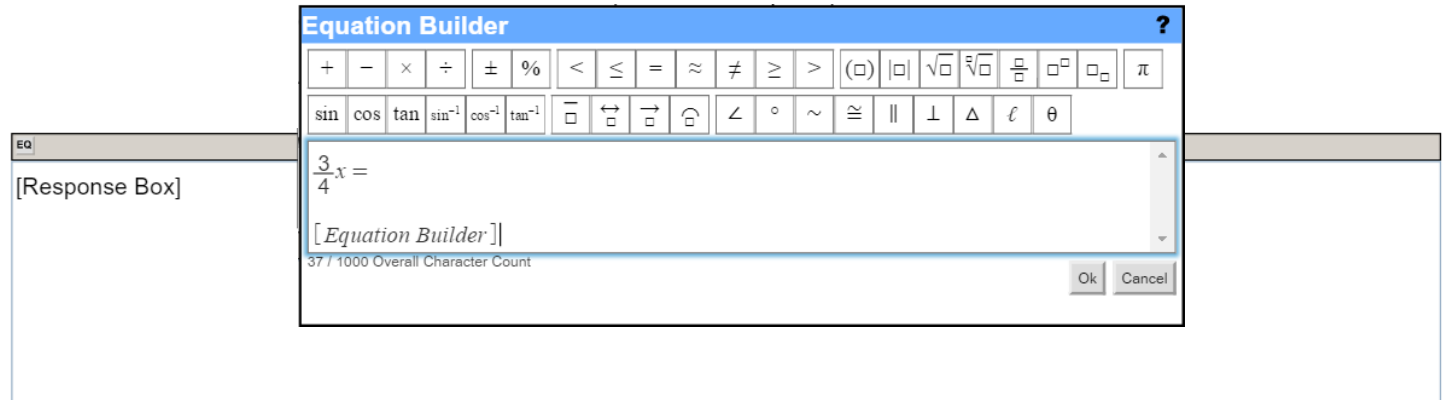


## Introduction

Students taking the Grades 6, 7, and 8 Online LEAP Tests will experience the Equation Builder below. The Online Tools Training (OTT) and practice tests provide opportunities within INSIGHT, the online testing platform, for students to engage with the equation builder prior to the operational assessment. Please see the [Practice Test Quick Start Guide](#) for more Information.






## Using the Keyboard

For constructed-response tasks, students will need to type their answers in response boxes. Each response box has an Equation Builder tool available to assist students in typing mathematical expressions and equations.


Students are not required to use the Equation Builder for any symbols which are available on the keyboard. For example, students may use a slash, forward / or back \, to represent a fraction, a caret ^ to represent exponents, or a pair of pipes | | to represent absolute value. Additionally, symbols like degree ° and perpendicular ⊥ are not available on the keyboard, but students may type the words “degrees” and “perpendicular” as necessary. Other symbols, such as square root  $\sqrt{\quad}$  and pi  $\pi$ , are not available on the keyboard, but may be required in symbol form for expressions and equations.

The Equation Builder does not include all symbols/characters students might need to type into the response box. Students should know how to type a negative sign - and a colon : using the keyboard. The  $\times$  button in the Equation Builder is a multiplication symbol and should not be used as a variable x.

## Using the Equation Builder

- To enter text, click in the **Response Box** and type text using the keyboard.
- Click on the **Equation Builder** button  to open the tool and enter any math symbols, characters, or math format.
- When finished, click on the **OK**  button in the lower-right corner of the Equation Builder tool – the equation will be entered into the response box.
- To cancel what has been entered, click on the **Cancel**  button in the lower-right corner of the Equation Builder tool and you will be returned to the response box.
- To edit an existing equation, double-click on the equation in the Response Box. This will re-open the Equation Builder.

### Example:

To create a fraction, click on the **Fraction**  button.

- Click in the top box to enter a numerator.
- Click in the bottom box to enter a denominator.

### Additional Considerations for Students When Using the Equation Builder

The symbols outlined in red below are not used in middle school math and should be ignored when using the Equation Builder in grades 6, 7, and 8.

Equation Builder																		?		
+	-	×	÷	±	%	<	≤	=	≈	≠	≥	>	(□)	□	√□	∛□	$\frac{\square}{\square}$	□ <sup>□</sup>	□ <sub>□</sub>	π
sin	cos	tan	sin <sup>-1</sup>	cos <sup>-1</sup>	tan <sup>-1</sup>	$\frac{\square}{\square}$	↔	→	⊆	∠	°	~	≅		⊥	Δ	ℓ	θ		