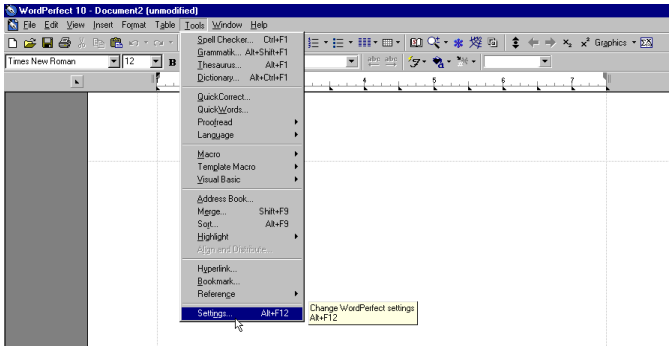
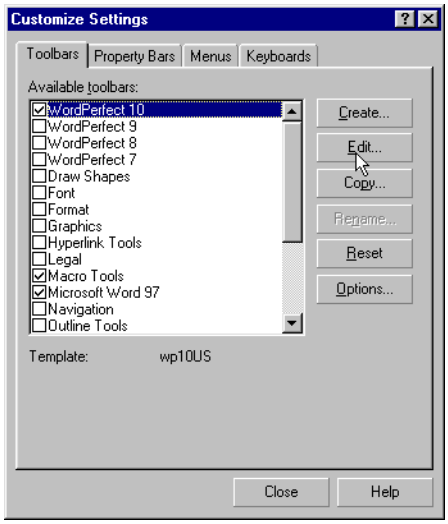
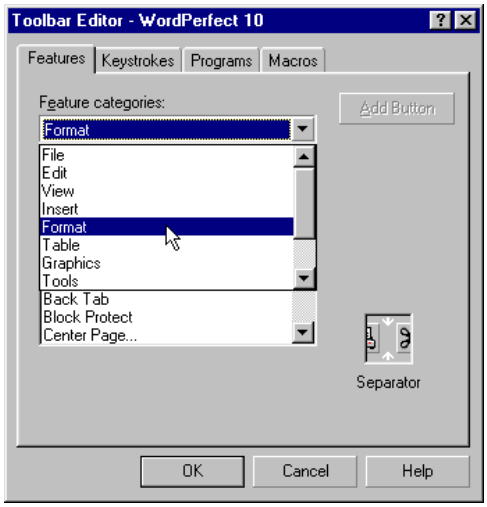
Graphics In WordPerfect™ - The Basics

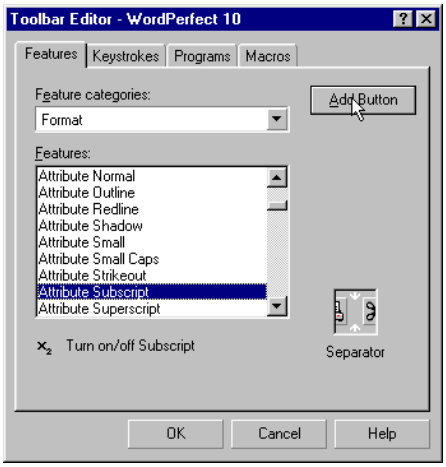
Customizing the Toolbar

Follow these steps to set up your toolbar for easier access to certain features such as Superscript and Subscript:



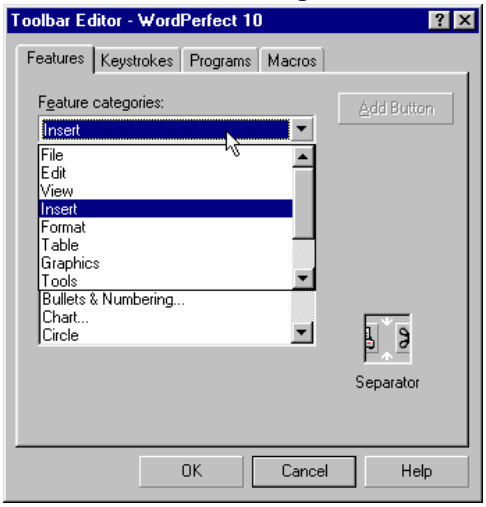


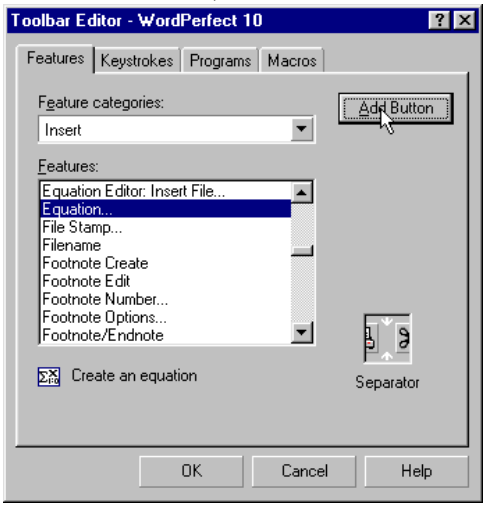




Repeat this step for Attribute Superscript and any other desired attributes you wish to have appear as buttons on your toolbar.

