

Adding Math Using the Equation Editor

The Equation Editor is available within the HTML Editor. It enables users to insert mathematical and statistical equations into their content in the Brightspace platform. It supports the input of MathML and LaTeX, as well as a graphical editor where you can visually create equations.

There is a variety of options for adding math within the Brightspace system and many places this can be added such as quizzes, news postings, discussions, etc., anywhere where the HTML Editor appears. Knowing the options will help you plan for developing math and statistical equations.

There are 4 popular ways to add math in D2L's products:

- Brightspace's Graphical Editor
- LaTeX
- MathML
- Chemistry equation

Graphical Editor

The Graphical equation option offers 10 tabs of symbols, arrows, Greek letters and numbers, matrices, scripts and layouts, decorations, big operators, calculus, and context for creating math equations.

LaTeX

LaTeX is a typesetting system based on TeX. It provides a text syntax for complex mathematical formulae. Brightspace Learning Environment stores equations entered in LaTeX format as MathML to ensure consistency and accessibility.

MathML

MathML is a standard adopted by the World Wide Web Consortium (W3C). It uses XML to describe mathematical notation by capturing both its structure and content. This enables MathML to support visual display and assistive technology access.

As a standard, Brightspace Learning Environment stores and displays all equations in the MathML format, regardless of the format you use to enter equations. Brightspace Learning Environment uses the MathJax JavaScript engine to display MathML equations.

Go to [MathJax.org](http://www.mathjax.org) (<http://www.mathjax.org>) to learn more about MathJax features.

Chemistry equation











The Chemistry equation option offers specialized chemistry symbols for inorganic chemistry formulas.

Accessing the Equation Editor

In the HTML editor, click the dropdown next to the Epsilon symbol and select a format.



Tabs in the Graphical Equation Editor

Icon	Name	Description
	Chemistry tab	Add specialized chemistry symbols for inorganic chemistry equations Note: This tab only appears when you select the Chemistry equation option
	General tab	<ul style="list-style-type: none"> Add a template for building equations. Add and edit text in the equation using the Cut, Copy, Paste, Undo, Color, and other text editing function
	Symbols tab	Add mathematical symbols to equations
	Arrows tab	Update or add arrows to equations
	Greek and letters tab	Update or add uppercase and lowercase Greek characters to equations
	Matrices tab	Update or add matrices to equations
	Scripts and layout tab	Add scripts or layouts to build equations
	Decorations tab	Add fences such as brackets and vertical bars around text fields
	Big operators tab	Update or add big operators to equations
	Calculus tab	Add a template for building Calculus equations

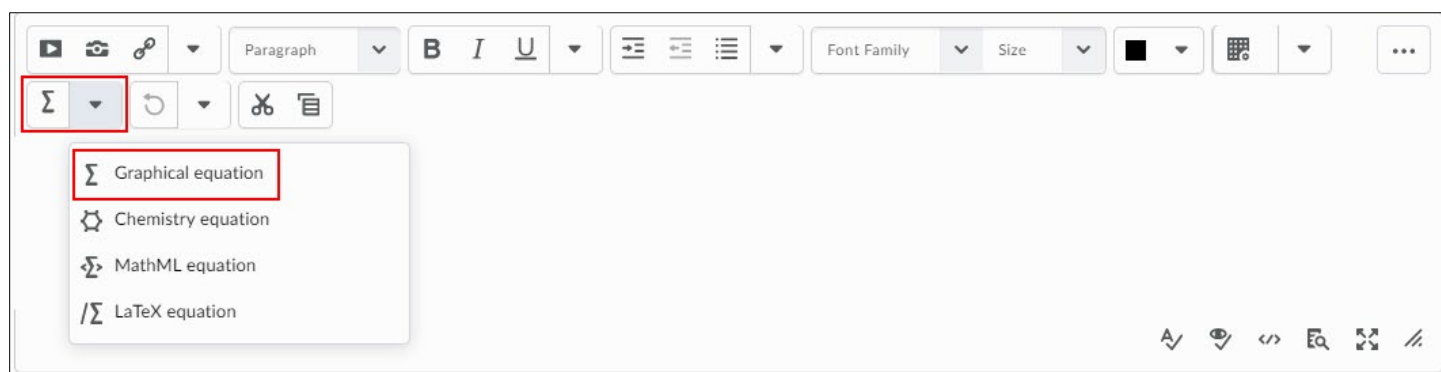
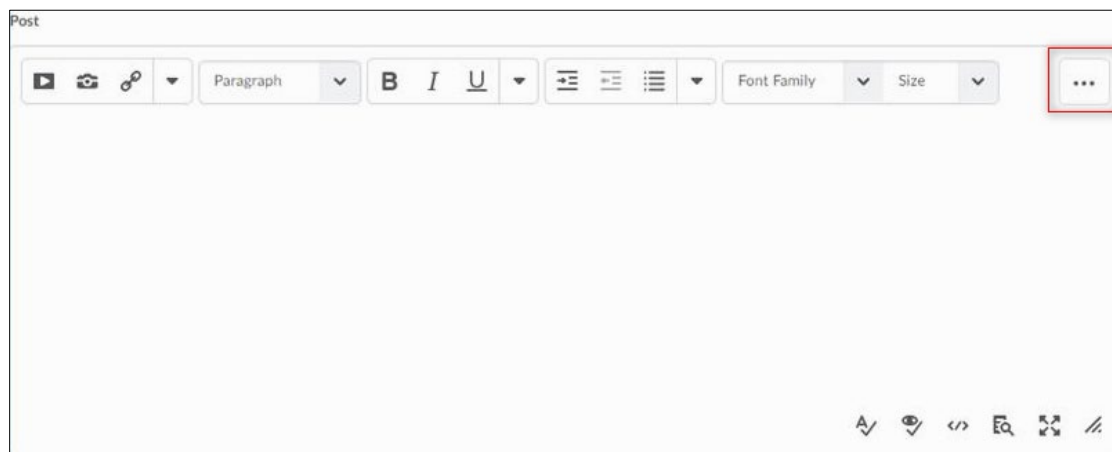
Keyboard shortcuts available in the Graphical Equation Editor

