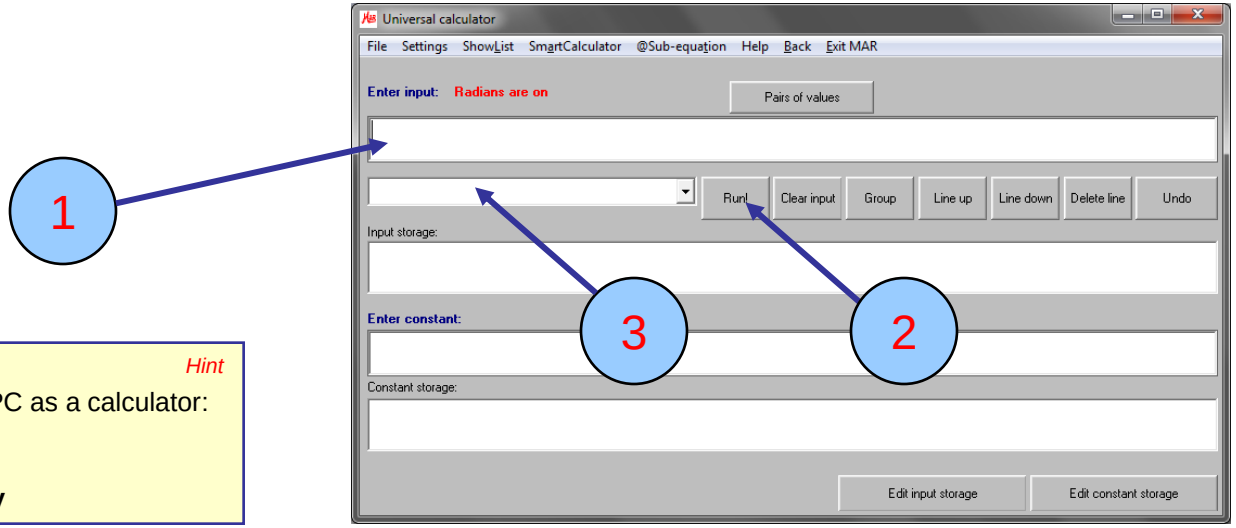
In 5 steps to MAR Cal – First Users

1. Principle approach
2. Basic example
3. Operators
4. Hierarchy and brackets
5. Numeracy with powers and roots

Principle Approach

The principle approach with the universal calculator is:

1. Enter the formula in the **formula input field**
2. Finalise the input with the return key or by clicking on the „**Run!**“ button
3. See the result in the **result field**



Hint

With MasterAllRound you can easily use your PC as a calculator:
- ☞ mathematical expressions are in **plain text**
- ☞ input follows very **simple rules**
- ☞ input as well as output is **kept automatically**

Basic example

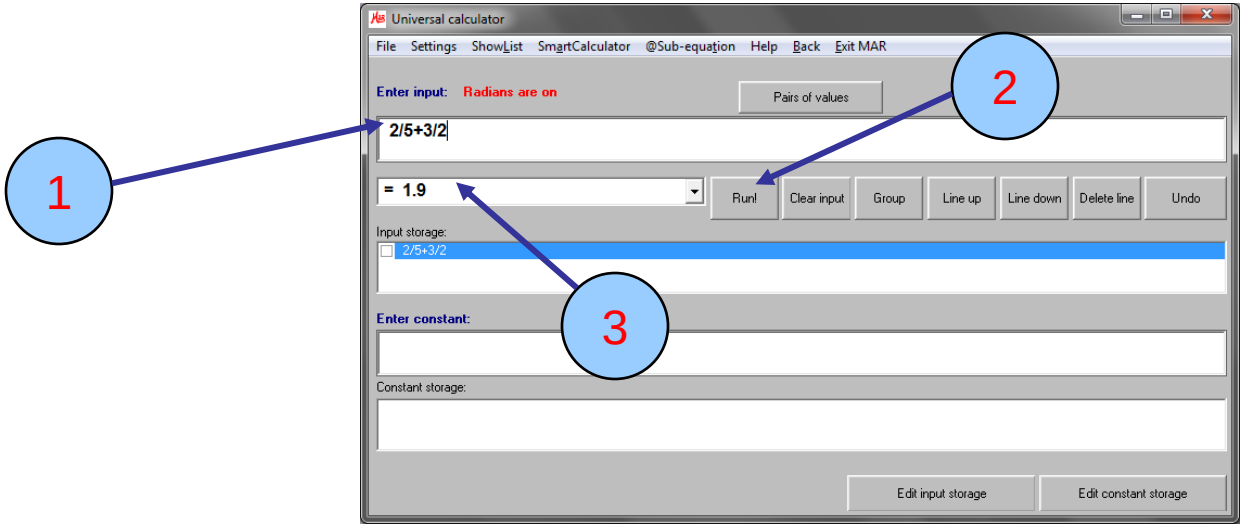
Let's assume that you wish to solve the following arithmetic problem: $\frac{2}{5}+\frac{3}{2}$

Hint

MasterAllRound automatically saves input in the formula storage field.

