

## Create a chart by using Microsoft Graph

When you create a chart by using Microsoft Graph, chart data is displayed in a table called a "datasheet." The datasheet provides sample information that shows where to type your own row and column labels and data.

1. In the program where you want to insert the chart, click **Object** on the **Insert** menu, and then click the **Create New** tab.
2. In the **Object type** box, click **Microsoft Graph Chart**, and then click **OK**.
3. To replace the sample data, type the information you want on the datasheet.

[How?](#)

4. To return to the program you inserted the chart in, click the program's document window.

### Tips

You can [use data from another program](#) to replace sample data on the datasheet.

You can [change the chart type](#) for a single data series or for the entire chart.

## Switch between the datasheet and the chart

To switch between the datasheet and the chart without hiding the datasheet, click the datasheet or the chart.

If the datasheet is not visible, click **View Datasheet**  to display it.

## Quit Microsoft Graph

If you inserted a new chart or opened your chart by double-clicking it, click the program's document window to quit Microsoft Graph and return to the program you inserted the chart in.

If you opened your chart by clicking **Open** on the **Chart Object** submenu (**Edit** menu), click **Exit & Return** on the **File** menu to quit Microsoft Graph and return to the program you inserted the chart in.

## **Get version information about Microsoft Graph**

On the **Help** menu in Microsoft Graph, click **About Microsoft Graph**.

The version number appears in the **About Microsoft Graph** dialog box.

## **Use shortcut keys in Microsoft Graph**

Some of the content in this topic may not be applicable to some languages.

## **What do you want to do?**

[Move around on a datasheet by using shortcut keys](#)

[Enter and edit data by using shortcut keys](#)

[Format data by using shortcut keys](#)

[Select cells or chart items by using shortcut keys](#)

[Work with windows, programs and Help by using shortcut keys](#)

[Work with menus and commands by using shortcut keys](#)

[Work with drawing objects and text boxes on charts by using shortcut keys](#)

[Work in dialog boxes by using shortcut keys](#)

[Work with the Office Assistant by using shortcut keys](#)



## Keys for moving around on a datasheet

| To move   | Press                                  |
|---|--|
| To a cell   | An arrow key                           |
| To the beginning of a row   | HOME                                   |
| To the first data cell (A1)                                       | CTRL+HOME                              |
| To the end of a row (last occupied column)                        | END                                    |
| To the lowest-right cell that contains data                       | CTRL+END                               |
| Down one window   | PAGE DOWN                              |
| Up one window   | PAGE UP                                |
| Right one window  | ALT+PAGE DOWN                          |
| Left one window   | ALT+PAGE UP                            |
| Up or down to the edge of the current <a href="#">data region</a> | CTRL+UP ARROW or<br>CTRL+DOWN ARROW    |
| Left or right to the edge of the current data region              | CTRL+LEFT ARROW or<br>CTRL+RIGHT ARROW |

## Select cells or chart items by using shortcut keys

### Select cells, columns, or rows in datasheets by using shortcut keys

| Press                 | To  |
|-----------------------|---|
| CTRL+SPACEBAR         | Select the entire column  |
| SHIFT+SPACEBAR        | Select the entire row   |
| CTRL+A                | Select the entire datasheet   |
| F8                    | Turn extend mode on or off  |
| SHIFT+ arrow key      | Extend the selection by one cell  |
| CTRL+SHIFT+ arrow key | Extend the selection to the last nonblank cell in the same column or row of the active cell |
| SHIFT+HOME            | Extend the selection to the beginning of the row  |
| CTRL+SHIFT+HOME       | Extend the selection to the upper left corner cell of the datasheet                         |
| CTRL+SHIFT+END        | Extend the selection to the last cell used in the datasheet (lower-right corner)            |
| SHIFT+PAGE DOWN       | Extend the selection down one screen  |
| SHIFT+PAGE UP         | Extend the selection up one screen  |
| SHIFT+BACKSPACE       | If multiple cells are selected, select only the active cell                                 |

## Select chart items by using shortcut keys

| Press       | To  |
|-------------|---|
| DOWN ARROW  | Select the previous group of items        |
| UP ARROW    | Select the next group of items            |
| RIGHT ARROW | Select the next item within the group     |
| LEFT ARROW  | Select the previous item within the group |

## Enter and edit data by using shortcut keys

| <b>Press</b>            | <b>To</b>   |
|-------------------------|---|
| ENTER                   | Complete a cell entry and move down in the selection  |
| SHIFT+ENTER             | Complete a cell entry and move up in the selection  |
| TAB                     | Complete a cell entry and move to the right in the selection  |
| SHIFT+TAB               | Complete a cell entry and move to the left in the selection   |
| ESC                     | Cancel a cell entry   |
| BACKSPACE               | Delete the character to the left of the insertion point, or delete the selection  |
| DELETE                  | Delete the character to the right of the insertion point, or delete the selection   |
| CTRL+DELETE             | Delete text to the end of the line  |
| Arrow keys              | Move one character left (LEFT ARROW) or right (RIGHT ARROW) within a cell, or return to the previous location of the insertion point (UP ARROW), or move to the end of the cell contents (DOWN ARROW); or move one cell up, down, left, or right within the datasheet |
| HOME                    | Move to the beginning of the line within a cell; or move to the beginning of a row within the datasheet   |
| END                     | Move to the end of the line within a cell; or move to the end of a row within the datasheet   |
| CTRL+PERIOD             | Move clockwise to the next corner of a selected range of cells  |
| F2                      | Edit or append data to the contents of the active cell  |
| CTRL+;<br>(SEMICOLON)   | Enter the date (datasheet only)   |
| CTRL+SHIFT+;<br>(COLON) | Enter the time (datasheet only)   |

|                         |                                     |
|-------------------------|-------------------------------------|
| CTRL+C                  | Copy the selection                  |
| CTRL+V                  | Paste the selection                 |
| CTRL+X                  | Cut the selection                   |
| DELETE                  | Clear the contents of the selection |
| CTRL+SHIFT+PLUS<br>SIGN | Insert blank cells                  |
| CTRL+ –                 | Delete the selection                |
| CTRL+Z                  | Undo the last action                |

## Format data by using shortcut keys

| Press         | To  |
|---------------|---|
| CTRL+1        | Display the <b>Format</b> dialog box for the selected chart item  |
| CTRL+SHIFT+~  | Apply the General number format to the selected chart axis or data labels   |
| CTRL+SHIFT+\$ | Apply the \$#,##0.00 Currency format to the selected chart axis or data labels (negative numbers appear in parentheses) |
| CTRL+SHIFT+%  | Apply the 0% Percentage format to the selected chart axis or data labels  |
| CTRL+SHIFT+^  | Apply the Scientific number format with two decimal places to the selected chart axis or data labels                    |
| CTRL+SHIFT+#  | Apply the d-mmm-yy Date format to the selected chart axis or data labels  |
| CTRL+SHIFT+@  | Apply the h:mm AM/PM Time format to the selected chart axis or data labels  |
| CTRL+SHIFT+!  | Apply the #,##0.00 Number format (negative values preceded by a minus sign) to the selected chart axis or data labels   |
| CTRL+B        | Apply or remove bold formatting   |
| CTRL+I        | Apply or remove italic formatting   |
| CTRL+U        | Apply or remove an underline  |
| CTRL+5        | Apply or remove strikethrough formatting  |

## Work in dialog boxes by using shortcut keys

| Press              | To   |
|--------------------|--|
| CTRL+TAB           | Switch to the next tab in a dialog box   |
| CTRL+SHIFT+TAB     | Switch to the previous tab in a dialog box   |
| TAB                | Move to the next option or option group  |
| SHIFT+TAB          | Move to the previous option or option group  |
| Arrow keys         | Move between options in the active list or between some options in a group of options  |
| SPACEBAR           | Select or clear the active check box   |
| Letter key         | Move to an option in the selected list, where the letter key is the first letter in the option name  |
| ALT+ <i>letter</i> | Select an option, or select or clear a check box, where <i>letter</i> is the key for the underlined letter in the option name              |
| ALT+DOWN<br>ARROW  | Open the selected list   |
| ESC                | Close the selected list  |
| ENTER              | Perform the action assigned to the default command button in the dialog box (the button with the bold outline— often the <b>OK</b> button) |
| ESC                | Cancel the command and close the dialog box  |

## Work with windows, programs, and Help by using shortcut keys

Some of the content in this topic may not be applicable to some languages.

| Press         | To  |
|---------------|---|
| CTRL+F7       | Activate the arrow keys so that you can move the active window. Press ENTER to complete the move.       |
| CTRL+F8       | Activate the arrow keys so that you can resize the active window. Press ENTER to complete the resizing. |
| CTRL+F5       | Restore the main program document window size   |
| CTRL+F4       | Close the window  |
| ALT+TAB       | Switch to the next open program   |
| ALT+SHIFT+TAB | Switch to the previous open program   |
| ALT+F4        | Exit the main program   |
| F1            | Display online Help   |
| CTRL+ESC      | Show the Windows <b>Start</b> menu  |

## Work with menus and commands by using shortcut keys

The menu bar is a special toolbar at the top of the screen that contains menus such as **File**, **Edit**, and **View**. In the following list, the term "toolbar" includes the menu bar.

| Press                                | To   |
|--------------------------------------|--|
| ALT, <i>letter1</i> , <i>letter2</i> | Open a command on a menu on the menu bar, where <i>letter1</i> is the underlined letter in the menu name and <i>letter2</i> is the underlined letter in the command name |
| F10 or ALT                           | Make the menu bar active   |
| CTRL+TAB                             | When a toolbar is active, select the next toolbar  |
| CTRL+SHIFT+TAB                       | When a toolbar is active, select the previous toolbar  |
| TAB                                  | Select the next menu or button on the active toolbar   |
| SHIFT+TAB                            | Select the previous menu or button on the active toolbar   |
| UP ARROW                             | Select previous menu item on the active menu or submenu  |
| DOWN ARROW                           | Select next menu item on the active menu or submenu  |
| SHIFT+F10                            | Display a shortcut menu  |
| HOME or END                          | Select the first or last command on the active menu or submenu   |
| ALT                                  | Close the active menu and submenu at the same time   |
| ESC                                  | Close the active menu or active submenu only   |
| ALT+SPACEBAR                         | Show the program icon menu (on the program title bar)  |
| ENTER                                | Open the active menu, or perform the action assigned to the selected button or command   |

## Work with drawing objects and text boxes on charts by using shortcut keys

| Press                 | To  |
|-----------------------|---|
| TAB                   | Select the next drawing object  |
| SHIFT+TAB             | Select the previous drawing object  |
| CTRL+ENTER            | Insert an AutoShape when the <b>AutoShape</b> menu on the <b>Drawing</b> toolbar is active and a shape has keyboard focus, or insert a text box when the text box tool on the <b>Drawing</b> toolbar has keyboard focus |
| HOME                  | Move to the beginning of a line in a text box   |
| CTRL+HOME             | Move to the beginning of the first line in a text box   |
| END                   | Move to the end of a line in a text box   |
| CTRL+END              | Move to the end of the last line in a text box  |
| LEFT ARROW            | Move one character to the left in a text box  |
| RIGHT ARROW           | Move one character to the right in a text box   |
| CTRL+LEFT ARROW       | Move one word to the left in a text box   |
| CTRL+RIGHT ARROW      | Move one word to the right in a text box  |
| SHIFT+HOME            | Select from the insertion point to the beginning of a line in a text box  |
| CTRL+SHIFT+HOME       | Select from the insertion point to the beginning of the first line in a text box  |
| SHIFT+END             | Select from the insertion point to the end of a line in a text box  |
| CTRL+SHIFT+END        | Select from the insertion point to the end of the last line in a text box   |
| SHIFT+LEFT ARROW      | Select or unselect one character to the left in a text box  |
| SHIFT+RIGHT ARROW     | Select or unselect one character to the right in a text box   |
| CTRL+SHIFT+LEFT ARROW | Select or unselect one word to the left in a text box   |

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|                           |   |
|---------------------------|---|
| CTRL+SHIFT+RIGHT<br>ARROW | Select or unselect one word to the right in a text<br>box |
|---------------------------|---|

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## Keys for working with Help

### With the Help window displayed

| Press        | To  |
|--------------|---|
| F6           | Move between the <a href="#">navigation pane</a> and the <a href="#">topic pane</a> |
| ALT+O        | Display the <b>Options</b> menu to access any <b>Help</b> toolbar command           |
| ALT+SPACEBAR | Display the program Control menu  |
| F5           | Refresh the Help topic  |

## In the navigation pane

| <b>Press</b> | <b>To</b>                              |
|--------------|--|
| CTRL+TAB     | Switch to the next tab                 |
| ENTER        | Open a selected book or Help topic     |
| DOWN ARROW   | Select the next book or Help topic     |
| UP ARROW     | Select the previous book or Help topic |

## In the topic pane

| <b>Press</b>       | <b>To</b>   |
|--------------------|---|
| ALT+RIGHT<br>ARROW | Go to the next Help topic   |
| ALT+LEFT<br>ARROW  | Go to the previous Help topic                                     |
| TAB                | Go to the first or next hyperlink                                 |
| SHIFT+TAB          | Go to the last or previous hyperlink                              |
| ENTER              | Activate a selected hyperlink                                     |
| UP ARROW           | Scroll toward the beginning of a Help topic                       |
| DOWN ARROW         | Scroll toward the end of a Help topic                             |
| PAGE UP            | Scroll toward the beginning of a Help topic in greater increments |
| PAGE DOWN          | Scroll toward the end of a Help topic in greater increments       |
| HOME               | Move to the beginning of a Help topic                             |
| END                | Move to the end of a Help topic                                   |
| CTRL+P             | Print the active Help topic                                       |
| CTRL+A             | Select the entire Help topic                                      |
| CTRL+C             | Copy the selected items to the Clipboard                          |

## Keys for using the Office Assistant

Some of the content in this topic may not be applicable to some languages.

| Press | To  |
|-------|---|
| F1    | Get Help. Displays the Assistant balloon if the Assistant is turned on and the <b>Respond to F1 key</b> check box is selected on the <b>Options</b> tab in the Assistant. |
| ESC   | Close an Assistant message  |

## **Use data from another program in your chart**

You can import, copy, or link to data from another program for use in your chart.