Add a button for the Equation Editor (which we will use later):



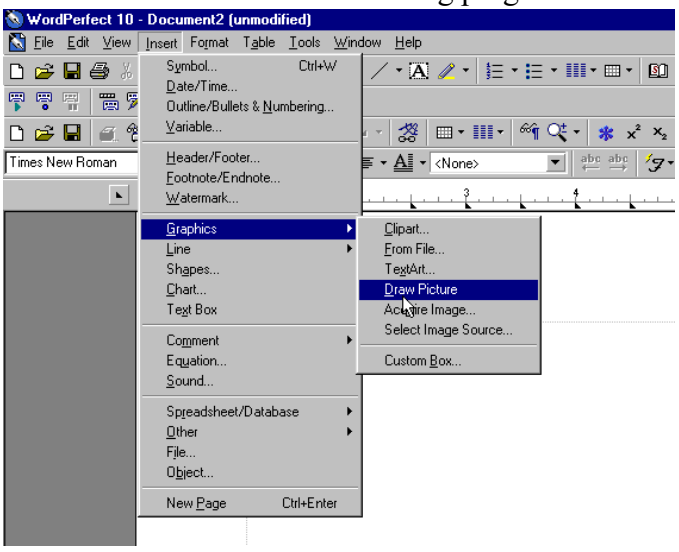


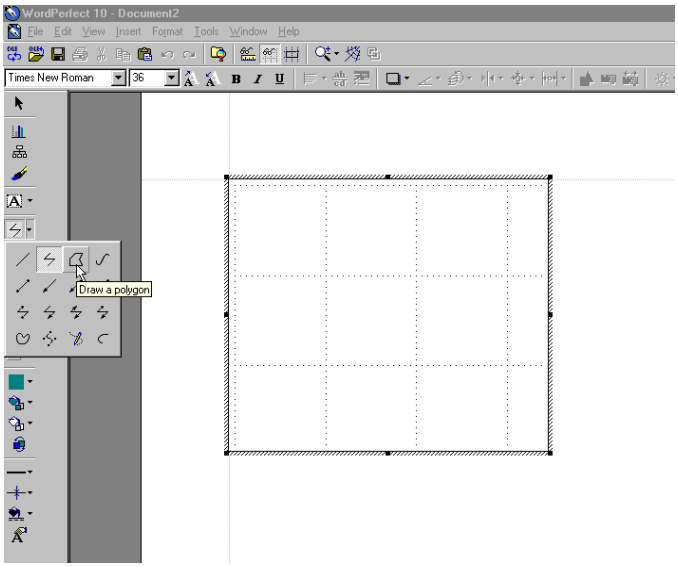
You can further customize your toolbar for readily accessible features as desired.
The three features indicated above, however, will give you quick access to Superscript (for exponents), Subscript (e.g. for bases in logarithms) and the Equation Editor for easily creating mathematical expressions (we will see how to do this later)..

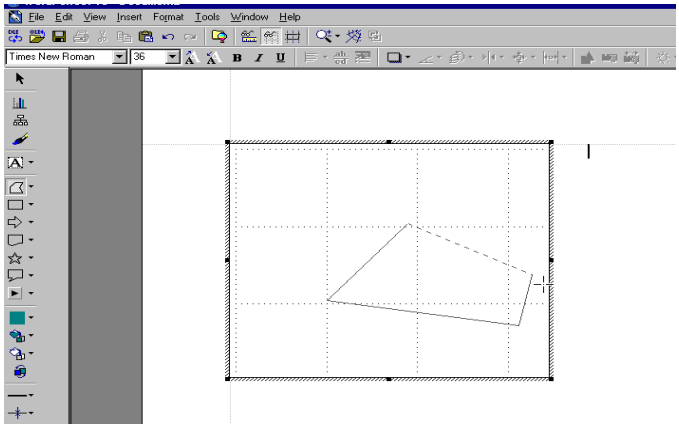
When you have finished customizing your toolbar, click OK until all menus are closed and you are back to the main document screen for WordPerfect.

Creating and Working with Graphics in WordPerfect

WordPerfect has a built-in drawing program. Follow these steps to create the drawing:



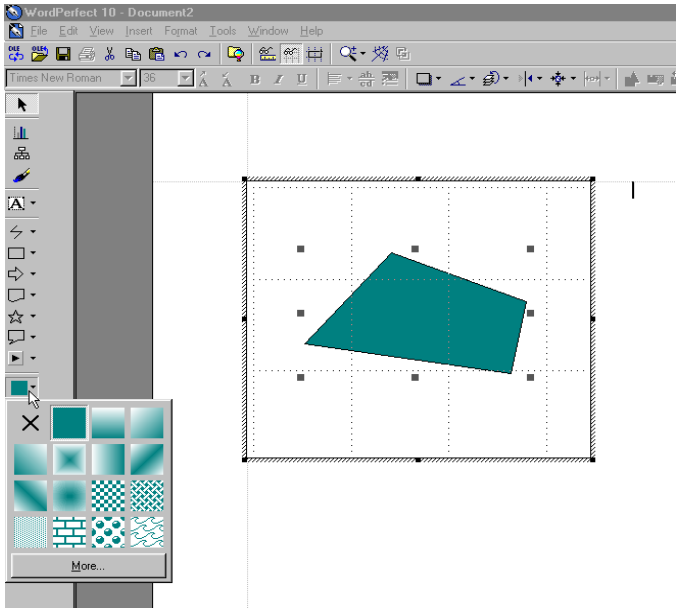




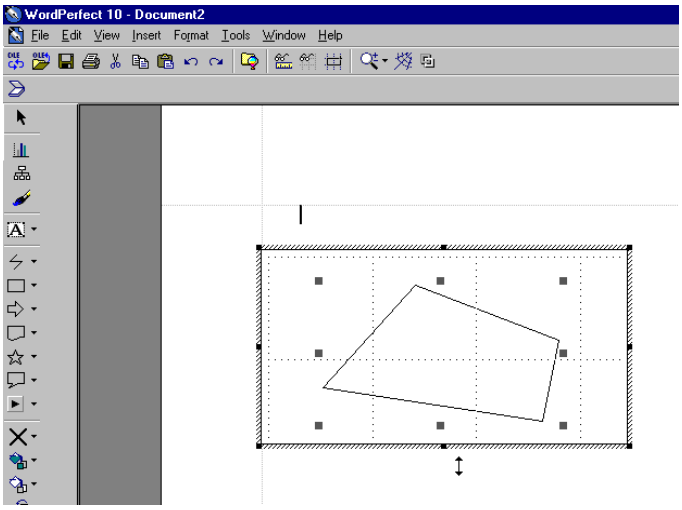
Press and hold your left mouse button to begin drawing in the drawing area.

When finished drawing a side, click the left mouse button once.

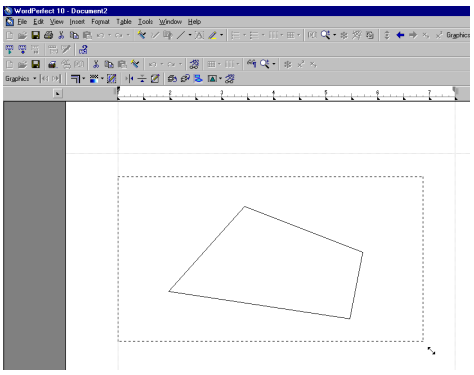
When finished the drawing, double click the left mouse button.



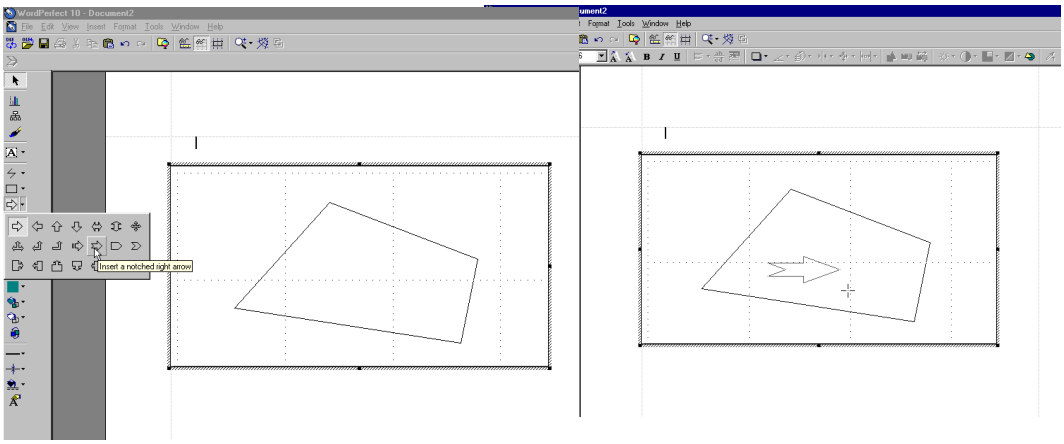
Select the drawing, click the icon in the left toolbar as shown, and change the fill style to X so there will be no fill. Other options can be used as desired and you may wish to experiment with these.



While still in drawing mode, by positioning the mouse cursor on a "handlebar" on the border until a double arrow appears, you can resize the drawing area without affecting the size of the drawing you have created. This is useful when you need the graphic to take up less space (say on an exam) but you do not want the size of the drawing to reduce.

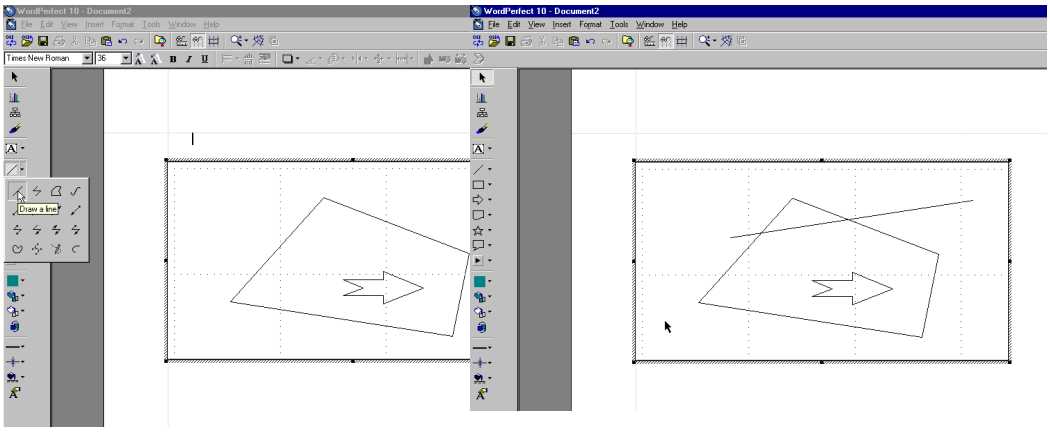


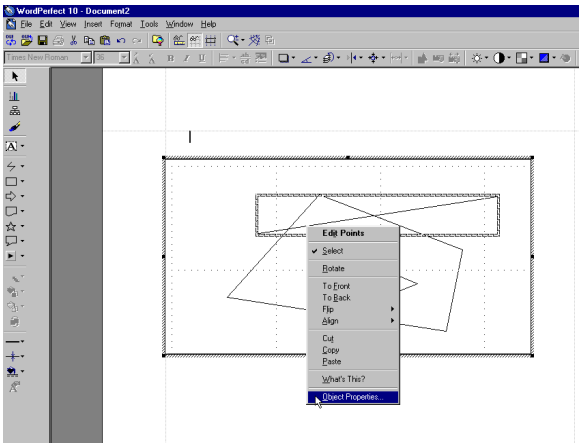
Click outside the drawing area and you will exit drawing mode but the graphic will still be selected. This time, resizing the window also resizes the drawing.



