MatDeck tips

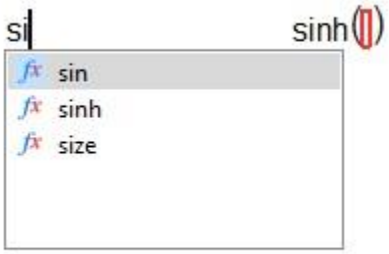
Basic

:=- assignment of variable values; assign value to variable a with code *a := value*

= - displaying variable value; display value stored in the variable a with code a =

$$a:=5 \qquad a=5$$

Alt – continue with writing function name; use Alt to insert multi character commands or to skip auto suggestion and continue with typing; while you type in the canvas auto suggestion will display all functions that contains the inserted combination of characters, to skip it just use Alt and continue with typing;



Ctrl + **U** – make variable unit / make unit variable; the default system state is to show units in math, when you type in a math object it is considered a variable by default, to make it a unit use Ctrl + U combination while cursor is in the math object

$$\mathrm{Ohm} = \mathrm{A}^{-2}\ \mathrm{s}^{-3}\ \mathrm{kg}\ \mathrm{m}^{2} \qquad \mathrm{Ohm} = \mathrm{Ohm}$$

Alt + **/**- create a fraction; $\frac{3}{5}$

Alt + **-** - value or expression to become negative; the negative of existing expression or variable value, when the cursor is in front of the variable or expression use Alt – combination to change the sign of it;

$$a \qquad 5$$
$$-a \qquad -5$$

Ctrl + **M** – enter a superscript mode of typing; O^2

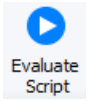
Ctrl + **B** – enter a subscript mode of typing; O_2

Ctrl + **mouse scroll**–zoom in, zoom out;

***** +***** - to create multiplying operators whose sign is not visible; when the cursor is behind the value or variable use * + * combination to create a multiplying operation without a multiplying sign;

Ctrl + **F** – exclude math object (formula) from using mathematical rules; use this key combination when you want to type formulas for demonstration purpose, without applying mathematical rules (there is no operators, variables, fractions, functions, …);

$3+4 = \sin(x) -2i$ $\sin(x)^2 + \cos(x)^2 = 5$

Ctrl + **E** – evaluate script shortcut key; use this key combination after you have created or changed the script code to initiate a calculation of it, this key combination is an alternative for pressing 

icon;

```
fn( )
{
    int i := 0
    while(i < 10 )
    {
        i++
    }
}
```

v+= - assign value to variable; assign value to an already created variable.

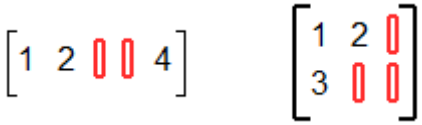
```
a := 0
a = 4
a = 4
```

Vectors and matrix

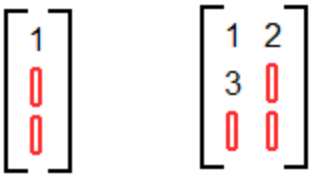
Vector – to create an empty vector with the size 2x1; type command vector (to create empty vector);

Matrix – to create an empty matrix with the size 2x2; type command matrix (to create empty matrix);

Space – while the cursor is in one of the empty fields of column vector/matrix use Space to add one row to the right;



Enter – while cursor is in one of the empty fields of row vector/matrix use Enter to add one column under the selected column;



Ctrl + **Space**–while cursor is in one of the empty fields of column vector/matrix use Ctrl + Space combination to delete the selected row;

Ctrl + **Enter** –while cursor is in one of the empty fields of row vector/matrix use Ctrl + Enter combination to delete the selected column;

[- to create a subscript function to return the element of current inputted vector/matrix in current position; when the cursor is behind the vector/matrix use [character to create a subscript function and enter the position you want to extract the value from;

$$\begin{bmatrix} 1 \\ 2 \end{bmatrix}[1] = 2 \qquad \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}[2] = 3$$

Logical operators

Alt + **=** + **=**– to create a logical operator equal to; when the cursor is behind the value or variable use Alt + = + = combination to create logical equal operation;

a ==[]

< + **=** - to create a logical operator less than or equal to; when the cursor is behind the value or variable use < + = combination to create less than or equal to logical operator;

a <=[]

> + **=** - to create logical operator greater than or equal to; when the cursor is behind the value or variable use < + = combination to create greater than or equal to logical operator;

a >=[]

< + **Space** – to create logical operator less than; when the cursor is behind the value or variable use < + Space combination to create less than logical operator;

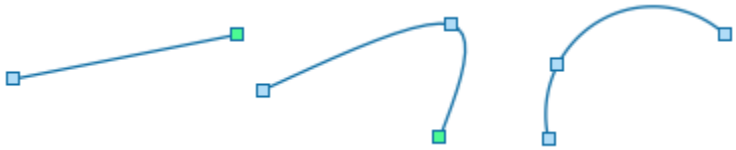
a <[]

> + **Space** – to create logical operator greater than; when the cursor is behind the value or variable use > + Space combination to create greater than logical operator;

a >[]

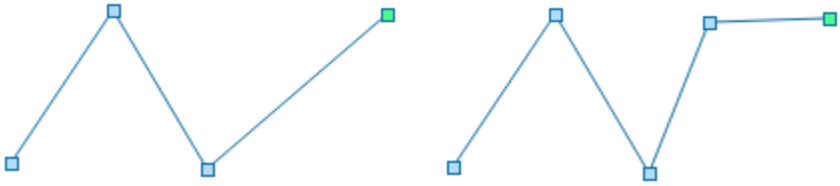
Drawing and shapes

Ctrl + **Left mouse click**– to move the green dots without making an additional line; use this combination while you draw lines (poly-lines and arc) when you want to move the last dot



Double left mouse click – use it when you want to delete one line dot; this options refers only to blue dots (every line dot except the last one), just double click on the dot you want to delete

Ctrl + **Left mouse click**– create two dots from one; this option refer only to blue dots, when you want to create a new one between existing dots



Global Keyboard Shortcut

Keyboard combination	Action	MatDeck icon
Ctrl + N	Create new document	
Ctrl + O	Open document	
Ctrl + S	Save current document	

Ctrl + W	Close current document	
Ctrl + P	Print current document	
Ctrl + A	Select all document items	
Ctrl + Z	Undo	
Ctrl + Y	Redo	
Ctrl + C	Copy	
Ctrl + V	Paste