## **What do you want to do?**

[Import data from a text file or Lotus 1-2-3 file](#)

[Import a Microsoft Excel worksheet or chart](#)

[Copy data from another program](#)

[Link to data in another program](#)

## File formats Microsoft Graph can import

With the **Import File** command on the **Edit** menu, you can import data from text files and other programs, as shown in the following table.

| <b>File extension</b> | <b>File type</b>  |
|-----------------------|---|
| .txt, .csv            | Text (Delimited, that is, separated by tab characters, commas, or spaces) |
| .wks, .wk1            | Lotus 1-2-3   |
| .xls                  | Microsoft Excel worksheet or workbook                                     |
| .xlw                  | Microsoft Excel version 4.0 workbook                                      |
| .xlc                  | Microsoft Excel version 4.0 or earlier chart                              |

## Copy data from another application

1. Switch to the program and document from which you want to copy data.
2. Select the data you want to copy.
3. On the program's **Edit** menu, click **Copy**.
4. Switch to Microsoft Graph.
5. Switch to the datasheet.

### [How?](#)

6. Select the cell in which you want the copied data to begin.
7. On the **Edit** menu in Microsoft Graph, click **Paste**.

## Link to data in another program to create a chart

Microsoft Graph will update the chart when the data in the source program changes.

**Caution** When you link to data in another program, all existing data from the Microsoft Graph datasheet is deleted.

1. In the source program and document, select the data you want to link to the Microsoft Graph datasheet. For example, if you are working on a Microsoft Excel worksheet, select a range of cells.
2. On the program's **Edit** menu, click **Copy**.
3. Switch to Microsoft Graph, or double-click the Microsoft Graph chart.
4. Switch to the datasheet.

[How?](#)

5. On the **Edit** menu, click **Paste Link**, and then click **OK**.

## Break a link to data in another program

When you break a link to data in another program, the datasheet and chart will no longer be updated when data in the former source document changes.

1. Switch to the datasheet.

[How?](#)

2. On the **Edit** menu, click **Links**.
3. Click **Break Link**.



## Import a Microsoft Excel worksheet or chart

Imported data can be up to 4,000 rows long by 4,000 columns wide, but no more than 255 [data series](#) can be displayed in the chart.

**Caution** If you select the **Overwrite existing cells** check box, the imported data replaces all existing data on the datasheet.

1. Switch to the datasheet.

[How?](#)

2. If you are importing a Microsoft Excel worksheet and you want the imported data to begin at a cell other than the upper-left cell on the datasheet, select the cell.
3. On the **Edit** menu, click **Import File**.
4. In the **Look in** box, click the drive, folder, or Internet location that contains the file.

To open a file created in another program, click the file format you want in the **Files of type** box. You can also type the file name extension in the **File name** box; for example, type **\*.xls** to find Microsoft Excel files. In the folder list, double-click folders until you open the folder that contains the file you want.

5. Double-click the file you want to import.
6. If you selected a Microsoft Excel workbook created with version 5.0 or later, select the sheet you want to import. You can import only one sheet.

To import all the data on the worksheet, click **Entire sheet** under **Import**.

To import part of the data, click **Range**, and then type the range of data you want. For example, to import cells A1 through B5, type **A1:B5** in the **Range** box.

If you selected a cell in step 2, clear the **Overwrite existing cells** check box.



## Import a text file or Lotus 1-2-3 file to create a chart

Imported data can be up to 4,000 rows long by 4,000 columns wide, but no more than 255 [data series](#) can be displayed in the chart.

1. Switch to the datasheet.

[How?](#)

2. Select the cell where you want the imported data to begin, usually the upper-left cell on the datasheet.
3. On the **Edit** menu, click **Import File**.
4. In the **Look in** box, click the drive, folder, or Internet location that contains the file.

To open a file created in another program, click the file format you want in the **Files of type** box. You can also type the file name extension in the **File name** box; for example, type **\*.txt** to find text files. In the folder list, double-click folders until you open the folder that contains the file you want.

5. Double-click the file you want to import.

If you are importing a text file, the Text Import Wizard appears. Follow the steps in the wizard to specify how you want the data arranged on the datasheet.

## How Microsoft Graph interprets Lotus 1-2-3 number formats

Some of the content in this topic may not be applicable to some languages.

When you import data from a Lotus 1-2-3 document, Microsoft Graph converts Lotus 1-2-3 number formats as shown in the following table. Microsoft Graph attempts to convert to a format with the same number of decimal places as specified in Lotus 1-2-3. If necessary, Microsoft Graph creates a custom format that accommodates extra decimal places.

| <b>Lotus 1-2-3 format</b> | <b>Microsoft Graph format</b>  |
|---------------------------|--|
| Fixed, 0 decimals         | Number, 0 decimals (0)   |
| Fixed, 2 decimals         | Number, 2 decimals (0.00)  |
| Scientific, 0 decimals    | Scientific, 0 decimals (0E+00)   |
| Scientific, 2 decimals    | Scientific, 2 decimals (0.00E+00)  |
| Currency, 0 decimals      | Currency, 0 decimals, \$ symbol<br>(\$#,##0;(\$#,##0))                     |
| Currency, 2 decimals      | Currency, 2 decimals, \$ symbol<br>(\$#,##0.00;(\$#,##0.00))               |
| Percent, 0 decimals       | Percentage, 0 decimals (0%)  |
| Percent, 2 decimals       | Percentage, 2 decimals (0.00%)   |
| Comma, 0 decimals         | Number, 0 decimals, comma (,) thousands separator<br>(#,##0;(#,##0))       |
| Comma, 2 decimals         | Number, 2 decimals, comma (,) thousands separator<br>(#,##0.00;(#,##0.00)) |
| General                   | General  |

|                   |                                |
|-------------------|--------------------------------|
| +/-               | General                        |
| Date1 (dd-mmm-yy) | Date, Type 4-Mar-96 (d-mmm-yy) |
| Date2 (dd-mmm)    | Date, Type 4-Mar (d-mmm)       |
| Date3 (mmm-yy)    | Date, Type Mar-96 (mmm-yy)     |
| Text              | Text                           |



## Examples of chart types

- ▶ Column
- ▶ Cone, cylinder, and pyramid
- ▶ Bar
- ▶ Line
- ▶ Area
- ▶ XY (scatter)
- ▶ Bubble
- ▶ Pie
- ▶ Doughnut
- ▶ Stock
- ▶ Surface
- ▶ Radar



## Select a different chart type

For most 2-D charts, you can change the chart type of either a [data series](#) or the entire chart. For xy (scatter) and bubble charts, you can change only the type of the entire chart. For most 3-D charts, changing the chart type affects the entire chart. For 3-D bar and column charts, you can change a data series to the cone, cylinder, or pyramid chart type.

1. Do one of the following:

To change the chart type of the entire chart, click the chart.

To change the chart type of a data series, click the data series.

2. On the **Chart** menu, click **Chart Type**.
3. On the **Standard Types** or **Custom Types** tab, click the chart type you want.

To apply the cone, cylinder, or pyramid chart type to a 3-D bar or column data series, click **Cylinder**, **Cone**, or **Pyramid** in the **Chart type** box on the **Standard Types** tab, and then select the **Apply to selection** check box.

**Note** If you clear the **Apply to selection** check box, Microsoft Graph changes the chart type for the entire chart even if a single data series is selected.

## **Change the default chart type**

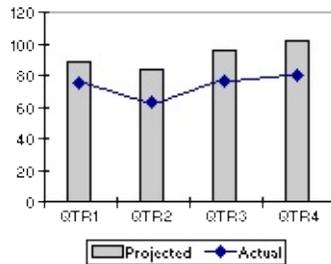
The default chart type for Microsoft Graph is a column chart. If you routinely create a different type of chart, such as a line chart, you can change the default chart type. If you already have a chart that has the chart type, items, and formatting you want, you can use that chart as the default chart type.

**What do you want to do?**

[Change the default chart type](#)

[Use the selected chart as the default chart type](#)

## Combination charts for showing mixed data



**Combination charts** A combination chart uses two or more chart types to emphasize that the chart contains different kinds of information. The chart in the example above shows one data series (Projected) as a column chart type and the other (Actual) as a line. To create this kind of overlay effect, [change the chart type](#) for one or more of the data series in the chart.



**Secondary axis** When the range of values for different data series varies widely, or when you have mixed types of data, you can [plot one or more data series on a secondary value \(y\) axis](#). The scale of the secondary axis reflects the values for the associated series. The chart in the example above shows the number of homes sold on the left y-axis and the average price on the right y-axis.

## Make your own chart types

When you create a chart or want to change the type of a chart, you can choose between a standard chart type and a custom chart type. If you want to use a custom chart type, you can choose one of the built-in custom chart types, or you can make your own.

**Built-in custom chart types** Microsoft Graph comes with several built-in chart types that are based on standard chart types but include additional formatting and options, such as a legend, gridlines, data labels, a secondary axis, colors, patterns, fills, and placement choices for various chart items. These chart types can be found on the **Custom Types** tab in the **Chart Type** dialog box. [How to select a different chart type](#).

**Make your own chart types** You can also create your own custom chart types by changing any of the chart types that Microsoft Graph provides. You can even share these custom chart types with other users. For example, if you want the same title information to appear on all your company charts, you can create a chart with that title, save the chart as a user-defined custom chart type, and then [share it with others](#) in your company to use like a template.

## Save a custom chart type to apply to other charts

1. Format the chart with the chart type, colors, and other options you want.
2. On the **Chart** menu, click **Chart Type**.
3. On the **Custom Types** tab, click **User-defined**.
4. Click **Add**.
5. In the **Name** box, type a name.  
If you want to add a description, type it in the **Description** box.
6. Click **OK**.

## Share a custom chart type with other users

1. On each user's machine, open the copy of the document that contains the custom chart type you want to share, and then double-click the chart to activate the Microsoft Graph menus.
2. Add the custom chart type as a new custom chart type.

[How?](#)

## Delete a user-defined custom chart type

You cannot delete a built-in custom chart type.

1. On the **Chart** menu, click **Chart Type**.
2. On the **Custom Types** tab, click **User-defined**.
3. In the **Chart type** box, click the format you want to delete.
4. Click **Delete**, and then click **OK**.

## Enter data on a datasheet

Microsoft Graph reserves the first row and column of the datasheet for text that identifies the information in that row or column. In the case of an xy (scatter) or bubble chart, the first row or column contains values.

1. Switch to the datasheet.

[How?](#)

2. Click a cell, and then type the text or numbers you want.

**Note** If you change existing text or values, the chart changes to reflect the new text or values.

## **Add or remove data from a chart**

You can delete data from both a datasheet and its related chart. When you delete data from a datasheet, Microsoft Graph updates the chart automatically. You can control which data from the datasheet appears in the chart by choosing to leave out or include specific datasheet rows and columns. To add data to a chart, you can type directly on the datasheet or copy and paste data from another application onto the datasheet.

## **What do you want to do?**

[Enter data on a datasheet](#)

[Copy data from another application](#)

[Exclude or include rows or columns of a datasheet from a chart](#)

[Delete cells, rows, or columns on a datasheet](#)

## Add a text box to a chart

1. Switch to the chart.

[How?](#)

2. On the **Drawing** toolbar, click **Text Box** .
3. Click where you want to position one corner of the text box, and then drag until the box is the size you want.
4. Type the text you want in the box. The text will wrap inside the box.

To start a new line inside the box, press ENTER.

5. When you finish typing, press ESC or click outside of the text box.

## **Change category axis labels, data series names, or legend text**

1. Switch to the datasheet.

[How?](#)

2. Click the cell that contains the text you want to change.
3. Type the new text.
4. Press ENTER.



## **Change chart labels, titles, and other text**

Most chart text— such as category axis [labels](#), [data series](#) names, [legend](#) text, and [data labels](#)— is linked to the cells on the datasheet used to create the chart. If you edit the text of these items on the chart, they are no longer linked to the datasheet cells. To change the text of these items and maintain links to datasheet cells, edit the text on the datasheet.

[Change category axis labels, data series names, or legend text](#)

[Change data labels](#)

[Edit chart and axis titles](#)

## **Edit chart and axis titles**

1. Click the title you want to change.
2. Type the new text you want.
3. Press ESC.



## Align text in chart titles and text boxes

1. Click the **title** or the border of the **text box** you want to align.
2. If you clicked an axis title, click **Selected Axis Title** on the **Format** menu.

If you clicked a chart title, click **Selected Chart Title** on the **Format** menu.

If you clicked a text box, click **Text Box** on the **Format** menu.

3. Click the **Alignment** tab.

If you don't see the **Alignment** tab, click **Cancel**, click outside of the text you want to format, and then repeat steps 1-3.

4. Select the options you want.

**Tip** To quickly change the horizontal alignment of selected chart titles and text boxes, click **Align Left** , **Center** , or **Align Right**  on the **Formatting** toolbar.

## **Change data labels**

To change data labels on the datasheet, switch to the datasheet, click the cell that contains the information you want to change, type the new text or value, and then press ENTER.

To change data labels on the chart, click once on the data label you want to change to select the data labels for the entire series, and then click again to select the individual data label. Type the new text or value, and then press ESC.

If you change the data label text on the chart, the data label text is no longer linked to a datasheet cell.

## Change values in a chart

The values in a chart are linked to the datasheet from which the chart is created. Microsoft Graph updates the chart when you change the data on the datasheet.

1. Switch to the datasheet.

[How?](#)

2. In the cell that contains the value you want to change, type a new value.
3. Press ENTER.



## **Change the way data is plotted**

You can change the placement and datasheet orientation of [data series](#) in a chart. The order in which Microsoft Graph plots data series in the chart is determined by their order on the datasheet.