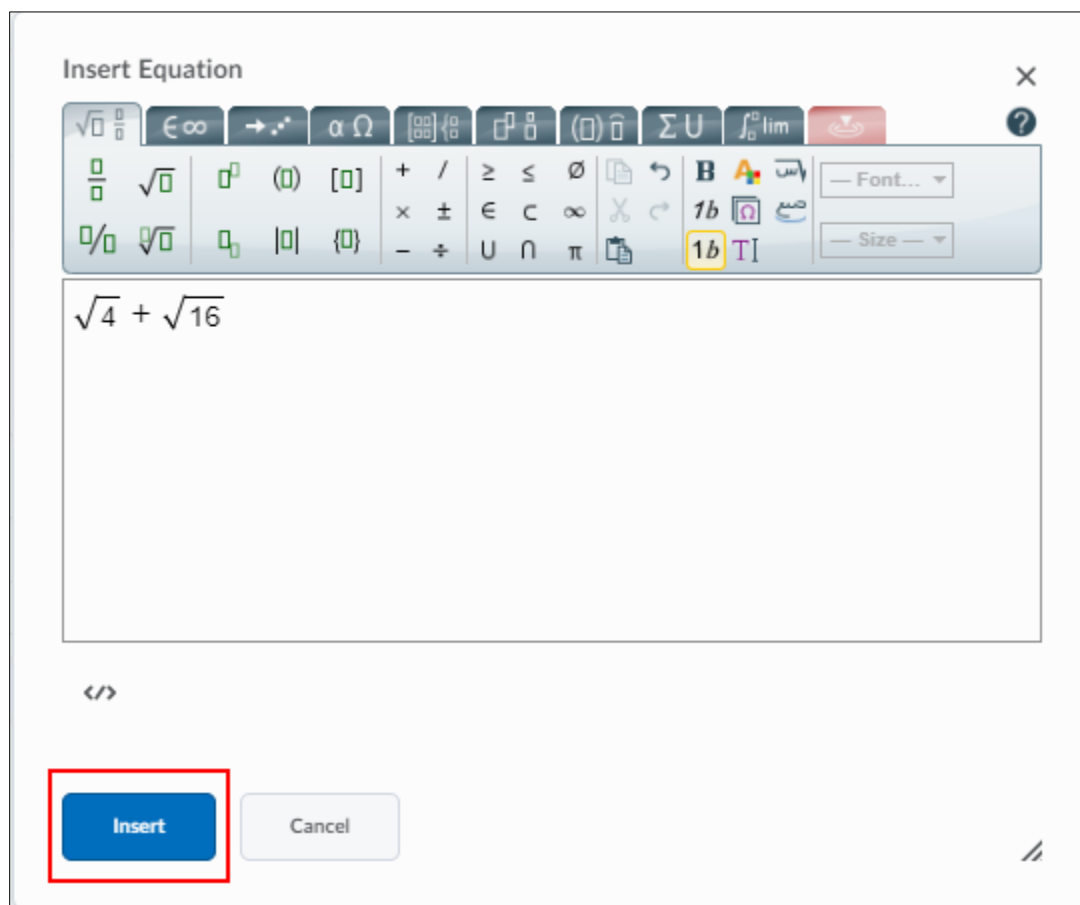
- Use **Ctrl + f** to create a fraction.
- Use **Ctrl + 9** to add round brackets.
- Use **Ctrl + h** to create superscript.
- Use **Ctrl + j** to create subscript.
- Use **Ctrl + z** to undo your last action.
- Use **Ctrl + i** to create an integral.
- Use **Ctrl + >** to enlarge text and **Ctrl + <** to shrink text.

Create an Equation

1. Navigate to the HTML Editor where you want to create an equation.
2. From the **Graphical equation** drop-down list, do one of the following:
 - To insert a graphical equation, select **Graphical equation**.
 - To insert a MathML equation, select **MathML equation**.
 - To insert a LaTeX equation, select **LaTeX equation**.
 - To insert a Chemistry equation, select **Chemistry equation**.
3. In the **Insert Equation** window, enter your equation.
4. Select **Insert**.

Note: You may need to select the Show all components icon to see the Equation Editor icon.





An example of a graphical equation