To bring a stored formula back into the input field, simply click on it.

1. Enter the following input into the formula input field: **2/5+3/2**
2. Finalise your input with the return key or by clicking on the „**Run!**" button
3. You obtain the result: „**1.9**"



Operators

The following **arithmetic operators** are available for basic calculations:

Addition:	+	e.g.:	22 **+** 43	results in:	65
Subtraction:	-	e.g.:	78 **-** 44	results in:	34
Multiplication:	*	e.g.:	2 ***** 3	results in:	6
Division:	/	e.g.:	5 **/** 6	results in:	0.83
Raise to a power:	^	e.g.:	2 **^** 4	results in:	16

Hint

Remember that the **^** key shows a visible result only in combination with a second keystroke.

Hierarchy and brackets

The universal calculator of MasterAllRound utilizes the algebraic **hierarchy**. The order of precedence is :

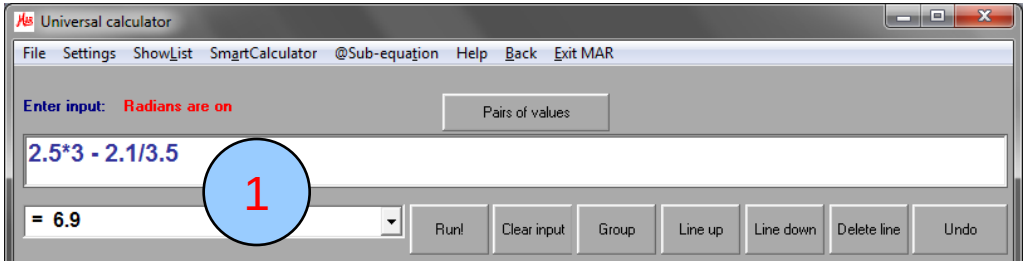
1. Raise to the power, e. g. 2^4
2. Multiplication and division, e. g. $2 \cdot 3$ or $5/6$
3. Addition and substraction, e. g . $22 + 43$ or $78 - 44$

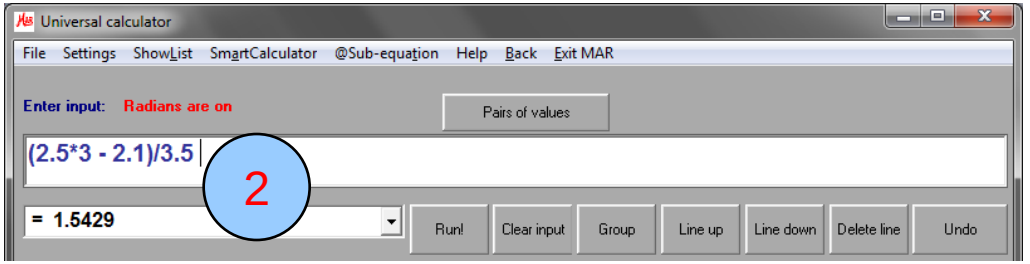
With the help of **brackets** you can **change the order of precedence**, as the term inside the bracket is evaluated first. Hence:

1. "**2.5*3 - 2.1/3.5**" results in "**6.9**"

and

2. "**(2.5*3 - 2.1)/3.5** " results in "**1.5429**"





Hint
Use only round brackets

Numeracy with powers and roots

☞ To raise a number to a power, use the „**^**“ as operator character

☞ To enter a square root, use the abbreviation „**SQR**“ for „**SQ**uare **R**oot“

Example: $\left(\frac{2}{5}\right)^3 + \sqrt{\frac{3}{2}}$

Hint

Remember that the ^ key shows a visible result only in combination with a second keystroke.

Hint

You can use lower or upper case letters.

Hint

Instead of using the standard function “SQR”, you could alternatively use either of the following inputs:
(2/5)^3+(3/2)^0.5 or **(2/5)^3+(3/2)^(1/2)**

1. Enter the following input into the formula input field: **(2/5)^3+SQR(3/2)**
2. Finalise your input with the return key or by clicking on the „**Run!**“ button
3. You obtain: „**1.2887**“