## **What do you want to do?**

[Plot data series from datasheet rows instead of columns, and vice versa](#)

[Plot a data series along a secondary value axis in a 2-D chart](#)

[Reverse the plotting order of categories, values, or series](#)

[Control the way empty cells are plotted](#)

[Change which row or column contains the x axis values for an xy \(scatter\) chart](#)

**Not sure which choice you want?**

## Change the points plotted in a pie-of-pie or bar-of-pie chart

1. Click a slice in the pie chart you want to change.
2. On the **Format** menu, click **Selected Data Point**, and then click the **Options** tab.
3. Select the options you want.

**Tip** You can also change which slices appear in the pie-of-pie or bar-of-pie chart by dragging. Click a slice or bar segment on the main chart, and then drag it to the pie-of-pie or bar-of-pie chart, or vice versa.



## Change values in a 2-D chart by dragging data markers

When you change the value of a [data marker](#) by dragging, Microsoft Graph also changes the underlying value on the datasheet.

1. Click the [data series](#) that contains the data marker you want to change, and then click the data marker.
2. If the data marker is a bubble, 2-D line, or xy (scatter) data marker, drag the data marker.

If the data marker is a 2-D bar or 2-D column data marker, drag the top-center selection handle.

If the data marker is a 2-D pie or doughnut chart data marker, drag the largest selection handle on the outer edge of the data marker.

**Note** You cannot change values in a 3-D chart by dragging data markers.



## Change which row or column contains the x axis values for an xy (scatter) chart

You can change the data series whose values are used to calculate tick-mark labels along the x axis in an xy (scatter) chart. By default, the values in the first series on the datasheet are used for tick-mark labels. An "X" appears in the row or column heading next to the data series you have assigned to be plotted on the x axis.

1. Switch to the datasheet.

[How?](#)

2. Click the [row heading](#) or [column heading](#) of the row or column you want to use as the values along the x axis.
3. On the **Data** menu, click **Plot on X Axis**.

## **Control the way empty cells are plotted**

1. On the **Tools** menu, click **Options**, and then click the **Chart** tab.
2. Under **Empty cells plotted as**, click the option you want.



## Exclude or include rows or columns of a datasheet from a chart

The following procedure either excludes data from a chart without deleting the corresponding data from the datasheet or restores to the chart rows and columns that appear dimmed on the datasheet.

1. Switch to the datasheet.

[How?](#)

2. Double-click the [row heading](#) or [column heading](#) of the row or column you want to remove from or add to the chart.

### Notes

You can also exclude a [data series](#) from a chart by clicking the data series and then pressing DELETE.

In a bubble chart, Microsoft Graph excludes or includes two rows or columns for each data series.



## Plot data series from datasheet rows instead of columns, and vice versa

You can tell whether data series are from rows or columns by looking at the [row headings](#) and [column headings](#) on the datasheet. A graphic that represents the chart type appears in the heading of a row or column.

To have the columns on the datasheet represent the [data series](#) in the chart, click **By Column**  on the **Standard** toolbar.

To have the rows on the datasheet represent the data series in the chart, click **By Row**  on the **Standard** toolbar.



## Reverse the plotting order of categories, values, or series

You can reverse the plotting order of categories or values for most charts, as well as of [data series](#) in 3-D charts with a third axis. You cannot reverse the plotting order of values in a radar chart.

1. Click the axis for the categories, values, or series whose plotting order you want to change.
2. On the **Format** menu, click **Selected Axis**, and then click the **Scale** tab.
3. To reverse the plotting order of categories, select the **Categories in reverse order** check box.

To reverse the plotting order of values, select the **Values in reverse order** check box.

To reverse the plotting order of series for 3-D charts, select the **Series in reverse order** check box.



## Plot a data series along a secondary value axis in a 2-D chart

When the range of values for different [data series](#) in a 2-D chart varies widely, or when you have mixed types of data (such as price and volume), you can plot one or more data series on a secondary value (y) [axis](#). The scale of the secondary axis reflects the values for the associated series.

1. Click the data series you want to plot along a secondary value axis.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Axis** tab.
3. Click **Secondary axis**.

## Where did the data for my chart go?

The data used to create the chart resides on the datasheet. When you switch from the datasheet to the chart by clicking **View Datasheet**  or by clicking **Datasheet** on the **View** menu, Microsoft Graph hides the datasheet. To display the datasheet, click the button or the command again. To switch between the datasheet and the chart without hiding the datasheet, click the datasheet or the chart.

If you clicked outside of the chart to switch back to the program that contains the chart, you closed Microsoft Graph. To return to Microsoft Graph, double-click the chart.

## **I typed new text or numbers on the datasheet, but the data labels in the chart didn't update.**

Microsoft Graph breaks links between data labels and datasheet cells if you typed information directly in the data label in the chart. To reestablish links between data labels and the datasheet, you must delete the data labels and then add them again. Click the data labels you want to delete, and then press DELETE.

## **Text is missing along the horizontal axis of the chart.**

If some of the category names aren't visible along the horizontal axis of your chart, try the following:

Click the chart, and then drag one of the sizing handles to enlarge the chart. By default, the fonts in the chart scale proportionally as you resize the chart.

Click the axis, click the arrow next to **Font Size**  , and then click a smaller font size.

Double-click the axis labels, and then change the rotation angle on the **Alignment** tab. If the angle is 0, 90, or – 90 degrees, the text will wrap.

**The text box, picture, or floating text I added to my user-defined chart type is not included when I create a chart.**

Text boxes, pictures, and floating text on charts are not saved in user-defined charts. Add these objects after you create the chart that is based on the user-defined chart.



## Why does the font size in my chart keep changing?

By default, fonts in a chart scale proportionally when you resize the chart. If you want the font sizes in a chart to remain constant, select the [chart area](#) by clicking the blank area between the border of the chart and the [plot area](#). On the **Format** menu, click **Selected Chart Area**, click the **Font** tab, and then clear the **Auto scale** check box.



## Add a legend to a chart

1. Click the chart to which you want to add a [legend](#).
2. On the **Chart** menu, click **Chart Options**, and then click the **Legend** tab.
3. Select the **Show legend** check box.
4. Under **Placement**, click the option you want.

**Note** When you click one of the **Placement** options, the legend moves, and the plot area automatically adjusts to accommodate it. If you move and size the legend by using the mouse, the plot area does not automatically adjust. When you use the **Placement** options, the legend loses any custom sizing you may have already applied by using the mouse.



## Add a title to a chart or axis

1. Click the chart to which you want to add a [title](#).
2. On the **Chart** menu, click **Chart Options**, and then click the **Titles** tab.
3. To add a chart title, click in the **Chart title** box, and then type the text you want.

To add one or more axis titles, click in the appropriate box for each title, and then type the text you want.

**Tip** To insert a line break in a chart title or axis title, click the text in the chart, click where you want to insert the line break, and then press ENTER.



## Add data labels to a chart

The chart type associated with the selected [data series](#) or data point determines the type of [data label](#) you can add.

1. To add data labels to a data series, click the data series.  
To add a data label to a single data point, click the data series that contains the [data marker](#) you want to label, and then click the data marker for the data point you want to label.
2. On the **Format** menu, click **Selected Data Series** or **Selected Data Point**.
3. On the **Data Labels** tab, select the options you want.

**Tip** You can quickly label all data points. Click the chart, click **Chart Options** on the **Chart** menu, and then select the options you want on the **Data Labels** tab.



## Change the display of chart labels, data tables, legends, gridlines, or axes

You can choose to display or hide [titles](#), [gridlines](#), [axes](#), [data labels](#), [legends](#), or a [data table](#) in your chart. Some of these items are available only in certain types of charts. You can display or hide some of these items by using the buttons on the **Chart** toolbar.

**What do you want to do?**

**Add or change chart items**

[Add data labels to a chart](#)

[Add or change a title in a chart and axis](#)

[Add a legend to a chart](#)

## **Display or hide chart items**

[Display or hide gridlines in a chart](#)

[Display or hide axes in a chart](#)

[Display or hide the data table in a chart](#)

## **Delete chart items**

[Delete data labels, titles, or legends in a chart](#)

## **Delete data labels, titles, or legends in a chart**

1. Click the item you want to delete.
2. Press DELETE.



## Display or hide a data table in a chart

**Data tables** can be displayed in line, area, column, and bar charts. In bar charts, the data table does not replace an axis of the chart but is aligned to the chart.

1. Click the chart to which you want to add a data table.
2. On the **Chart** menu, click **Chart Options**, and then click the **Data Table** tab.
3. To display the chart data in a grid at the bottom of the chart, select the **Show data table** check box.

To hide the data table, clear the check box.

**Note** To attach the data table to the category axis in a 3-D chart, click **3-D View** on the **Chart** menu, and then select the **Right angle axes** check box.



## Display or hide axes in a chart

Hiding an [axis](#) hides the [labels and tick-marks](#) along the axis. Pie and doughnut charts do not have axes.

1. Click the chart in which you want to display or hide axes.
2. On the **Chart** menu, click **Chart Options**, and then click the **Axes** tab.
3. Select the check boxes for the axes you want to display.  
Clear the check boxes for the axes you want to hide.



## Display or hide gridlines in a chart

Pie and doughnut charts do not have [gridlines](#).

1. Click the chart to which you want to add gridlines.
2. On the **Chart** menu, click **Chart Options**, and then click the **Gridlines** tab.
3. Select the check boxes for the gridlines you want to display.  
Clear the check boxes for the gridlines you want to hide.

## Display or hide information about chart items

When you rest the pointer over a chart item, you can see the name and value of the item in a tip.

1. On the **Tools** menu, click **Options**, and then click the **Chart** tab.
2. To see the name of a chart item when you rest the pointer over it, select the **Show names** check box.

To see the value of a data marker when you rest the pointer over it, select the **Show values** check box.

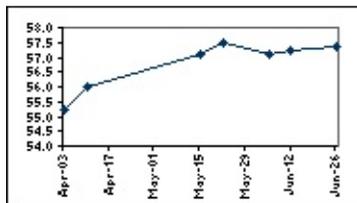
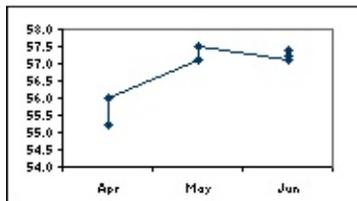
To hide all tips, clear both check boxes.

## Using dates in charts

When you create a chart from worksheet data that uses dates, and the dates make up the category (x) axis in the chart, Microsoft Graph automatically uses a time-scale category axis.

**Display of dates** The time-scale category axis displays dates in chronological order at specific intervals, or "base units," even if the dates on the worksheet are not in order or in the same base units.

| Date   | Price |
|--------|-------|
| 26-Jun | 57.38 |
| 22-May | 57.50 |
| 10-Apr | 56.00 |
| 5-Jun  | 57.10 |
| 15-May | 57.13 |
| 12-Jun | 57.25 |
| 3-Apr  | 55.20 |



Graph initially sets the time-scale base units (days, months, or years) according to the smallest difference between any two dates in the data. You can change the base unit setting, and Graph will redraw the chart. For example, if you have data for stock prices where the smallest difference between dates is seven days, Graph presets the time-scale base unit to days.

You can change the base unit to months to see the performance of the stock over a longer period, as in the first chart in the example. To change the base unit, click the axis, click **Selected Axis** on the **Format** menu, and then click the options you want on the **Scale** tab.

**Time-scale charts and times** You can't create time-scale charts from data that is measured at intervals of hours, minutes, or seconds. Only days, months, and years are considered base units in time-scale charts.

**Chart types that can use a time-scale axis** Time-scale axes are

available on stock charts and on 2-D and 3-D line, column, bar, and area charts.

**Tip** You cannot have a time-scale axis if the dates in your chart appear in the legend. You can [change the way data is plotted in the chart](#) so that the dates appear on the category axis instead.

## **I'm using dates on my chart, but I don't get a time-scale axis.**

Make sure that the **Time-scale** option is selected on the **Axes** tab (**Chart** menu, **Chart Options** command). If this option isn't available, either you aren't using the correct chart type or you don't have dates on the category axis of your chart.

The time-scale axis is available only on 2-D or 3-D line, column, bar, area, or stock chart types.

Make sure the dates are on the category axis of your chart. If they are not, you can [change the way data is plotted in a chart](#).

## **There are gaps between the dates plotted in my chart.**

If the datasheet data for the category axis contains date number formatting, Microsoft Graph automatically uses a special type of axis in your chart called a time-scale axis. A time-scale axis shows a blank category for dates for which you have no data. If you do not want to see these gaps— for example, if you have data for 1-Jan, 15-Jan, 3-Feb, 12-Feb, and 2-Mar, and you want to plot the days next to each other— you can change the time-scale axis to a standard category axis. On the **Chart** menu, click **Chart Options**, click the **Axes** tab, and then click **Category** under **Category (X) axis**.

## **My xy (scatter) chart doesn't use my values along the horizontal (x) axis.**

If your category axis displays numbers like 1, 2, 3, 4 instead of the values you want, you may have selected a line chart instead of an xy (scatter) chart when you created the chart. In the **Chart Type** dialog box (**Chart Type** command, **Chart** menu), click **XY (scatter)** in the **Chart type** box. If you want lines to connect the markers, click one of the xy (scatter) subtypes that has a line.

Make sure to enter the data for the xy (scatter) chart in the correct order on the datasheet. The top row (or left column) of your data selection represents the x series, and each successive row (or column) represents a y series. Both the x and y values should be entered and formatted as numbers, not text.

Make sure the correct row or column is plotted on the x axis.



## Ways to select chart items

To select a chart item by using the mouse, do one of two things:

Click the chart item you want. [Data series](#), [data labels](#), and the [legend](#) have individual elements that can be selected after you select the group. For example, to select a single [data marker](#) in a data series, click the data series, and then click the data marker. Microsoft Graph displays the name of a chart item in a tip when you rest the pointer over the item if you have the **Show names** check box selected (**Tools** menu, **Options** command, **Chart** tab).

Click the chart, click the arrow next to the **Chart Objects** box

, and then click the item you want.

To select a chart item by using the keyboard, use the arrow keys.

To cancel a selection, press ESC.



## Move and resize chart items by using the mouse

You can use the mouse to resize and move the [chart area](#), the [plot area](#), and the [legend](#). Microsoft Graph automatically sizes [titles](#) to accommodate their text. You can move titles with the mouse but not resize them.

