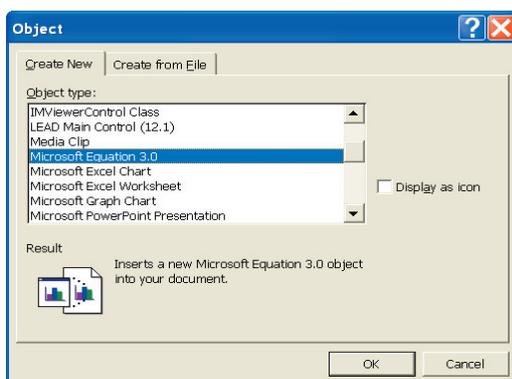


# Equations in Word 2002

A program accessible from **Word 2002**, allows you to write equations, and enter them into a Word Document. This note makes use of two examples in order to introduce you to the use of the equation editor and let you work through the various steps. It is assumed that you are familiar with both Windows XP and Word 2002.

- Select **Object** from the **Insert** menu.
- Highlight the **Microsoft Equation 3.0** option and click on **OK**. The equations work area will appear in a new window and a toolbar will be available.



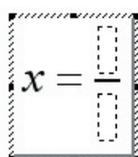
You can move the toolbar around the screen by clicking and dragging on the blue bar at the top. The rectangle of dotted lines on the page is where your equation will appear when you close **Microsoft Equation**. If you click anywhere outside the dotted area you will return to the Word page. Double click the left mouse button on the equation object to return to the editing mode.

## Creating equations: first example

This section will show you how to create the equation:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

- Type **x=** on the keyboard.
- Click and hold the  button on the tool bar. Select the top left box .
- You will be given two slots separated by a bar, in which to insert the text. Move the cursor to either of these by clicking inside them.



- Click inside the top slot, and type **-b** on the keyboard.

- Click and hold the  button, and select the top right  box.
- Click and hold the  again, and this time select the square root option .
- In the slot after the square root sign type **b**.
- Select the  button, and choose this box .
- This allows you to insert superscript. The cursor should be in the high slot; type **2**.
- Click just underneath the **2** so that the text continues on the main line and not on the superscript.
- Type **-4ac** and position the cursor in the slot underneath the bar and type **2a**.
- The size of the equation can be adjusted through the **Size** menu. Highlight the equation and select **Other...** from the **Size** menu.
- Type 30pt in the dialogue box: this will enlarge your equation. Adjust the size back to 12pt.

Once you are sure you have finished, click on the small box at the top left of the equation's window and the equation will be moved to the Word document. The equation will be positioned in the rectangle or where your cursor is on the Word page. By clicking anywhere on the page outside this rectangle you can return to your Word document.

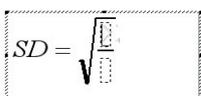
Note: The cursor can be placed at a number of points on the equation. It is important that after each section you position the cursor exactly where you want to continue to develop the equation. This can be difficult and it may be worth experimenting with the various different positions in which the cursor can be placed.

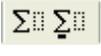
### Creating equations: second example

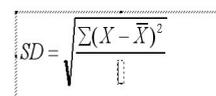
This section will show you how to create the equation: 
$$SD = \sqrt{\frac{\sum(X - \bar{X})^2}{N - 1}}$$

- Select Object... from the Insert Menu and Microsoft Equation 3.0 as before.
- Type **SD=** on the keyboard, then click and hold the  button and select the square root .
- Click and hold the same button and select the fraction box .

You should see something like this:



- Position the cursor on the top slot.
- Click and hold the  button and select , then place the cursor in the top slot and type (X- on the keyboard.
- Click and hold the  button, select the top left button  and type **X**.
- Position the cursor so that the bracket continues on the main line, and does not include the overhead bar.
- Type **)** then click and hold the  button and select the option .
- Type **2** in the superscript position. Your equation should now look like:
- Position the cursor in the bottom slot and type **N-1**.



- Once you are finished close the equations window.

If you need to change the equation after you have moved it to the Word document, double-click on the equation and it will appear again in the equations editor where you can make changes.