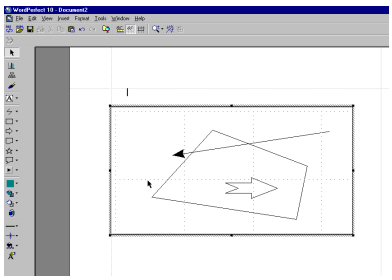
Double click the graphic to reenter drawing mode.

Add an arrow and a line to the drawing





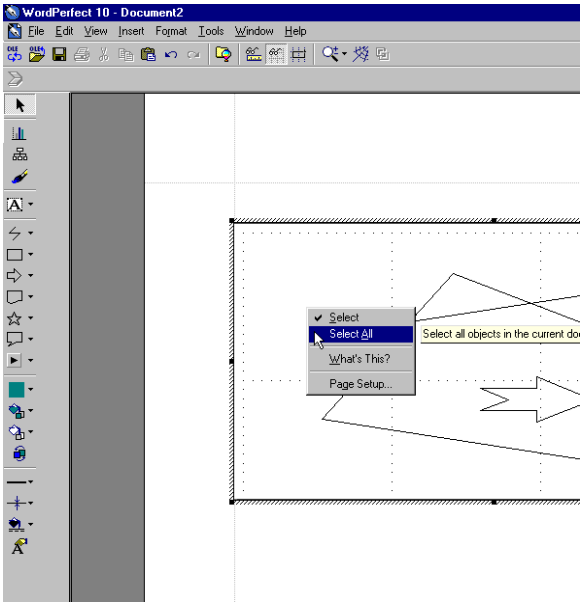
Position the mouse cursor over the line and RIGHT CLICK. A menu will appear as shown. Select OBJECT PROPERTIES and another menu will appear. Select one of the options for STARTING CAP and click OK. Your line should now have an arrow (or whatever you selected) on one end (see next screen shot).



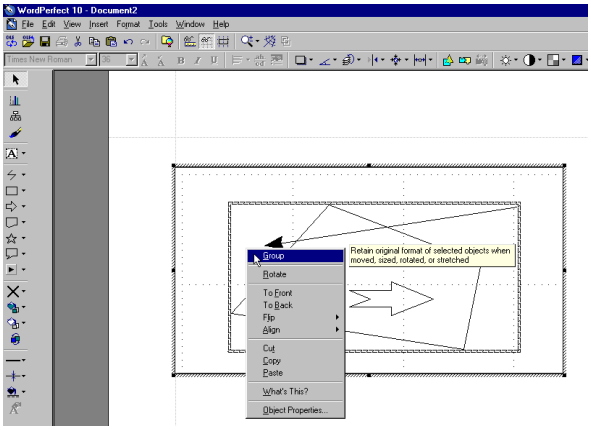
You can try experimenting with other Object Properties if you desire.

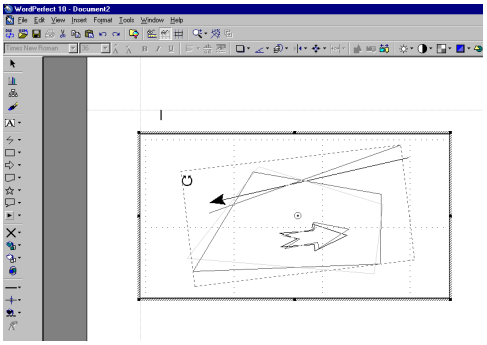
It is easy to move part of the drawing or resize it simply by clicking to select the part to be moved or resized, then dragging to the new location or to get the desired size. This is not shown here, but you can try it.It is easy to move part of the drawing or resize it simply by clicking to select the part to be moved or resized, then dragging to the new location or to get the desired size. This is not shown here, but you can try it.

Sometimes, you may decide to move all the drawing while in drawing mode. The easiest way to do this is to RIGHT CLICK in the white drawing area (but NOT on the drawing) and choose SELECT ALL on the menu as shown. Then you can click and drag to move or resize the entire drawing.



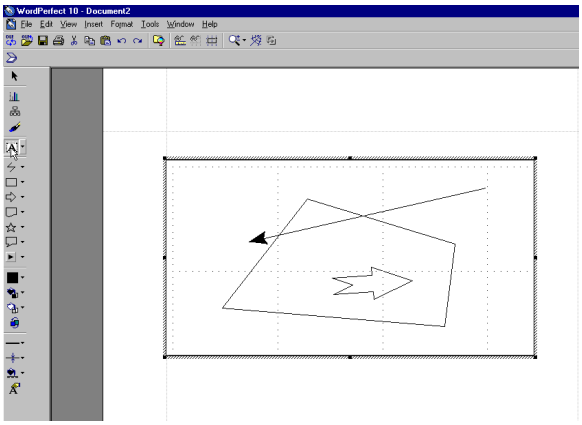
Also, once you have chosen the SELECT ALL option, you can then RIGHT CLICK on the drawing and choose GROUP so that all parts of the drawing are "tied together " and in future you can move/resize the whole drawing simply by clicking and dragging on any part.