1. Click the chart item.
2. To move a chart item, point to the item, and then drag it to another location.



To resize a chart item, point to a sizing handle. When the mouse pointer changes to a double-headed arrow, drag the sizing handle until the item is the size you want.





## Change the size, color, or shape of line, xy (scatter), or radar chart markers

1. Click the line with the [data markers](#) you want to change.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Patterns** tab.
3. Under **Marker**, select the options you want.



## Overlap or space data markers in bar and column charts

You need to select only a single data series to change the overlap or spacing of all [data series](#) of the same chart type.

1. Click a data series in the chart you want to change.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Options** tab.
3. To change the overlap of the data markers in each category, enter a value between -100 and 100 in the **Overlap** box. The higher the value, the greater the overlap within the category.
4. To change the spacing between categories of data markers, enter a value between 0 (zero) and 500 in the **Gap width** box. The higher the value, the greater the distance between each category.



## Add up-down bars and drop, series, and high-low lines to charts

You can add [series lines](#) to connect [data series](#) in 2-D stacked bar and column charts. [Drop lines](#) are available in 2-D and 3-D area and line charts. [High-low lines](#) and [up-down bars](#) are available in 2-D line charts. Stock charts already have high-low lines and up-down bars.

To add these lines and bars to all data series of the same chart type, select only a single data series.

1. Click a data series in the chart that you want to add bars or lines to.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Options** tab.
3. Select the option for the type of lines or bars you want.



## Vary colors in the same data series

You can vary the colors of [data markers](#) within the same [data series](#) in doughnut charts and in single-series charts. The colors of slices in pie charts and doughnut charts are varied by default.

1. Click the data series that you want to change the colors for.
2. On the **Format** menu, click **Selected Data Series** or **Selected Data Point**, and then click the **Options** tab.
3. Select the **Vary colors by point** check box or the **Vary colors by slice** check box.



## Change colors in a surface chart

To format the colors of the levels in a surface chart, you must format the [legend key](#).

1. If the chart doesn't have a [legend](#), add one.

[How?](#)

2. Click the legend once to select it, and then click the legend key that represents the surface level you want to change.
3. On the **Format** menu, click **Selected Legend Key**, and then click the **Patterns** tab.
4. Click the color you want, and then repeat steps 2 and 3 for each level you want to format.

**Note** If you want to delete the legend, click the legend, and then press DELETE. The colors you specified remain in the surface chart after you delete the legend.



## Change colors, patterns, lines, fills, and borders in charts

Use this procedure to change colors, apply a texture or pattern, or change the line width or border style for [data markers](#), the [chart area](#), the [plot area](#), [gridlines](#), [axes](#), and [tick marks](#) in 2-D and 3-D charts, [trendlines](#) and [error bars](#) in 2-D charts, and the [walls and floor](#) in 3-D charts.

1. Double-click the chart item you want to change.
2. If necessary, click the **Patterns** tab, and then select the options you want.

To specify a fill effect, click **Fill Effects**, and then select the options you want on the **Gradient**, **Texture**, or **Pattern** tabs.

**Note** Formatting applied to an axis is also applied to the tick marks on that axis. Gridlines are formatted independently of axes.



## Use a picture in a chart

You can use an image— for example, a bitmap— for certain types of [data markers](#), the [chart area](#), the [plot area](#), or the [legend](#) in 2-D and 3-D charts, or the [walls and floor](#) in 3-D charts.

With this procedure, you can use a picture for the data markers in column, bar, area, bubble, 3-D line, and filled radar charts.

1. Click the chart item that you want to use a picture for.
2. Click the arrow next to **Fill Color** , click **Fill Effects**, and then click the **Picture** tab.
3. To specify a picture, click **Select Picture**.
4. In the **Look in** box, click the drive, folder, or Internet location that contains the picture, and then double-click the picture you want.
5. On the **Picture** tab, select the options you want.

**Note** The **Fill Effects** command is not available for 2-D line, scatter, or unfilled radar chart markers. To use a picture for data markers in these chart types, select the picture in a picture editing program, click **Copy (Edit menu)**, switch to Microsoft Graph or double-click the Microsoft Graph chart, click the data series, and then click **Paste (Edit menu)**.



## Clear a picture or fill effect from a chart item

Use this procedure to clear a picture or other fill effect from the [chart area](#), the [plot area](#), or the [legend](#) in 2-D and 3-D charts, or the [walls and floor](#) in 3-D charts.

1. Double-click the chart item you want to change, and then click the **Patterns** tab.
2. To clear the picture or fill effect and return the object to the default formatting, click **Automatic** under **Area**.

To clear all formatting, including the picture or fill effect, click **None** under **Area**.



## Smooth the angles of line charts

When you use this procedure to soften the jagged edges of a line chart, your data is not affected.

1. Click the line [data series](#) you want to smooth.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Patterns** tab.
3. Select the **Smoothed line** check box.



## Change the scale of the value axis

The scale specifies the range of values on an [axis](#), the intervals at which the values occur, the way the axis values are displayed, and the point at which one axis crosses another.

1. Click the value axis you want to change.
2. On the **Format** menu, click **Selected Axis**, and then click the **Scale** tab.
3. Select the options you want.

### Tips

To flip the direction of bars or columns in a bar or column chart, select the **Values in reverse order** check box.

If your chart values consist of large numbers, you can make the axis text shorter and more readable by [changing the display unit of the axis](#). For example, if the chart values range from 1,000,000 to 50,000,000, you can display the numbers as 1 to 50 on the axis and show a label that indicates that the units express millions.

## Change the display unit on the value axis

If your chart values consist of large numbers, you can make the axis text shorter and more readable by changing the display unit of the axis. For example, if the chart values range from 1,000,000 to 50,000,000, you can display the numbers as 1 to 50 on the axis and show a label that indicates that the units express millions.

1. Click the value axis you want to change.
2. On the **Format** menu, click **Selected Axis**, and then click the **Scale** tab.
3. In the **Display units** list, click the units you want or type a numeric value.
4. To show a label that describes the units expressed, select the **Show display units label on chart** check box.



## Change the spacing of tick marks and labels on the category axis

Each category on the category [axis](#) is identified by a label and separated from other categories by [tick marks](#). You can change the intervals at which labels and tick marks appear. For 2-D charts, you can specify where you want the value (y) axis to cross the category (x) axis.

1. Click the category axis you want to change.
2. On the **Format** menu, click **Selected Axis**, and then click the **Scale** tab.
3. Select the options you want.

**Tip** To have the edges of an area chart meet the edges of the [plot area](#), clear the **Value (Y) axis crosses between categories** check box.



## Change tick mark appearance and label placement on an axis

1. Click the axis with the [tick marks](#) you want to change.
2. On the **Format** menu, click **Selected Axis**, and then click the **Patterns** tab.
3. Under **Tick mark type** and **Tick mark labels**, select the options you want.

**Note** To hide major or minor tick marks, or to hide both types of tick marks, click **None**.



## Change the font and size of text in a chart

1. Click the chart text, or select the individual characters you want to format.

To change the formatting for all of the text in the chart at the same time, click the blank area between the border of the chart and the [plot area](#) to select the [chart area](#).

2. On the **Formatting** toolbar, click a button for the format you want.

| To make text          | Click  |
|-----------------------|--|
| A different font      | The font you want in the <b>Font</b> box          |
| A different font size | The font size you want in the <b>Font Size</b> box  |
| Bold                  | <b>Bold</b>   |
| Italic                | <i>Italic</i>                                       |
| Underlined            | <u>Underline</u>                                   |

**Note** To see other font options, such as color, superscript, and subscript, click the text you want to change. On the **Format** menu, click **Font**, and then select the options you want.



## Rotate text in a chart title or along an axis

You can rotate, or "angle," text in a chart [title](#) or along an [axis](#). You cannot rotate [legend](#) text.

1. Click the axis or the title you want to format.
2. If you clicked an axis, click **Selected Axis** on the **Format** menu.  
If you clicked an axis title, click **Selected Axis Title** on the **Format** menu.  
If you clicked a chart title, click **Selected Chart Title** on the **Format** menu.
3. Click the **Alignment** tab.  
If you don't see the **Alignment** tab, click **Cancel**, click outside of the text you want to format, and then repeat steps 1-3.
4. To rotate text, under **Orientation**, click a degree point, or drag the indicator to the position you want.

**Tip** To quickly rotate selected text 45 degrees up or down, click **Angle Text Upward**  or **Angle Text Downward** .



## Reestablish links between number formats used on a datasheet and a related chart

If you have changed the number formatting in a chart, the number formatting is no longer linked to the datasheet cells.

1. To reestablish number formats for [labels](#) along an axis, double-click the appropriate axis.

To reestablish number formats for [data labels](#) or a [trendline label](#), double-click the item.

2. On the **Number** tab, select the **Linked to source** check box.

## **Change the view of a 3-D chart**

Depending on the type of 3-D chart you have, you can change certain aspects of the 3-D view.

## **What do you want to do?**

[Change the height and perspective in a 3-D chart](#)

[Change the rotation and elevation in a 3-D chart](#)

[Change the depth and width in a 3-D chart](#)

[Change the plot order of the data series so that large 3-D data markers do not block smaller ones](#)

## Change the rotation and elevation in a 3-D chart

1. Click the 3-D chart you want to change.
2. On the **Chart** menu, click **3-D View**.
3. Select the options you want.

**Note** You can also rotate the chart by using the mouse. Click the intersection of any two axes to select the corners of the chart, and then drag a corner to adjust the elevation and rotation in the chart. To view the data markers, hold down CTRL while you drag.

## Change the height and perspective in a 3-D chart

Depending on the chart type and the chart options you select, you can change the height and perspective in the chart.

1. Click the 3-D chart you want to change.
2. On the **Chart** menu, click **3-D View**.
3. Select the options you want.

### Notes

When the **Right angle axes** check box is cleared, you can set the **Perspective** and **Height** options.

When the **Right angle axes** check box is selected, you can either set the **Height** option or turn the **Auto scaling** option on.

The **Perspective** option is not available for 3-D bar charts, for which the **Right angle axes** check box is always selected.



## Change the depth and width in a 3-D chart

You can change the chart depth in 3-D charts that have [axes](#), the gap depth in 3-D perspective charts, and the gap width in 3-D bar or column charts.

1. Click a [data series](#) in the 3-D chart you want to change.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Options** tab.
3. Select the options you want.

## **Pull out slices in pie and doughnut charts**

In a doughnut chart, you can pull out only the slices of the outer ring.

To pull out all of the slices in a pie chart, click the pie, and then drag away from the center of the chart.

To pull out only one slice in a pie chart, click the pie, click the slice you want to move, and then drag the slice away from the center of the chart.

To pull out all of the slices in the outer ring of a doughnut chart, click the outer ring, and then drag away from the center of the chart.

To pull out only one slice in the outer ring of a doughnut chart, click the outer ring, click the slice you want to move, and then drag the slice away from the center of the chart.



## Change the size of the pie-of-pie or bar-of-pie plot area

1. Click a [data series](#) in the pie chart you want to change.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Options** tab.
3. In the **Size of second plot** box, enter a value between 5 and 200 to specify the size of the second pie or bar as a percentage of the first pie chart. For example, 105 makes the second pie or bar 5 percent larger than the first.



## Rotate the position of the slices in a doughnut or pie chart

The order in which Microsoft Graph plots [data series](#) in pie and doughnut charts is determined by the order of the data on the datasheet. Use this procedure to "rotate" slices within the 360 degrees of the pie or doughnut circle.

1. Click a data series in the pie or doughnut chart you want to change.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Options** tab.
3. In the **Angle of first slice** box, type a value between 0 (zero) and 360 to specify the angle at which you want the first slice to appear.



## Change the position of data labels automatically

You can change the position of a single [data label](#) by dragging it. Use this procedure to place all labels for a [data series](#) in a standard position on their [data markers](#) in 2-D bar, column, and line charts; 2-D and 3-D pie charts; and scatter and bubble charts.

1. Click the chart outside of the data labels that you want to change.
2. Click one of the data labels in the series that you want to change.
3. On the **Format** menu, click **Selected Data Labels**, and then click the **Alignment** tab.
4. In the **Label position** box, click the location you want.



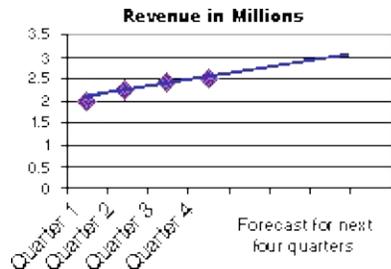
## Change the hole size in a doughnut chart

1. Click a [data series](#) in the doughnut chart you want to change.
2. On the **Format** menu, click **Selected Data Series**, and then click the **Options** tab.
3. In the **Doughnut hole size** box, type a value between 10 and 90 to specify the diameter of the hole.



## Trendlines in charts

Trendlines are used to graphically display trends in data and to analyze problems of prediction. Such analysis is also called [regression analysis](#). By using regression analysis, you can extend a trendline in a chart beyond the actual data to predict future values. For example, the following chart uses a simple linear trendline that is forecast ahead four quarters to clearly show a trend toward rising revenue:



**Moving Average** You can also create a [moving average](#), which smoothes out fluctuations in data and shows the pattern or trend more clearly.

**Chart types that support trendlines** You can add trendlines to [data series](#) in unstacked 2-D area, bar, column, line, stock, xy (scatter), and bubble charts. You cannot add trendlines to data series in 3-D, stacked, radar, pie, surface, or doughnut charts. If you change a chart or data series so that it can no longer support the associated trendline— for example, by changing the chart type to a 3-D chart— you lose the trendlines.

## **More information**

[Choosing the best trendline for your data](#)

[Equations for calculating trendlines](#)

[Adding a trendline to a data series](#)



## Choosing the best trendline for your data

When you want to add a [trendline](#) to a chart in Microsoft Graph, you can choose any of the six different trend/regression types. The type of data you have determines the type of trendline you should use.

