.5.2.2):** Double-click the  **printer** icon in the system tray and check the file's progress in the Print Manager window.
- **To Change Print Job Status (2.5.2.3):** Right-click the print job in the Print Manager window and select an option from the shortcut menu.

