

Lecture 16 - Symbolic Math

* prayer / spiritual thought

* announcements

* unit of the day:

$$1 \text{ m}^3 = 1000 \text{ L}$$

I. Jupyter Notebook

* Jupyter notebook is another way of interacting with python. It is convenient for homework.

I wanted to introduce you to it.

* Open Jupyter with Anaconda. Open files in J.N., not a text editor.
A text editor shows it isn't a simple python file

* Notebook is composed of cells

• code cells - enter code here

• markdown cells - formatted text here

• raw cells - plain text here

↳ Shift + Enter } Evaluates
Ctrl + Enter } the cell.

See Example Notebook

A. Code Cells

B. Markdown Cells

1. Text formatting
2. Paragraphs
3. Headings & Lines
4. Code
5. Links
6. Bulleted Lists
7. Numbered Lists
8. Equations
9. Math Formatting
10. More about Equations

Practice

Problem 1

II. Symbolic Math

* Symbolic math functionality can be found in
the sympy module

See Example Notebook

Practice

Problem 2

- A. Sympy module
- B. Symbolic Variables
- C. Algebra
- D. Algebraic Solver
- E. Calculus