**Trendline reliability** A trendline is most reliable when its [R-squared value](#) is at or near 1. When you fit a trendline to your data, Graph automatically calculates its R-squared value. If you want, you can display this value on your chart.

- ▶ [Linear](#)
- ▶ [Logarithmic](#)
- ▶ [Polynomial](#)
- ▶ [Power](#)
- ▶ [Exponential](#)
- ▶ [Moving average](#)



## Add a trendline to a data series

1. Click the **data series** to which you want to add a **trendline** or **moving average**.
2. On the **Chart** menu, click **Add Trendline**.
3. On the **Type** tab, click the type of regression trendline or moving average you want.

If you select **Polynomial**, enter in the **Order** box the highest power for the independent variable.

If you select **Moving Average**, enter in the **Period** box the number of periods to be used to calculate the moving average.

### Notes

The **Based on series** box lists all the data series in the chart that support trendlines. To add a trendline to another series, click the name in the box, and then select the options you want.

If you add a moving average to an xy (scatter) chart, the moving average is based on the order of the x values plotted in the chart. To get the result you want, you might need to sort the x values before you add a moving average.



## Change trendline settings

Most trendline settings are available only for [regression trendlines](#).

1. Click the trendline you want to change.
2. On the **Format** menu, click **Selected Trendline**.
3. On the **Options** tab, select the options you want.

To change the name of the trendline or [moving average](#), type a name in the **Custom** box.



## Display the R-squared value for a trendline

1. Click the trendline for which you would like to display the [R-squared value](#).
2. On the **Format** menu, click **Selected Trendline**.
3. On the **Options** tab, select **Display R-squared value on chart**.

**Note** You cannot display an R-squared value for a moving average.



## Delete a trendline

1. Click the [trendline](#) you want to delete.
2. Press DELETE.

## Equations for calculating trendlines

### Linear

Calculates the least squares fit for a line represented by the following equation:

$$y = mx + b$$

where  $m$  is the slope and  $b$  is the intercept.

## Polynomial

Calculates the least squares fit through points by using the following equation:

$$y = b + c_1x + c_2x^2 + c_3x^3 + \dots + c_6x^6$$

where  $b$  and  $c_1 \dots c_6$  are constants.

## Logarithmic

Calculates the least squares fit through points by using the following equation:

$$y = c \ln x + b$$

where  $c$  and  $b$  are constants, and  $\ln$  is the natural logarithm function.

## Exponential

Calculates the least squares fit through points by using the following equation:

$$y = ce^{bx}$$

where  $c$  and  $b$  are constants, and  $e$  is the base of the natural logarithm.

## Power

Calculates the least squares fit through points by using the following equation:

$$y = cx^b$$

where  $c$  and  $b$  are constants.

## R-squared Value

$$R^2 = 1 - \frac{SSE}{SST}$$

where

$$SSE = \sum (Y_i - \hat{Y}_i)^2$$

and

$$SST = \left( \sum Y_i^2 \right) - \frac{\left( \sum Y_i \right)^2}{n}$$

**Note** The R-squared value you can display with a trendline is not an adjusted R-squared value. For logarithmic, power, and exponential trendlines, Microsoft Graph uses a transformed regression model.

## Moving Average

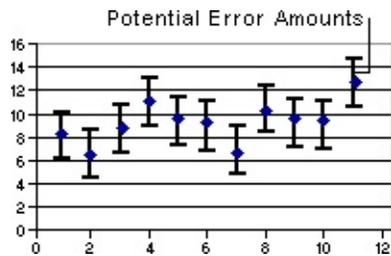
$$\bar{F}_t = \frac{A_t + A_{t-1} + \dots + A_{t-n+1}}{n}$$

**Note** The number of points in a moving average trendline equals the total number of points in the series less the number you specify for the period.



## Error bars in charts

Error bars graphically express potential error amounts relative to each data marker in a [data series](#). For example, you could show 5 percent positive and negative potential error amounts in the results of a scientific experiment:



**Chart types that support error bars** You can add error bars to data series in 2-D area, bar, column, line, xy (scatter), and bubble charts. For xy (scatter) and bubble charts, you can display error bars for the x values, the y values, or both.

## **More information**

[Add error bars to a data series](#)

[Equations for calculating the error amount](#)



## Add error bars to a data series

1. Click the [data series](#) to which you want to add [error bars](#).
2. On the **Format** menu, click **Selected Data Series**.
3. On the **X Error Bars** tab or the **Y Error Bars** tab, select the options you want.

**Note** If you change the datasheet values associated with the data points in the series, the error bars are adjusted to reflect your changes.



## Change error bar settings

When you select an [error bar](#), any changes you make affect all of the error bars in its associated data series.

1. Click the [data series](#) that has the error bars you want to change.
2. On the **Format** menu, click **Selected Data Series**.
3. Click the **Y Error Bars** tab or the **X Error Bars** tab, depending on the type of error bars you want to change.

To select a different type of error bar, click the type you want under **Display**.

To change the method used to determine the error, select the method you want under **Error amount**.



## Delete error bars

You cannot delete an individual error bar. When you delete one error bar, all [error bars](#) for the entire data series are deleted.

1. Click any error bar.
2. Press DELETE.

## Equations for calculating the error amount

### Standard Deviation

$$S. D. = \sqrt{\frac{\sum_{s=1}^m \sum_{j=1}^n (y_{is} - M)^2}{(n_y - 1)}}$$

$$M = \frac{\sum_{s=1}^m \sum_{j=1}^n y_{is}}{n_y}$$

where:

$s$  = series number

$i$  = point number in series  $s$

$m$  = number of series for point  $y$  in chart

$n$  = number of points in each series

$y_{is}$  = data value of series  $s$  and the  $i$ th point

$n_y$  = total number of data values in all series

$M$  = arithmetic mean

## Standard Error

$$S. E. = \sqrt{\frac{\sum_{s=1}^m \sum_{j=1}^n y_{js}^2}{(n_Y - 1)(n_Y)}}$$



## Move and scroll through a datasheet

To move between cells on a datasheet, click any cell or use the arrow keys. When you move to a cell, it becomes the **active cell**. To see a different area of the sheet, use the scroll bars.

| To scroll                | Do this  |
|--------------------------|--|
| One row up or down       | Click the arrows on the vertical scroll bar.   |
| One column left or right | Click the arrows on the horizontal scroll bar.   |
| One window up or down    | Click above or below the scroll box on the vertical scroll bar.  |
| One window left or right | Click to the left or right of the scroll box on the horizontal scroll bar.   |
| A large distance         | Drag the scroll box to the approximate relative position. On a very large datasheet, hold down SHIFT while dragging. |

**Tip** The size of a scroll box indicates the proportional amount of the used area of the sheet that is visible within the window. The position of a scroll box indicates the relative location of the visible area within the datasheet.

## Undo mistakes

To reverse the last command or undo the last entry you typed, click **Undo**



## Delete cells, rows, or columns on a datasheet

When you delete cells, Microsoft Graph removes them from the datasheet and shifts the surrounding cells to fill the space.

To remove the cell contents (text and values) or formats but leave the blank cells on the datasheet, clear the cells instead. [How to clear cells, rows, or columns on a datasheet.](#)

1. Switch to the datasheet.

[How?](#)

2. Select the cells, rows, or columns you want to delete.

[How?](#)

3. On the **Edit** menu, click **Delete**.

Surrounding cells shift to fill the space.



## Insert blank cells, rows, or columns on a datasheet

A datasheet can contain a maximum of 4,000 rows and 4,000 columns. A chart can contain up to 255 data series, with up to 4,000 data points in a [data series](#).

1. Switch to the datasheet.

[How?](#)

2. To insert blank cells, select a [range](#) of existing cells where you want to insert the new blank cells. Select the same number of cells as you want to insert.

To insert blank rows, select rows immediately below where you want to insert the new rows. Select the same number of rows as you want to insert.

To insert blank columns, select columns immediately to the right of where you want to insert the new columns. Select the same number of columns as you want to insert.

[How?](#)

3. On the **Insert** menu, click **Cells**.

If you selected a range, click **Shift cells right** or **Shift cells down**.

## Clear cells, rows, or columns on a datasheet

When you clear cells, Microsoft Graph removes the cell contents (text and values) or formats but leaves the blank cells on the datasheet.

To remove the cells from the datasheet and shift surrounding cells to fill the space, delete the cells instead. [How to delete cells, rows, or columns on a datasheet.](#)

1. Switch to the datasheet.

[How?](#)

2. Select the cell, row, or column you want to clear.

[How?](#)

3. On the **Edit** menu, point to **Clear**, and then click **All**, **Contents**, or **Formats**.

**Note** If you click a cell and then press DELETE or BACKSPACE, Graph removes the cell contents but does not remove any cell formats.

## Move or copy part of a cell's contents into another cell

1. Switch to the datasheet.

[How?](#)

2. Double-click the cell that contains the data you want to move or copy.
3. In the cell, select the characters to move or copy.
4. To move the selection, click **Cut** .  
To copy the selection, click **Copy** .
5. Double-click the cell to which you want to move or copy the data.
6. In the cell, click where you want to paste the data.
7. Click **Paste** .
8. Press ENTER.

**Note** When you double-click a cell or press F2 to edit a cell, the arrow keys work only within that cell. To use the arrow keys to move to another cell, first press ENTER to complete the editing changes to the active cell.

## Move or copy cell data

### What do you want to do?

[Move or copy entire cells](#)

[Move or copy part of a cell's contents into another cell](#)

**Note** When you move or copy cells by dragging or using the **Cut**  or **Copy**  and **Paste**  commands, Microsoft Graph also copies the number formats.



## Change column width on a datasheet

1. Switch to the datasheet.

[How?](#)

2. Drag the border on the right side of the column heading until the column is the width you want.



**Tip** To change the column width for multiple columns, select the columns whose widths you want to change. Then drag a border at the right of a selected [column heading](#). To change the column width for all columns on the datasheet, click the [Select All button](#), and then drag the border of any column heading.

## Change the font on a datasheet

You can assign one font, font size, and font style for the entire datasheet. Changes to the font on the datasheet do not affect the fonts in the chart.

1. Switch to the datasheet.

[How?](#)

2. On the **Formatting** toolbar, click a button for the format you want.

| To make text          | Click  |
|-----------------------|--|
| A different font      | The font you want in the <b>Font</b> box          |
| A different font size | The font size you want in the <b>Font Size</b> box  |
| Bold                  | <b>Bold</b>   |
| Italic                | <b>Italic</b>                                       |
| Underlined            | <b>Underline</b>                                   |

**Note** Microsoft Graph automatically adjusts the height of datasheet rows to fit the font size you specify.



## Select cells, ranges, rows, and columns on a datasheet

| To select                                     | Do this   |
|---|---|
| A single cell                                 | Click the cell, or press the arrow keys to move to the cell.  |
| A <a href="#">range</a> of cells              | Click the first cell in the range, and then drag to the last cell.  |
| A large range of cells                        | Click the first cell in the range, and then hold down SHIFT and click the last cell in the range. You can scroll to make the last cell visible.                                   |
| An entire row                                 | Click the <a href="#">row heading</a> .   |
| An entire column                              | Click the <a href="#">column heading</a> .  |
| Adjacent rows or columns                      | Drag across the row or column headings. Or select the first row or column; then hold down SHIFT and select the last row or column.  |
| All cells on a datasheet                      | Click the <a href="#">Select All button</a> .   |
| More or fewer cells than the active selection | Hold down SHIFT and click the last cell you want to include in the new selection. The rectangular range between the active cell and the cell you click becomes the new selection. |



## Restore datasheet columns to the default width

1. Select the columns you want to restore to the default width.

[How?](#)

To restore all columns on the datasheet to the default width, click the [Select All button](#).

2. On the **Format** menu, click **Column Width**.
3. Select the **Use standard width** check box.



## Move or copy entire cells

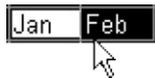
1. Switch to the datasheet.

[How?](#)

2. Select the cells you want to move or copy.

[How?](#)

3. Point to the border of the selection.



4. To move the cells, drag the selection to the upper-left cell of the [paste area](#). Microsoft Graph replaces any existing data in the paste area.

To copy the cells, hold down CTRL as you drag.

**Tip** To move or copy cells to a different application or a long distance, select the cells, and then click **Cut**  to move the cells or **Copy**  to copy the cells. Switch to the other application, or select the upper-left cell of the paste area on the datasheet, and then click **Paste** .

## Create custom number formats

1. To format cells, click **View Datasheet**  if you need to display the datasheet, and then select the cells for which you want to create a custom number format.

[How?](#)

To format a chart item, such as data labels or an axis, click the chart item you want.

[How?](#)

2. On the **Format** menu, click **Number**.
3. In the **Category** box, click a category, and then select a built-in format that resembles the one you want.
4. In the **Category** box, click **Custom**.
5. In the **Type** box, edit the number format codes to create the format you want. Editing a built-in format does not remove it.

## **Change the way Microsoft Graph displays numbers, dates, and times**

**Automatic vs. applied formatting** When you enter a number, date, or time into a cell, Microsoft Graph interprets the data and applies a built-in number, date, or time format. For example, if you enter **\$52.41** in a cell, Graph formats the cell as currency. To change the way existing numbers, dates, and times are displayed on the datasheet, you apply a different number format to the selected cells. Graph provides several built-in number formats, and you can create your own custom formats for numbers such as product codes.

**Number formatting in charts** The way numbers are formatted on a datasheet determines the way values appear in the chart. Specifically, numbers on the value axis are formatted the same way as the upper-left cell in the range of numbers that are charted. However, you can format the numbers in your chart independently of the datasheet number formatting.

## **What do you want to do?**

[Change the number format of cells or chart items](#)

[Create custom number formats](#)

**Not sure which choice you want?**

## About custom number, date, and time format codes

**Custom number formats** If a built-in number format is not available to display data the way you want, you can [create a custom format](#).

**Format codes** You create custom number formats on the datasheet by specifying format codes that describe how you want to display a number, date, time, or text. You can specify up to four sections of format codes. The sections, separated by semicolons, define the formats for positive numbers, negative numbers, zero values, and text, in that order. If you specify only two sections, the first is used for positive numbers and zeros, and the second is used for negative numbers. If you specify one section, all numbers use that format. If you skip a section, include the ending semicolon for that section.