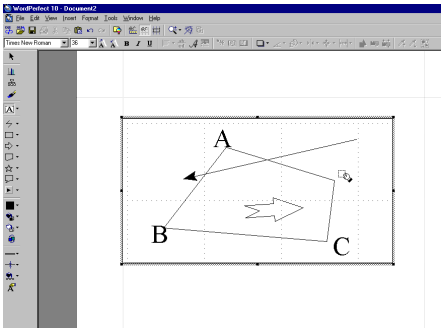
Now you can do other things with the drawing, such as flip (reflect) and rotate. Right click on the drawing and select ROTATE. Position the mouse cursor over one of the corner "handlebars" until the double arrow appears, then click and drag to any desired rotation.

In WordPerfect 9 or higher, the center of rotation is indicated as a dot (see center of drawing shown) - this can be changed by clicking and dragging the dot to a new location. The rotation is illustrated and you can experiment with the flip.

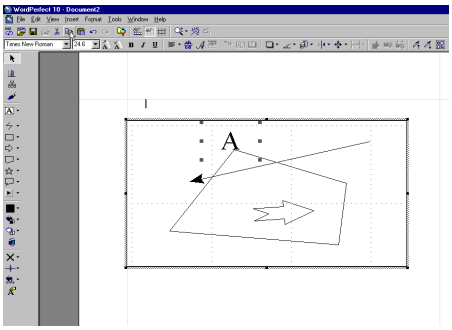


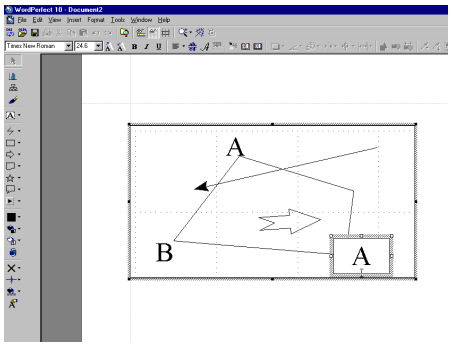
Finally, add some text to the drawing.

Click on the **A** in the sidebar. A hand appears (see next screenshot) and you can click wherever you wish to place the text. Once finished typing your text, click outside the text box.



As with the drawings earlier, once you have finished the text you can select it and resize or move it.





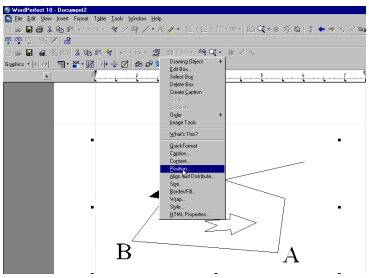
TRICK:

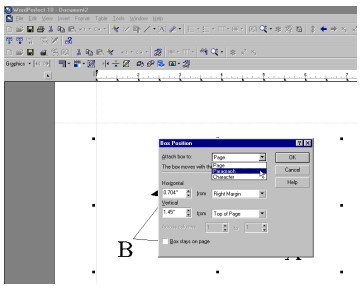
Sometimes, it is desirable to have more than one text box but have a consistent size, as in the labeling of a diagram.

In the example at the left, the "B" was created by copying the "A", pasting the "A" 3 times, then dragging the "A" to this position. The "A"was double clicked to allow editing of this text box, then changed to a "B". On the third vertex, we can see the "A" is about to be changed to a "C". This way, we do not have to worry about resizing each individual text box to have consistently sized text.

Anchoring and Resizing a Graphic in WordPerfect

Once you have finished your drawing, you will wish to have positioned as part of your document in a desired location. This is pretty simple to do by simply clicking the drawing and dragging it to the desired location, but this may not always give you the desired effect. In addition, you may run into problems with graphics suddenly changing position, especially if you have more than one drawing in the same document. This usually occurs because of the type of "anchoring" used for the graphic. There are 3 types of anchoring: **Page, Paragraph, and Character**. Usually, the best is **Character** since it treats the graphic the same as any character in a line of text (more explanation below), while **Paragraph** allows you to place text around the box.

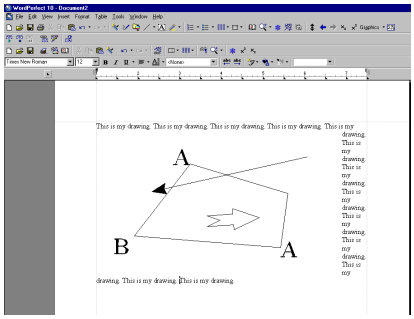




Make sure your drawing is NOT in the drawing mode i.e. make sure you are in document mode.

Right click on the graphic.

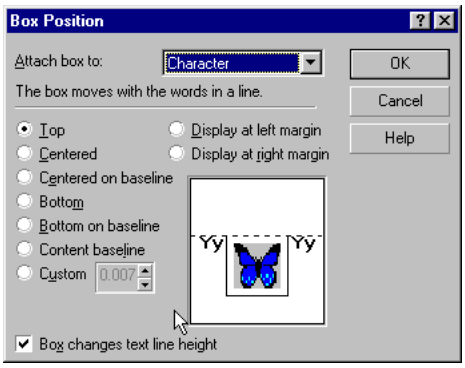
Select POSITION.



