

## Working with Equations

Udacity offers a quick and efficient way to test your math knowledge by checking your derived mathematical calculations!

At the end of each concept, you will be given a quiz. In the quiz we will sometimes compare the equations you have derived with ours. We may also check derived numerical values.

You will write your equation in the editing window, under math.txt . Your equation will be compared with the correct equation, giving you an immediate *correct* or *incorrect* result.

Lets look at an example:

In this case there are two correct equations that are checked:

- $xe+y9=z3\sqrt{x^e + y^9} = z^3xe+y9$
- $=z3$
- $(x+1)*(x-1)=y(x+1) * (x-1) = y(x+1)*(x-1)=y$

A correct answer will be highlighted in green.

math.txt

1

# Edit your math expression below.

2

$\sqrt{x^e + y^9} = z^3$

3

# Edit your second math expression below

4

$(x+1) * (x-1) = y$

5

Equation 1

$$\sqrt{x^e + y^9} = z^3$$

Compare with instructor's solution:

$$\sqrt{x^e + y^9} = z^3$$

Equation 2

$$(x + 1) * (x - 1) = y$$

Compare with instructor's solution:

$$(x + 1) * (x - 1) = y$$

^

MENU

An incorrect answer will be highlighted in red.

math.txt

```
1 # Edit your math expression below.
2 \sqrt{x^e + y^9} = z^2
3 # Edit your second math expression below
4 (x+1) * (x-1) = y
5
```

Equation 1

$$\sqrt{x^e + y^9} = z^2$$

Equation 2

$$(x + 1) * (x - 1) = y$$

Compare with instructor's solution:

$$(x + 1) * (x - 1) = y$$

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Notice that one of the equation we tested was  $x^e + y^9 = z^3 \sqrt{x^e + y^9} = z^3 x^e + y^9$

$= z^3$ , but under math.txt (which is where you will type your equations) we had used  $\sqrt{x^e + y^9} = z^3$ . This expression was written in LaTeX (a language we use as a writing tool for mathematics).

To use our workspace and test your equations, you will also need to type your answers in LaTeX. You will find that it's user friendly and does not need extensive previous knowledge.

- For further examples of how to use LaTeX, you can use this the following two links:
  - [Latex cheatsheet](#)
  - [LaTeX Cookbook](#)

Don't be alarmed by LaTeX. It is not a new programming language you need to learn. We simply need to use it with equations in our workspace. We also provide you with detailed solutions of the quizzes, along with the LaTeX format you will need to use in each quiz.

**Last but not least**, you may find yourself needing to **reset** your data.

Use the **menu** bar at the bottom left of the window and choose **Reset data**.

The screenshot shows a workspace interface with a dark theme. On the left is a sidebar with a file explorer showing 'workspace'. The main area is split: the top part is a code editor with a file named 'math.txt' containing three lines of text:   
1 # Edit your math expression below.  
2  $\sqrt{x^e + y^9} = z^3$   
3 # Edit your second math expression below  
The bottom part of the main area is a terminal window showing 'No Open Terminals' and a 'NEW TERMINAL' button. A white modal dialog is centered on the screen with the following text:   
When having issues with your Workspace, you can refresh your Workspace without resetting your data.  
**REFRESH WORKSPACE**  
-----  
Permanently reset all your files, code, and databases back to the original state.  
**RESET DATA**

and write **Reset data** on the prompt (case sensitive).



## Do you want to reset your data?

Resetting data will wipe all your work and restore the project to the original state.  
This cannot be undone. Please type in "Reset data" to confirm.

**RESET DATA**

At times, when trying to open a workspace, you may see the following picture:



## We are unable to load your Workspace.

Please refresh the page. If the problem persists, then contact support. [Udacity Support](#)

*Workspace Services encountered an error. You have reached the rate limit and must wait 14 seconds  
Mon Apr 02 2018 16:25:38 GMT-0700 (PDT) 11385029179*

If that happens, wait a few seconds and reopen the window.

That's it! you can now test your workspace!