`#,###.00_); [Red] (#,###.00);0.00;"sales "@`

Format for positive numbers | Format for zeros  
Format for negative numbers | Format for text

## **More information**

[Number, date, and time format codes](#)



## Basic number format codes

**Decimal points** To format fractions or numbers with decimal points, include the following digit placeholders in a section. If the number has more digits to the right of the decimal point than there are placeholders in the format, the number is rounded to as many decimal places as there are placeholders. If the number has more digits to the left of the decimal point than there are placeholders in the format, the extra digits are displayed. If the format contains only number signs (#'s) to the left of the decimal point, numbers less than 1 begin with a decimal point.

The placeholder # displays only significant digits; it does not display insignificant zeros.

| To display        | Use this format code |
|-------------------|----------------------|
| 1234.59 as 1234.6 | #####.#              |

The placeholder 0 (zero) displays insignificant zeros if a number has fewer digits than there are 0's in the format.

| To display                          | Use this format code |
|-------------------------------------|----------------------|
| 8.9 as 8.900                        | #.000                |
| .631 as 0.6                         | 0.#                  |
| 12 as 12.0, and 1234.568 as 1234.57 | #.0#                 |

The placeholder ? adds spaces for insignificant zeros on either side of the decimal point so that when formatted with a fixed-width font, such as **Courier New**, decimal points align. You can also use this symbol for fractions that have varying numbers of digits.

| To display  | Use this format code |
|---|----------------------|
| 44.398, 102.65, and 2.8 with aligned decimals                   | ???.???              |
| 5.25 as 5 1/4, and 5.3 as 5 3/10, with aligned division symbols | # ???/???            |

**Thousands separator** To display a comma as a thousands separator or

to scale a number by a multiple of one thousand, include a comma in the number format.

| To display             | Use this format code |
|------------------------|----------------------|
| 12000 as 12,000        | <code>#,###</code>   |
| 12000 as 12            | <code>#,</code>      |
| 12200000 as 12.2 0.0,, |                      |

**Using colors** To set the color for a section of the format, type the name of the color in square brackets in the section.

#### Color codes

|                        |                       |
|------------------------|-----------------------|
| <code>[BLACK]</code>   | <code>[BLUE]</code>   |
| <code>[CYAN]</code>    | <code>[GREEN]</code>  |
| <code>[MAGENTA]</code> | <code>[RED]</code>    |
| <code>[WHITE]</code>   | <code>[YELLOW]</code> |

**Conditional number format codes** To set number formats that will be applied only if the number meets a condition you specify, enclose the condition in square brackets; the condition consists of a [comparison operator](#) and a value. For example, the following format displays numbers less than or equal to 100 in a red font color and numbers greater than 100 in a blue font color.

```
[Red][<=100];[Blue][>100]
```

## Formats for dates and times

**Days, months, and years** To display days, months, and years, include the following format codes in a section. If you use "m" immediately after the "h" or "hh" format code or immediately before the "ss" or "s" code, Microsoft Graph displays minutes instead of the month.

| To display                              | Use this format code |
|---|----------------------|
| Months as 1–12                          | m                    |
| Months as 01–12                         | mm                   |
| Months as Jan–Dec                       | mmm                  |
| Months as January–December              | mmmm                 |
| Months as the first letter of the month | mmmmm                |
| Days as 1–31                            | d                    |
| Days as 01–31                           | dd                   |
| Days as Sun–Sat                         | ddd                  |
| Days as Sunday–Saturday                 | dddd                 |
| Years as 00–99                          | yy                   |
| Years as 1900–9999                      | yyyy                 |

**Hours, minutes, and seconds** To display hours, minutes, and seconds, include the following format codes in a section.

| To display                                | Use this format code |
|---|----------------------|
| Hours as 0–23                             | h                    |
| Hours as 00–23                            | hh                   |
| Minutes as 0–59                           | m                    |
| Minutes as 00–59                          | mm                   |
| Seconds as 0–59                           | s                    |
| Seconds as 00–59                          | ss                   |
| Hours as 4 AM                             | h AM/PM              |
| Time as 4:36 pm                           | h:mm am/pm           |
| Time as 4:36:03 p                         | h:mm:ss a/p          |
| Elapsed time in hours; for example, 25:02 | [h]:mm               |

|  |            |
|--|------------|
| Elapsed time in minutes; for example, 63:46 [m]:ss |            |
| Elapsed time in seconds                            | [ss]       |
| Fractions of a second                              | h:mm:ss.00 |

**Note** If the format contains an AM or PM, the hour is based on the 12-hour clock, where "AM," "am," "A," or "a" indicates times after midnight to 12:00 noon, and "PM," "pm," "P," or "p" indicates times after noon to 12:00 midnight. Otherwise, the hour is based on the 24-hour clock. The "m" or "mm" must appear immediately after the "h" or "hh" format code or immediately before the "ss" code, or Graph displays the month instead of the minutes.

## Formats for text and spacing

**Text characters** To display text characters, either enclose the characters in double quotation marks (" ") or precede them with a backslash (\). The following special characters are displayed without the use of quotation marks:

\$ - + / ( ) : space

If you enter any of the following symbols, a backslash is inserted for you:

! ^ & ` (left single quotation mark) ' (right single quotation mark) ~ { } = < >

**Spacing** To create a space the width of a character in a number format, include an underscore followed by the character. For example, when you follow an underscore with a closing parenthesis ( \_ ), positive numbers line up correctly with negative numbers that are enclosed in parentheses.

**Text in numbers** A text format section, if included, is always the last section in the number format. Include the at sign (@) character in the text section where you want to display any text entered in the cell. If the @ character is omitted from the text section, text you enter will not be displayed. If you want to always display specific text characters with the entered text, enclose the additional text in double quotation marks (" "); for example, "gross receipts for" @.

If the format does not include a text section, text you enter is not affected by the format.

**Repeated characters** To repeat the next character in the format to fill the column width, include an asterisk (\*) in the number format. For example, type 0\*- to include enough hyphens after a number to fill the cell.

## **Delete custom number formats**

1. On the **Format** menu, click **Number**.
2. In the **Category** box, click **Custom**.
3. In the **Type** box, select the number format you want to delete.
4. Click **Delete**.

## Change the number format of datasheet cells or chart items

1. To format cells, click **View Datasheet**  if you need to display the datasheet, and then select the cells you want to change.

[How?](#)

To format a chart item, such as data labels or an axis, click the chart item you want to change.

[How?](#)

2. Click the button for the format you want.

To select another format, click **Number** on the **Format** menu.

| To display                           | Click  |
|--------------------------------------|--|
| Commas to separate thousands         | <b>Comma Style</b><br>       |
| Currency symbol                      | <b>Currency Style</b><br>   |
| Numbers as percentages of 100        | <b>Percent Style</b><br>    |
| Fewer digits after the decimal point | <b>Decrease Decimal</b><br> |
| More digits after the decimal point  | <b>Increase Decimal</b><br> |

## **Number, date, and time format codes**

Microsoft Graph provides built-in basic codes that you can use to format your data. For example, you can use the date code mmm-yy to make a date entered as 7/15/98 be displayed as Jul-98. You can also build on these codes to create your own custom codes. Learn about [custom number, date, and time format codes](#).

## **What do you want to learn about?**

[Using basic number format codes](#)

[Formatting dates and times](#)

[Formatting currency, percentages, and exponential notation](#)

[Formatting text and spacing](#)

## Formats for percentages, exponential notation, and non-U.S. currency

**Percentages** To display numbers as a percentage of 100, include the percent sign (%) in the number format. For example, a number such as .08 is displayed as 8%; 2.8 is displayed as 280%.

**Scientific format** To display numbers in scientific format (exponential notation), use "E-," "E+," "e-," or "e+" codes in a section. If a format contains a 0 (zero) or # (number sign) to the right of an exponent code, Microsoft Graph displays the number in scientific format and inserts an "E" or "e." The number of 0's or #'s to the right of the exponent code determines the number of digits in the exponent. "E-" or "e-" places a minus sign by negative exponents. "E+" or "e+" places a minus sign by negative exponents and a plus sign by positive exponents.

**Currency** To specify one of the following currency symbols in a number format, with NUM LOCK on, hold down ALT and type the ANSI code for the currency symbol on the numeric keypad. For information on other currency symbols, see Help for the program from which you inserted the Microsoft Graph chart.

| To enter | Hold down ALT and type |
|----------|------------------------|
| ¢        | 0162                   |
| £        | 0163                   |
| ¥        | 0165                   |

**Note** Custom formats are saved with the chart. To have Graph always use a specific currency symbol, change the currency symbol selected in the Regional Settings control panel before you start Graph.

## Correct spelling and typing errors on a datasheet as you type

The AutoCorrect feature in Microsoft Graph can correct common typing errors as you work on the datasheet; for example, it can change "adn" to "and" and change "their is" to "there is." You can add new AutoCorrect entries to correct additional words you often mistype or misspell.

Microsoft Graph shares AutoCorrect entries with other Microsoft Office applications.

To correct your common typing errors automatically, you must specify the word that is mistyped or misspelled in advance. AutoCorrect works only on the datasheet, not in the chart.

1. On the **Tools** menu, click **AutoCorrect**.
2. Make sure the **Replace text as you type** check box is selected.
3. In the **Replace** box, type the word that you often mistype or misspell— for example, **usualy**.
4. In the **With** box, type the correct spelling of the word— for example, **usually**.
5. Click **Add**.

**Tip** If you save a long phrase or passage of text as an AutoCorrect entry, you can enter the text later by typing only a few letters. Select the text you want to reuse, copy it, and then click **AutoCorrect** on the **Tools** menu. In the **Replace** box, type a unique sequence of characters— a sequence that you would not usually type on a datasheet. Click in the **With** box, press CTRL+V to paste the copied text, and then click **Add**. For example, you could type **afd** to enter "Aperture Film Distributors."

## Change the name or contents of an AutoCorrect entry

1. On the **Tools** menu, click **AutoCorrect**.
2. To change the name of an AutoCorrect entry, click the entry you want to change in the list, and then click **Delete**. Type a new name in the **Replace** box, and then click **Add**.

To change the contents of an AutoCorrect entry, click the entry you want to change in the list. Retype or edit the entry in the **With** box, and then click **Replace**.

## Exclude specific abbreviations or capitalized text from automatic changes

1. On the **Tools** menu, click **AutoCorrect**.
2. Click **Exceptions**.
3. To prevent Microsoft Graph from automatically capitalizing any word that is typed after an abbreviation, click the **First Letter** tab, and then type the abbreviation—including the period—in the **Don't capitalize after** box.

To prevent Microsoft Graph from automatically correcting a word that contains a mixture of uppercase and lowercase letters, click the **Initial Caps** tab, and then type the word in the **Don't correct** box.

4. Click **Add**, and then click **OK**.

## Prevent automatic corrections

1. On the **Tools** menu, click **AutoCorrect**.
2. To prevent all automatic corrections, clear the **Replace text as you type** check box.

To prevent a specific type of correction, clear the check box for the corresponding option.

## **Delete an AutoCorrect entry**

1. On the **Tools** menu, click **AutoCorrect**.
2. In the list, click the entry you want to delete.
3. Click **Delete**.



## I can't print the datasheet.

To print the data used to create a chart, do one of the following:

If you are working with a line, area, column, radar, or bar chart, add a [data table](#) to the chart. On the **Chart** menu, click **Chart Options**, and then click the **Show data table** check box on the **Data Table** tab.

Copy the data from the datasheet into the program where you inserted the chart, for example, a Microsoft Word document or a Microsoft PowerPoint presentation. Click **View Datasheet**  to switch to the datasheet, and then select the cells you want to copy. In Microsoft Graph, click **Copy** , switch to the other program, and then click **Paste** on the program's **Edit** menu.

## **I can't use a named range when I try to import a range from an Excel workbook.**

You can use a named range when you import a workbook that was saved in the Microsoft Excel 5.0/95 format; however, you must use a cell range when you import a workbook that was saved in an Excel 97 or later format.



## Show all buttons on a toolbar

Use the move handle  on a toolbar to drag the toolbar to its own row — or to a location other than the edge of the program window— so that the toolbar becomes a [floating toolbar](#).



## Show or hide a toolbar

Right-click any toolbar, and then click the toolbar you want to show or hide on the shortcut menu.

**Tip** To quickly hide a [floating toolbar](#), click the **Close** button  on the toolbar.



## **I can't find the correct menu, command, toolbar button, tab, or dialog-box option.**

The Microsoft Graph menus and toolbars appear when you double-click a Microsoft Graph chart, or when you click **Object** on the **Insert** menu and specify a Microsoft Graph object.

The name of the **Format** menu command for a selected chart item depends on the item selected. For example, if a [data series](#) is selected, the first command on the **Format** menu is **Selected Data Series**. You can also double-click a chart item to see the formatting options for the item.

Some commands are available only when the datasheet is active. To switch between the datasheet and the chart, click **View Datasheet** .

## **The Customize command for toolbars is not available.**

The **Customize** command (**View** menu, **Toolbars** submenu) is not available unless you open Microsoft Graph by doing the following:

In the program where you created a Microsoft Graph chart, click a chart, point to **Chart Object** on the **Edit** menu, and then click **Open**.

If you double-clicked the Microsoft Graph chart to edit it, close Microsoft Graph by clicking the document, form, or slide in the program, and then follow the procedure above.

## I can't find a toolbar button.

The button may not appear on the toolbar because there isn't enough room to show all of the buttons. Click **More Buttons**  at the end of the toolbar, and then click the button you want. Or you can [show all buttons on a toolbar](#).



## **How data is organized in a chart**

- ▶ Data in rows or columns?
- ▶ Order of categories and values
- ▶ Second value axis
- ▶ X and Y values in a scatter chart
- ▶ Empty cells



## About graphic objects in Microsoft Graph

**Adding pictures** You can copy pictures and scanned photographs from other programs and locations and paste them in a Microsoft Graph chart. [How to insert an imported picture.](#)

**Editing pictures** There are two types of pictures: [bitmaps](#), which usually look like photographs, and metafiles, which usually look like illustrations.