Change the anchor to PARAGRAPH.

For our purposes today, drag your drawing near the top of the page and type some text. Note that the text will "wrap" around the box (this wrapping feature can be changed, but we will not do that today).

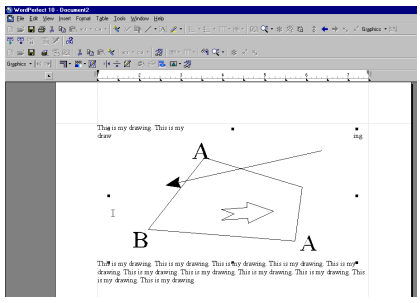
Unfortunately, graphics may still move unexpectedly with this type of anchor.



Repeat the above steps, but this time change the anchor to CHARACTER (do not worry about the other options yet).

Click OK.

Drag the drawing to any desired position within the line of text, even to the middle of a word.



Perform these steps again, but this type experiment with some of the other options for the Character anchor. For example, try **Centered on Baseline**. The options for positioning on the baseline are very useful when creating graphics using the **Equation Editor** (more on Equation Editor later)..

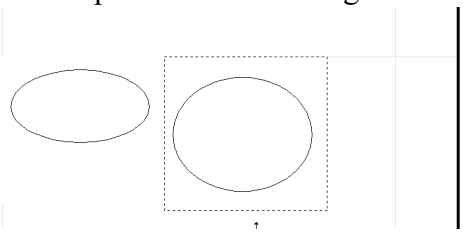
Special Note: You can also get around anchoring issues somewhat by using a table (this is beyond the scope of what we are trying to do today). For example, when creating an exam with 50 multiple choice, you might want to create a table with 50 rows and 3 columns (one for numbering, one for the question including the graphic (if any), and one for the answer space). Graphics pasted inside a cell of a table are less likely to move, even with a page anchor (this is not guaranteed!). Most of this document was formatted inside a table with transparent borders. One thing to keep in mind, however, is that graphics and tables really increase the file size of a document and this can: **a)** eat up space on your hard drive, and **b)** cause crashes of WordPerfect and/or your computer. You may find that large documents will need to be divided into several documents and saved as separate files.

To resize a graphic while in document mode, you can either:

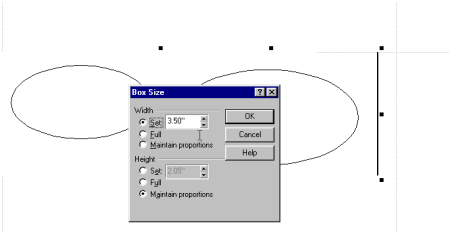
a) select it then click and drag, or

b) right click it, then choose SIZE, and manually type in the size (this is recommended when you want a series of graphics to be the same size OR to prevent some distortion that can be caused with the click and drag method. For example:

The "Click and Drag" approach in this case has distorted the original ellipse on the left into the nearly circular ellipse shown on the right



Using method b) above, the new ellipse retains the same shape as the original even though it has been enlarged (NOTE: Enter a setting for either the Width or Height of the graphics box, then select MAINTAIN PROPORTIONS for the other dimension)

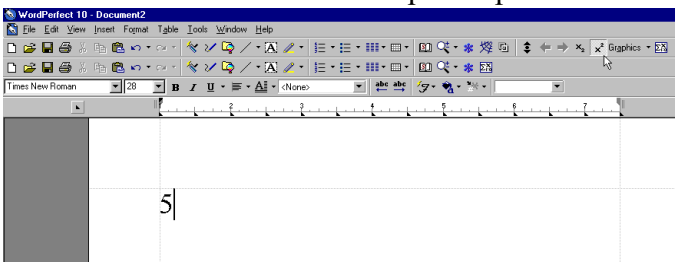


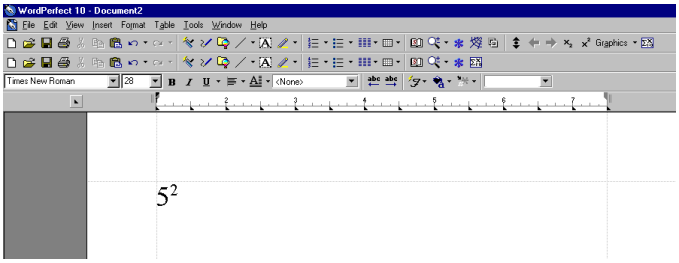
Creating Equations and Expressions - Special Characters and The Equation Editor

There are two ways to create equations and expressions:

1) Some expressions merely use such things as exponents and bases which can be created using superscript and subscript features (remember we customized our toolbars for these at the beginning?)

E.g. To create the expression 5^2, type the 5, click the **x²** in the toolbar, type the 2, then click **x²** again to turn off the superscript.

