What is the Equation Editor?

Equation Editor is a special version of the Math Type equation editor from Design Science that is customized for use with Microsoft applications. Using Equation Editor, you can build complex equations by picking symbols from a toolbar and typing variables and numbers. As you build an equation, Equation Editor automatically adjusts font sizes, spacing and formatting in keeping with mathematical typesetting conventions.

The top row of the Equation Editor toolbar has buttons for inserting more than 150 mathematical symbols. To insert a symbol in an equation, click a button on the top row of the toolbar and then click the specific symbol from the palette that appears under the button.

The bottom row of the Equation Editor toolbar has buttons for inserting templates or frameworks that contain such symbols as fractions, radicals, summations, integrals, products or matrices. The frameworks also include fences or matching pairs of symbols such as brackets and braces. Many templates contain slots – spaces into which you type text and insert symbols.

To Insert an Equation

1. Open a new, blank Word document.
2. Click where you want to insert the equation.
3. Click Insert.
4. Click Object.
5. Click the Create New tab.
6. In the Object type box, scroll down to find and click Microsoft Equation 3.0.
7. Click OK.
8. Build this equation $124 \neq 125$ by selecting symbols from the Equation toolbar and typing variables and numbers.
9. To return to Word, click anywhere in the document outside of the equation.
Using Microsoft Word’s Equation Editor

10. Repeat steps 3-7 above and build this equation: $\sqrt{25} \neq \frac{12}{3}$

11. To return to Word, click anywhere in the document outside of the equation

12. Repeat steps 3-7 above and build this equation: $\overrightarrow{AB} \approx \overleftarrow{CD}$

13. To return to Word, click anywhere in the document outside of the equation

To Edit an Equation

1. Double click the equation you wish to edit.

2. Use options of the Equation toolbar to edit the equation. If you need help, click Equation Editor Help Topics on the Help menu of the Equation toolbar.

3. To return to Word, click anywhere in the document outside of the equation.

If Equation Editor is not Installed

Equation Editor is the recommended tool for creating equations. However, you can create equations using the EQ field if the Equation Editor is not installed.

1. Click Insert.

2. Click Field.

3. In the Categories box on the left, click Equations and Formulas.

4. In the Field names box on the right, click $EQ$.

5. In the box under Field codes and next to the letters $EQ$, you must type the equation instructions you wish for the program to create.

6. The following table lists the equation switches with the task each performs.

All of the switches listed in the table below can be modified. Please refer to the attached handouts for examples.
<table>
<thead>
<tr>
<th>Name of Task</th>
<th>What to type next to EQ</th>
<th>What it does</th>
</tr>
</thead>
<tbody>
<tr>
<td>Array switch</td>
<td>\a()</td>
<td>Draws a two-dimensional array</td>
</tr>
<tr>
<td>Bracket</td>
<td>\b()</td>
<td>Brackets a single element</td>
</tr>
<tr>
<td>Displace</td>
<td>\d()</td>
<td>Moves the next character to the left or right a specified number of points</td>
</tr>
<tr>
<td>Fraction</td>
<td>\f(,)</td>
<td>Creates a fraction</td>
</tr>
<tr>
<td>Integral</td>
<td>\i(,,)</td>
<td>Creates an integral, using the specified symbol or default symbol and three elements</td>
</tr>
<tr>
<td>List</td>
<td>\l()</td>
<td>Groups values in a list which can then be used as a single element</td>
</tr>
<tr>
<td>Overstrike</td>
<td>\o()</td>
<td>Prints each successive element on top of the previous one</td>
</tr>
<tr>
<td>Radical</td>
<td>\r(,)</td>
<td>Draws a radical sign using one or two elements</td>
</tr>
<tr>
<td>Superscript or Subscript</td>
<td>\s()</td>
<td>Positions elements as superscripts or subscripts</td>
</tr>
<tr>
<td>Box</td>
<td>\x()</td>
<td>Draws a border around an element</td>
</tr>
</tbody>
</table>

7. After typing the necessary code, click **OK**.

8. The equation appears in your document.

9. Pressing **Alt + F9** will toggle the equation to editing mode.