Bitmaps are made up of dots and can't be ungrouped. When you select a bitmap, the **Picture** toolbar appears with tools you can use to crop the picture, add a border to it, and adjust its brightness and contrast.

Metafiles can be ungrouped, converted to drawing objects, and then edited with Microsoft Graph drawing tools. Most illustrations, or clip art, are in metafile format. To ungroup and convert clip art to a drawing object, select it and click **Ungroup** on the **Draw** menu (**Drawing** toolbar). You can then change it just as you can any other object you draw. For example, you might insert a clip art image of a person, ungroup it, change the color of the person's clothing, and then add the modified image to another clip art image.

**Drawing your own pictures** You can also draw your own pictures by using the tools on the **Drawing** toolbar. You can add and combine ready-made AutoShapes, or draw your own lines, scribbles, and freeforms.

## More information

[Show or hide the drawing toolbar](#)

[Add a circle, square or other AutoShape](#)

[About freeforms and curves](#)

**Graphics filters** Microsoft Graph recognizes a wide variety of picture formats. Because all Office programs share the same graphics filters, if you installed a graphics filter when you installed another Office program — Word, for example— you can use that same filter in this program. Learn about how to install graphics filters.



## About drawing freeforms and curves

The **AutoShapes** menu on the **Drawing** toolbar includes several categories of tools. In the **Lines** category, you can use the **Curve**, **Scribble**, and **Freeform** tools to draw lines, curves, and shapes that combine lines and curves.

### Scribble

Makes an object look as if you drew it with a pen. The resulting shape closely matches what you draw on the screen.



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### Freeform

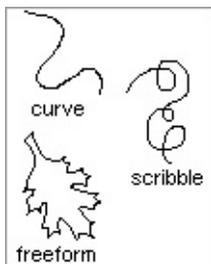
Makes a more refined shape without jagged lines or drastic changes in direction



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### Curve

Helps you draw curves with greater control and accuracy



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**Note** You can enhance freeforms and curves just as you can other [AutoShapes](#)— for example, you can add color or a pattern, change the line style, and flip or rotate them. However, you can't add text or convert a freeform or curve to another AutoShape.

## **More information**

[Add a freeform or scribble](#)

[Add a curve](#)

## Show or hide the Drawing toolbar

Click **Drawing** .

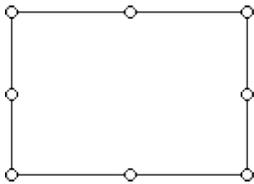


## Symbols used in drawing object manipulation

Special symbols are used to indicate the state of a drawing object and how it can be manipulated. Not all drawing objects can be manipulated or changed in the same way, so not all drawing objects use every symbol.

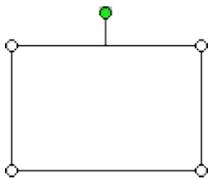
### Sizing handles

These appear on a drawing object when it is selected. When you drag these handles, the size of the object is reduced or enlarged.



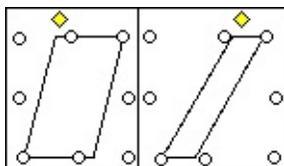
### Rotate handle

A green rotate handle appears when you select an object. You can then rotate the object by dragging the handle.



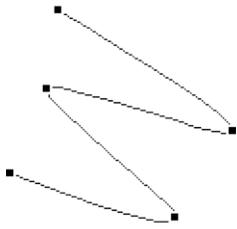
### Adjustment handles

A yellow adjustment handle on [AutoShapes](#) that allows shape manipulation. In the illustration, the handle was dragged toward the middle of the shape to make the shape thinner.



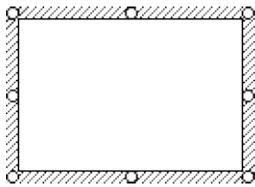
### Vertex

These are black squares that appear at the ends and intersections of lines or curves in selected curves and freeform drawing objects when you click **Edit Points** on the **Draw** menu. You can drag them to change the shape of the object.



### **Hatched border**

When a text box is surrounded by a hatched border, you can enter, delete, select, and format the text inside.



### **Dotted border**

When a text box is surrounded by a dotted border, you can format the text box itself. To get the dotted border, click the hatched border.



## **Insert a graphic object**

You can paste clip art, a picture, or a scanned photograph you copy from other programs and locations. You can also add AutoShapes to your chart.

**What do you want to do?**

[Insert an imported picture](#)

[Add a circle, square or other AutoShape](#)

## Insert an imported picture in a chart

1. In a drawing program or Microsoft Office program that supports clip art, select the picture you want.
2. On the program's **Edit** menu, click **Copy**.
3. Switch to Microsoft Graph or double-click the Microsoft Graph chart.
4. Switch to the chart.

[How?](#)

5. On the **Edit** menu, click **Paste**.



## Add a circle, square, or other AutoShape

You can add [AutoShapes](#) and other drawing objects only to a chart. You cannot add them to the datasheet.

1. On the **Drawing** toolbar, click **AutoShapes**, point to a category, and then click the shape you want.
2. To insert a shape with a predefined size, click the chart.

To insert a shape with a different size, drag the pointer to make the shape the size you want.

To maintain the shape's width-to-height ratio, hold down SHIFT while you drag the pointer.

### Tips

To draw a circle or square, click **Oval**  or **Rectangle**  on the **Drawing** toolbar, and then click the chart.

To add color, change borders, rotate, or add shadow or 3-D effects to a shape, select the shape, and then use the tools on the **Drawing** toolbar.

## Add a curve

You can add curves and other drawing objects only to a chart. You cannot add them to the datasheet.

1. On the **Drawing** toolbar, click **AutoShapes**, point to **Lines**, and then click **Curve** .
2. Click where you want the shape to start, and then continue to move the mouse and click wherever you want to add a curve.
3. To end the shape and leave it open, double-click it at any point.

To close the shape, click near its starting point.

**Tip** After you complete a curve, you can close an open shape or open a closed one. Right-click the curve, and then click **Close Curve** or **Open Curve** on the shortcut menu.



## Add a freeform object

You can add **freeforms** and other drawing objects only to a chart. You cannot add them to the datasheet.

1. On the **Drawing** toolbar, click **AutoShapes**, and then point to **Lines**.
2. Click **Freeform**  to draw an object with both curved and straight segments. Drag to draw freehand shapes; click and move the mouse to draw straight lines.

Click **Scribble**  when you want an object to look as if it was drawn with a pen.

3. To end a shape and leave it open, double-click it at any point.  
To close a shape, click near its starting point.

**Tip** After you complete a freeform, you can close an open shape or open a closed one. Right-click the shape, and then click **Close Curve** or **Open Curve** on the shortcut menu.

## Add a line

You can add lines and other drawing objects only to a chart. You cannot add them to the datasheet.

1. On the **Drawing** toolbar, click **AutoShapes**, point to **Lines**, and then click the line style you want.
2. Drag to draw the line.

To constrain a straight line to draw at 15-degree angles from its starting point, hold down SHIFT as you drag.

To lengthen a straight line in opposite directions from the first end point, hold down CTRL as you drag.

**Tip** If you want to draw a simple straight line, click **Line**  on the **Drawing** toolbar.

## Add a WordArt drawing object

You can add WordArt drawing objects and other drawing objects only to a chart. You cannot add them to the datasheet.

1. On the **Drawing** toolbar, click **Insert WordArt** .
2. Double-click the special effect you want.
3. In the **Edit WordArt Text** dialog box, type the text you want, select any other options, and then click **OK**.
4. To add or change effects to the text, use the tools on the **WordArt** and **Drawing** toolbars.

## Add or change the 3-D effect of a drawing object

1. Select the object you want to change.
2. On the **Drawing** toolbar, click **3-D Style** .

To add a 3-D effect, click the option you want.

To change a 3-D effect— for example, its color, rotation, depth, lighting, or surface texture— click **3-D Style**  again, click **3-D Settings**, and then click the options you want on the **3-D Settings** toolbar.

**Tip** To add the same 3-D effect to several objects at one time— the same color, for example— select or group the objects before you add the effect.

## **Add or edit a WordArt drawing object**

You can add a special effect to text on a chart by using the **Insert WordArt** tool on the **Drawing** toolbar. You can create shadowed, skewed, rotated, and stretched text, as well as text that has been fitted to predefined shapes. Because a special text effect is a drawing object, you can also use tools on the **Drawing** toolbar to change the effect— for example, to fill a text effect with a picture.

**What do you want to do?**

[Add a WordArt drawing object](#)

[Change the text in a WordArt drawing object](#)



## Add or move a connector line

You can add connector lines and other drawing objects only to a chart. You cannot add them to the datasheet.

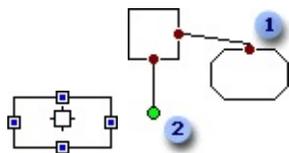
1. On the **Drawing** toolbar, click **AutoShapes**, point to **Connectors**, and then click the connector you want.
2. Point to the first object to which you want to attach the connector.

Connection sites appear as blue squares.

3. Click the first connection site you want, point to the other object, and then click the second connection site.

Locked connector ends appear as red squares. Locked connector lines move with the objects they connect. Unlocked connector ends appear as green squares.

To move the connector line, drag one of its ends, and connect it to another site or object. To detach the entire line, drag its middle. If the connector line has a yellow **adjustment handle**, dragging the handle will change the shape of the connector line, but not detach it.



- 1 Locked connector line
- 2 Unlocked connector line



## Add text to an AutoShape or text box

You can add text to most [AutoShapes](#), except lines, connectors, and freeforms.

Click any AutoShape— except a line, connector, or freeform— and then type the text.

**Note** The text is attached to the AutoShape and is treated as part of the shape. If you don't want to attach the text to the shape, use the **Text Box** tool  on the **Drawing** toolbar.



## Change the AutoShape type

1. Select the [AutoShape](#) you want to change.
2. On the **Drawing** toolbar, click **Draw**, point to **Change AutoShape**, point to a category, and then click the shape you want.



## Change the shape of a freeform or curve

1. Select the **freeform** object or curve you want to change.
2. On the **Drawing** toolbar, click **Draw**, and then click **Edit Points**.
3. To reshape the freeform, drag one of the **vertexes** that form its outline.

To add a vertex to the freeform, click where you want to add it, and then drag.

To delete a vertex, press CTRL and click the vertex you want to delete.

**Tip** For greater control over the shape of a curve, after you click **Edit Points**, right-click a vertex. A shortcut menu appears with options for other types of vertexes you can use to refine the shape of the curve.



## Change the appearance of text in an AutoShape or text box

1. Select the text in the [AutoShape](#) or text box that you want to change.
2. If you selected an AutoShape, click **AutoShape** on the **Format** menu, and then click the **Font** tab.

If you selected a text box, click **Text Box** on the **Format** menu, and then click the **Font** tab.

3. Select the options you want.



## Change the margins around text in an AutoShape or text box

1. Click the border of the [AutoShape](#) or text box whose margins you want to change.
2. If you selected an AutoShape, click **AutoShape** on the **Format** menu, and then click the **Margins** tab.

If you selected a text box, click **Text Box** on the **Format** menu, and then click the **Margins** tab.

3. Under **Internal margin**, adjust the measurements to increase or decrease the distance between the text and the object.

## **Change the text in a WordArt drawing object**

1. Click the WordArt drawing object you want to change.
2. On the **WordArt** toolbar, click **Edit Text**.
3. Make the changes you want, and then click **OK**.



## Make an AutoShape or text box automatically fit its text

1. Click the border of the [AutoShape](#) or text box you want to resize.
2. If you selected an AutoShape, click **AutoShape** on the **Format** menu, and then click the **Alignment** tab.

If you selected a text box, click **Text Box** on the **Format** menu, and then click the **Alignment** tab.

3. Select the **Automatic size** check box.

**Note** If you later change the size of the AutoShape or text box, you must fit the AutoShape or text box to the text again by selecting the **Automatic size** check box.

## **Edit a picture**

1. Select the picture you want to edit.
2. On the **Picture** toolbar, select the options you want.



## Move a drawing object or set of objects

1. Select the object, [multiple selection](#), or [group](#) you want to move.
2. Drag the object to its new location.

**Tip** To constrain an object so it moves only horizontally or vertically, press SHIFT as you drag the object.

## **Move a text box**

Click the text box, and then drag its border.

Make sure to drag the border and not one of the sizing handles. If you drag a sizing handle, the text box will change shape but stay in the same place on the sheet.



## About resizing or cropping an object

**Resizing** When you select an object, [sizing handles](#) appear at the corners and along the edges of the [selection rectangle](#). You can resize an object by dragging its sizing handles, or you can resize it more precisely by specifying percentages for the object's height and width.

[Resize an object by dragging](#)

[Resize an object by a specific percentage](#)

[Maintain the proportions of an object while resizing it](#)

**Cropping** If the object is a [picture](#)— for example, a photo, [bitmap](#), or clip art— you can crop it, that is, trim the vertical or horizontal edges of it. Photos are often cropped to focus attention on a specific area of the picture. [How to crop a picture](#).

**Restoring** You can restore pictures that have been cropped or resized. No matter how many times the picture has been changed, Microsoft Graph keeps track of its original size when it was first inserted in your chart. [How to restore a picture to its original size](#).



## Resize an object

1. Select the object you want to resize.
2. Drag a [sizing handle](#) until the object is the shape and size you want.

## Resize an object by a specific percentage

1. Select the object you want to resize.
2. On the **Format** menu, click the command for the type of object you selected— for example, **AutoShape** or **Picture**— and then click the **Size** tab.
3. Under **Scale**, enter the percentages you want in the **Height** and **Width** boxes.

**Tip** To maintain the ratio between the object's height and width, select the **Lock aspect ratio** check box on the **Size** tab.

## **Crop or trim portions of a picture**

1. Select the picture you want to crop.
2. On the **Picture** toolbar, click **Crop** .
3. Position the mouse pointer over a sizing handle and drag.