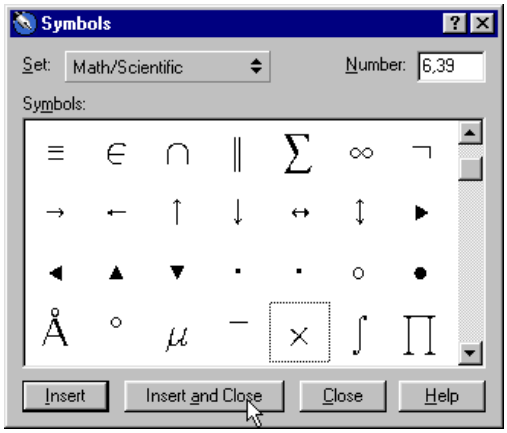




You can also add many special characters not found on the keyboard to the expression by accessing the special character set:

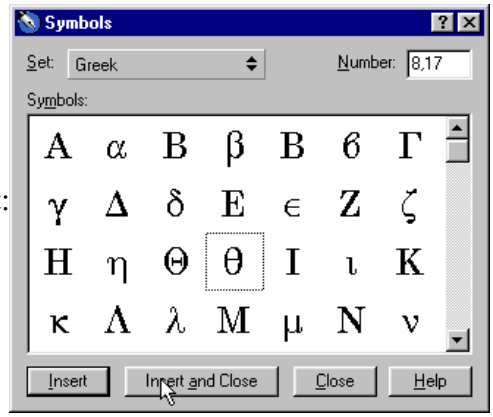
Example: Create the expression $3 \times 5 + \cos\theta$

Type the 3 in the expression. Press CTRL W or click the INSERT menu and select SYMBOL. The special character for multiplication is in the Math/Scientific set as shown.



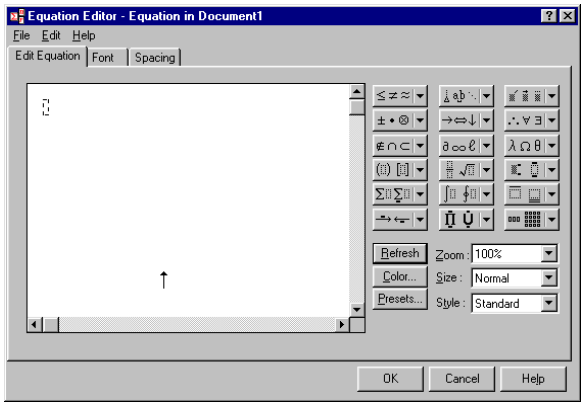
Click the desired symbol first

The Greek letter θ is in - you guessed it - the Greek set:

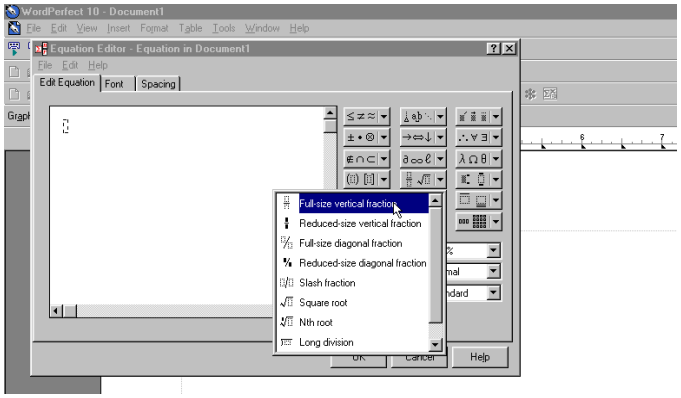


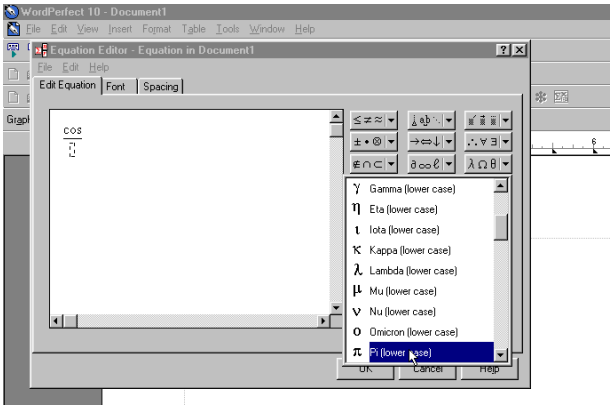
Note: ***You can find some ready made fractions in the*** **Typographic** ***set.***

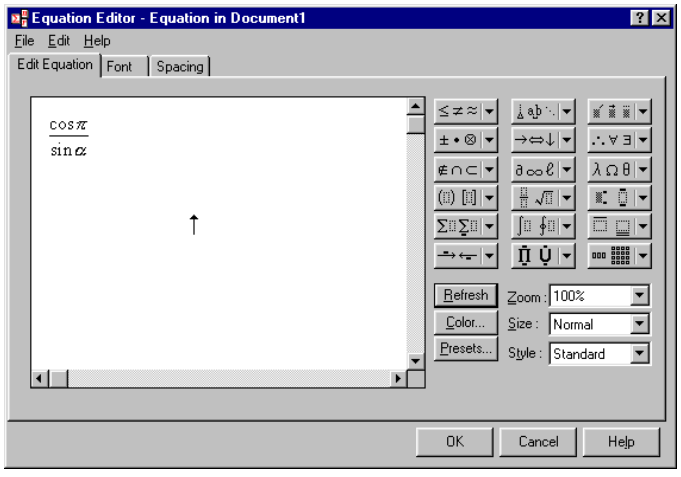
2) **The Equation Editor.** This is a powerful tool that can be used to create virtually any mathematical expression. You can access this under INSERT and selecting EQUATION, or you can click the icon in the toolbar that we placed there earlier. You will get a screen that looks something like this:



You can now create expressions using templates. Note that you generally do not have to worry about spaces in expressions between words and symbols as Equation Editor automatically does this for you (for example, the space between the word "cos" and "π"). In fact, the Space bar and Tab button on your keyboard do not work in Equation Editor (if you want to add a space or tab of your own, press CTRL - SPACEBAR or CTRL-TAB simultaneously.) Try working through this:

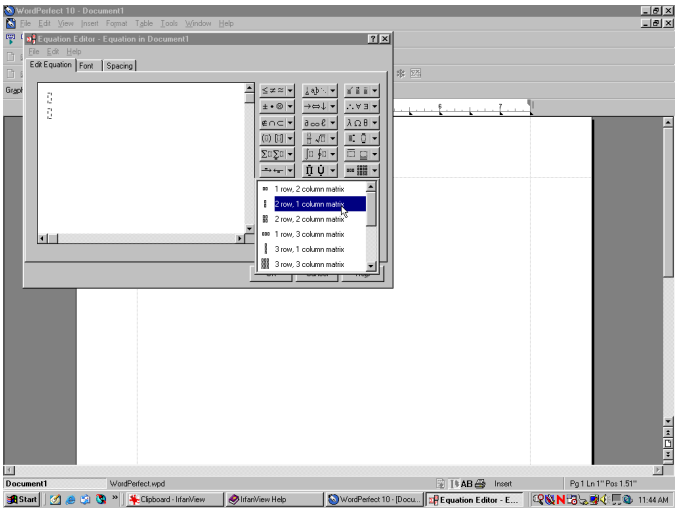


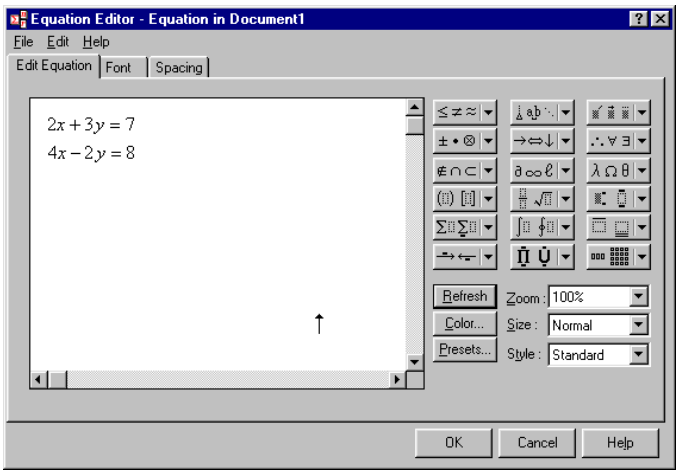




Click OK when finished.

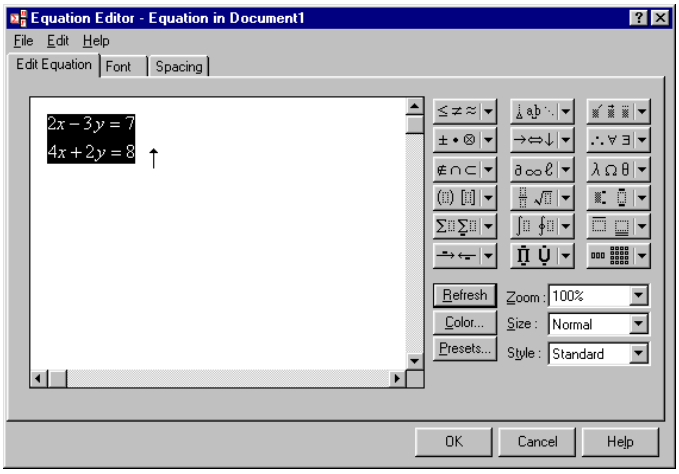
Use the matrix template to create a system of equations:

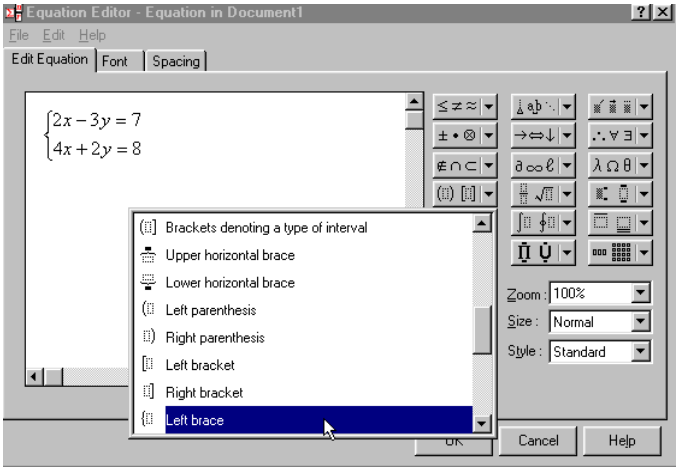




Type the equations in each box

To add a bracket before the system, select the whole system using the mouse, then choose the left brace as shown.





When you have finished your expression, click OK and go back to the main document. Complete the following

line of text. The equation must be anchored as a character and centered on the baseline as shown:

Solve the system: $\begin{cases} 2x - 3y = 7 \\ 4x + 2y = 8 \end{cases}$

Special Notes 1) Equation Editor is a less powerful version of Math Type, which is available at http://www.mathtype.com/en/products/mathtype/ . You can download a fully functional 30 day evaluation version. After this time, it reverts to lite mode which is essentially Equation Editor. The full version of Math Type is about $100 U.S.

2) This site also contains some Tips and Tricks for Equation Editor.

Now that you know some of the basics for working with Graphics, you can now use other software programs to create graphics more easily and then paste them into WordPerfect.