## Maintain the proportions of an object while resizing it

| To resize a selected object                                     | Hold down                                  |
|---|--|
| Proportionally from a corner                                    | SHIFT and drag a corner sizing handle      |
| Vertically, horizontally, or diagonally from the center outward | CTRL and drag a sizing handle              |
| Proportionally from the center outward                          | CTRL+SHIFT and drag a corner sizing handle |
| While temporarily turning on or off the Snap to Grid feature    | ALT and drag a sizing handle               |

## Restore a picture to its original size

1. Select the picture you want to restore.
2. On the **Format** menu, click **Picture**, and then click the **Size** tab.
3. Click **Reset**.

## Rotate a drawing object to any angle

1. Select the object you want to rotate.
2. On the **Drawing** toolbar, click **Free Rotate** .
3. Drag a corner of the object in the direction you want to rotate it.
4. Click outside the object to set the rotation.

### Tips

To constrain the rotation of the object to 15-degree angles, hold down SHIFT while you use the **Free Rotate** tool.

To rotate the object around the handle opposite the handle you're using, hold down CTRL while you use the **Free Rotate** tool.

## **Rotate a drawing object 90 degrees to the left or right**

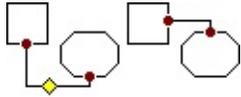
1. Select the object you want to rotate.
2. On the **Drawing** toolbar, click **Draw**, and then point to **Rotate or Flip**.
3. To rotate the object 90 degrees to the left, click **Rotate Left**.  
To rotate the object 90 degrees to the right, click **Rotate Right**.

## **Flip a drawing object horizontally or vertically**

1. Select the object you want to flip.
2. On the **Drawing** toolbar, click **Draw**, and then point to **Rotate or Flip**.
3. To flip the object horizontally, click **Flip Horizontal**.  
To flip the object vertically, click **Flip Vertical**.

## Reroute a connector line

1. Select one of the connected objects.
2. On the **Drawing** toolbar, click **Draw**, and then click **Reroute Connectors**.



**Tip** If you click **Reroute Connectors** when two or more connector lines are connecting the same two objects, all the lines move so they connect at the same points. If you don't want to reroute all the lines, select only the line you want to reroute, and then click **Reroute Connectors**.



## Save a drawing object style as the default

This procedure applies the attributes you select to new drawing objects.

1. Select the object that has the [attributes](#) you want to use as the default.
2. On the **Drawing** toolbar, click **Draw**, and then click **Set AutoShape Defaults**.

## **Delete an AutoShape or graphic object**

1. Select the AutoShape or graphic object you want to delete.
2. Press DELETE.



## About grouping drawing objects

When you group drawing objects, you combine them so you can work with them as though they were a single object. You can flip, rotate, and resize or scale all objects in a group as a single unit. You can also change the [attributes](#) of all objects in a group at one time— for example, you might change the fill color for or add a shadow to all objects in the group. You can also build complex drawings by creating groups within groups. You can ungroup or regroup a group of objects at any time

## **What do you want to do?**

[Group drawing objects](#)

[Ungroup drawing objects](#)

[Regroup drawing objects](#)



## Align drawing objects on a grid

1. On the **Drawing** toolbar, click **Draw**, and then point to **Snap**.
2. To automatically align objects on an invisible **grid**, click **To Grid**.

To automatically align objects with gridlines that go through the vertical and horizontal edges of other shapes, click **To Shape**.

**Tip** You can also snap the object to the grid by holding down ALT while you move, draw, or resize a drawing object.

## **Group drawing objects**

1. Select the objects you want to group by holding down SHIFT as you click each object.
2. On the **Drawing** toolbar, click **Draw**, and then click **Group**.

## **Move, or "nudge," a drawing object in small increments**

1. Select the object you want to nudge.
2. On the **Drawing** toolbar, click **Draw**, point to **Nudge**, and then click the direction you want to nudge the object.

## Ungroup and change clip art

1. Select the clip art you want to change.
2. On the **Drawing** toolbar, click **Draw**, and then click **Ungroup**.
3. To continue ungrouping, click **Yes** when the message box appears.
4. To change an individual object in the image, continue to select and ungroup objects until the one you want becomes available.
5. Use the tools on the **Drawing** toolbar to change the object.  
For example, you can rearrange parts of the image, combine two or more images, or change fill and line colors.
6. To restore the individual objects to one image, select all objects that make up the image, and then click **Group** on the **Draw** menu.

## **Regroup drawing objects**

1. If you are working with multiple groups of drawing objects, select any one of the objects that was previously grouped.
2. On the **Drawing** toolbar, click **Draw**, and then click **Regroup**.

## Stack drawing objects

Drawing objects automatically stack in individual layers as you add them to a chart. You see the stacking order when objects overlap— the top object covers a portion of objects beneath it. You can create different effects by overlapping objects when you draw. You don't have to draw the bottom object first— you can always move it later.

1. Select the object you want to move.

If the object is hidden behind other objects, click one of the objects, and then press TAB or SHIFT+TAB until the one you want is selected.

2. On the **Drawing** toolbar, click **Draw**, and then point to **Order**.
3. Click the command for the placement you want.

| To do this                                   | Click                 |
|--|-----------------------|
| Bring an object to the front of the stack    | <b>Bring to Front</b> |
| Send an object to the back of the stack      | <b>Send to Back</b>   |
| Bring an object one step closer to the front | <b>Bring Forward</b>  |
| Send an object one step toward the back      | <b>Send Backward</b>  |

## **Ungroup drawing objects**

1. Select the group you want to ungroup.
2. On the **Drawing** toolbar, click **Draw**, and then click **Ungroup**.



## Align text in an AutoShape or text box

1. Click the border of the [AutoShape](#) or text box you want to resize.
2. If you selected an AutoShape, click **AutoShape** on the **Format** menu, and then click the **Alignment** tab.

If you selected a text box, click **Text Box** on the **Format** menu, and then click the **Alignment** tab.

3. Select the options you want.



## **Set margins and align text that is attached to an AutoShape or text box**

When text is attached to an [AutoShape](#)— such as a callout or a flowchart symbol— you can change the alignment of the text, change the size of the object to fit the text, or change the margins between the text and the edge of the object.

## **What do you want to do?**

[Align text in an AutoShape or text box](#)

[Make an AutoShape or text box automatically fit its text](#)

[Change the margins around text in an AutoShape or text box](#)

## Change the style of a drawing object line or border

1. Select the line or border you want to change.
2. On the **Drawing** toolbar, click **Line Style** .
3. Click the style you want; or click **More Lines**, and then click a style.

## Change the color of a line or border around a drawing object

1. Select the object you want to change.
2. On the **Drawing** toolbar, click the arrow next to **Line Color** .
3. Click the color you want.

If you don't see the color you want, click **More Line Colors**. Click a color on the **Standard** tab, or click the **Custom** tab to mix your own color, and then click **OK**.

## Make a dashed line or border around a drawing object

1. Select the line or border you want to change.
2. On the **Drawing** toolbar, click **Dash Style** , and then click the style you want.

## **Add or change a gradient (shaded), patterned, textured, or picture fill in a drawing object**

1. Select the object you want to change.
2. Click the arrow next to **Fill Color** , click **Fill Effects**, and then click the **Gradient**, **Texture**, **Picture**, or **Pattern** tab.
3. Select the options you want.

## Change a fill color in a drawing object

1. Select the object you want to change.
2. Click the arrow next to **Fill Color** , and then click the color you want.

If you don't see the color you want, click **More Fill Colors**. Click a color on the **Standard** tab, or click the **Custom** tab and mix your own color, and then click **OK**.

## **Add, change, or remove a fill in a drawing object**

You can fill objects with solid or gradient (shaded) colors, a pattern, a texture, or a picture. Any time you fill an object, the new fill replaces the old one.

## **What do you want to do?**

[Add or change a gradient \(shaded\), patterned, textured, or picture fill](#)

[Change a fill color](#)

[Remove a fill](#)

## Remove a fill in a drawing object

1. Select the object you want to change.
2. Click the arrow next to **Fill Color** , and then click **No Fill**.



## Add a shadow or 3-D effect to a drawing object



Rectangle with shadow



Rectangle with 3-D effect

**Shadows** You can add shadows to AutoShapes—including text boxes—and you can change the size, direction, and color of shadows. When you change the color of a shadow, the change affects only the shadow, not the object itself. You can also add some types of shadows—an offset shadow, for example—to the borders of pictures. [How to add a shadow to a drawing object.](#)

**3-D effects** You can add a 3-D effect to most lines, [AutoShapes](#), and freeform drawing objects. With 3-D options, you can change the depth (the extrusion) of the object and its color, rotation, angle, direction of lighting, and surface texture. When you change the color of a 3-D effect, the change affects only the 3-D effect of the object, not the object itself. [How to add a 3-D effect to a drawing object.](#)

**Note** An object can have either a shadow or a 3-D effect, but not both—if you apply a 3-D effect to an object that has a shadow, the shadow disappears.

**Tip** You can create text with a 3-D effect by using the **Insert WordArt** button  on the **Drawing** toolbar.

## Add a shadow to a drawing object

1. Select the object you want to add a shadow to.
2. On the **Drawing** toolbar, click **Shadow Style** , and then click the option you want.

**Tip** To change the color or offset of a shadow, click **Shadow Style** , click **Shadow Settings**, and then click the options you want on the **Shadow Settings** toolbar.

## Change the color of a shadow on a drawing object

1. Select the object you want to change.
2. On the **Drawing** toolbar, click **Shadow Style** , and then click **Shadow Settings**.
3. On the **Shadow Settings** toolbar, click the arrow next to **Shadow Color** .
4. Click the color you want.

If you don't see the color you want, click **More Shadow Colors**. Click a color on the **Standard** tab, or click the **Custom** tab to mix your own color, and then click **OK**.

**Tip** To change the shadow color so you can see through it, click **Shadow Color** , and then click **Semitransparent Shadow**.

## Change the offset direction of a shadow on a drawing object

1. Select the object you want to change.
2. On the **Drawing** toolbar, click **Shadow Style** , and then click **Shadow Settings**.
3. On the **Shadow Settings** toolbar, click any of the four **Nudge Shadow** buttons to create the effect you want.

Clicking a **Nudge Shadow** button nudges the shadow 1 point. To nudge the shadow 6 points, hold down SHIFT while you click a **Nudge Shadow** button.

## Remove a shadow from a drawing object

1. Select the object you want to change.
2. On the **Drawing** toolbar, click **Shadow Style** , and then click **No Shadow**.

## Change the color of the 3-D effect of a drawing object

1. Select the object you want to change.
2. On the **Drawing** toolbar, click **3-D Style** , and then click **3-D Settings**.
3. On the **3-D Settings** toolbar, click the arrow next to **3-D Color** .
4. Click the color you want.

If you don't see the color you want, click **More 3-D Colors**. Click a color on the **Standard** tab, or click the **Custom** tab to mix your own color, and then click **OK**.

To change the 3-D color back to its default, click **Automatic**.

## Remove a 3-D effect from a drawing object

1. Click the object you want to change.
2. On the **Drawing** toolbar, click **3-D Style** , and then click **No 3-D**.



## Troubleshoot drawing objects

### Appearance

- ▶ The lines in my drawing are jagged.
- ▶ Colors within objects aren't smooth.
- ▶ Freeforms I drew won't align evenly.
- ▶ Text in a drawing object doesn't rotate or flip.

## **Drawing**

- ▶ Freehand drawing is hard to control.

## **Moving and selecting**

- ▶ I ungrouped a group of drawing objects and can't regroup them.
- ▶ When I try to move a drawing object, it resizes, or vice versa.



## Troubleshoot pictures and imported graphics

- ▶ I can't rotate a graphic
- ▶ A graphic won't import
- ▶ The AutoShape, Text Box, Picture, WordArt, or Object command isn't on the Format menu.
- ▶ I can't change the color of some parts of a picture.
- ▶ I can't ungroup an imported picture.



## **Troubleshoot adding borders, fills, shadows, and 3-D effects to drawing objects**

- ▶ When I added a 3-D effect to my drawing object, the object shadow disappeared.
- ▶ I can't see the border around a drawing object.
- ▶ I changed the fill, border, shadow, or 3-D effect, but I get the old settings when I draw an object.
- ▶ When I change the fill color of a drawing object with a shadow or 3-D effect, the shadow or 3-D effect doesn't change color.
- ▶ The shadow on my drawing object is not solid.



## **Troubleshoot aligning and arranging drawing objects**

- ▶ I aligned my drawing objects, and they are stacked on top of each other.
- ▶ Items on the Align or Distribute menu are dimmed, and I can't select them.

# Troubleshoot Microsoft Graph

## What do you need help with?

### Working with data

[I'm using dates on my chart, but I don't get a time-scale axis.](#)

[I can't use a named range when I try to import a range from an Excel workbook.](#)

[My xy \(scatter\) chart doesn't use my values along the horizontal \(x\) axis.](#)

[I typed new text or numbers on the datasheet, but the data labels in the chart didn't update.](#)

[Text is missing along the horizontal axis of the chart.](#)

[Where did the data for my chart go?](#)

## **Formatting and display**

[Why does the font size in my chart keep changing?](#)

[There are gaps between the dates plotted in my chart.](#)

[The text box, picture, or floating text I added to my user-defined chart type is not included when I create a chart.](#)

## **Printing and commands**

[I can't find the correct menu, command, toolbar button, tab, or dialog box option.](#)

[I can't print the datasheet.](#)

## Change the default chart type

1. On the **Chart** menu, click **Chart Type**.
2. On the **Standard Types** or **Custom Types** tab, click the chart type you want.

The **Custom Types** tab lists the current default chart, the built-in custom chart types, and any custom chart types you've added. You can create a chart with the chart type, items, and formatting you want and then save it as a custom chart type.

[How?](#)

3. Click **Set As Default Chart**, and then click **Yes**.

## Use the selected chart as the default chart type

1. On the **Chart** menu, click **Chart Type**.
2. On the **Custom Types** tab, click **Set As Default Chart**, and then click **Yes**.
3. If the **Add Custom Chart Type** dialog box appears, type a name in the **Name** box, type a description in the **Description** box, and then click **OK**.