

Two-Argument Math Functions

The HP-11C calculator provides a complete set of two arguments functions and operations. The arguments of the functions or operations are placed in the stack-Y and stack-X registers. Each time one of this functions is applied the following actions are performed:

- The function calculated using the stack-Y and stack-X as arguments.
- The stack is dropped.
- The original value in stack-X is stored in the Last-X.
- The displayed number in stack-X is replaced with the result of the function.
- The Stack is set to lift if a new number is entered.

Following is a description and examples of all of the one-argument functions. For convenience and easy reading, the functions are grouped in different categories.

General Operations

Keys	Description
[+]	Calculates the number in stack-Y plus the number in the stack-X.
[-]	Calculates the number in stack-Y minus the number in the stack-X.
[x]	Calculates the number in stack-Y times the number in the stack-X.
[÷]	Calculates the number in stack-Y divided by the number in the stack-X.
[y ^x]	Calculates the number in stack-Y raised to the power of the number in the stack-X.

Examples (assumes FIX mode with 4 decimals)

Calculation	Keystrokes	Display (stack-X)	Last-X
4 + 5	"4" [ENTER] "5" [+]	9.0000	5.0000
4 - 9	"4" [ENTER] "9" [-]	-5.0000	9.0000
5 x 7	"5" [ENTER] "7" [x]	35.0000	7.0000
7 ÷ 3	"7" [ENTER] "3" [÷]	2.3333	3.0000
2.5 ^{0.6}	"2.5" [ENTER] "0.6" [y ^x]	1.7329	0.6000

Percentage Functions

Keys	Description
[g] [%]	Calculates what percentage is stack-X of stack-Y = $100 \cdot X / Y$
[g] [Δ%]	Calculates stack-Y to stack-X percent-difference = $100 \cdot (X - Y) / Y$

Examples (assumes FIX mode with 4 decimals)

Calculation	Keystrokes	Display (stack-X)	Last-X
25% of 150	“150” [ENTER] “25” [g] [%]	37.5000	25.0000
150 - 25%	“150” [ENTER] “25” [g] [%] [-]	112.5000	37.5000
Growth rate from 62.5 to 78.3	“62.5” [ENTER] “78.3” [g] [Δ%]	25.2800	78.3000

Polar-rectangular Coordinates Conversion Functions

Keys	Description
[f] [→R]	Convert a polar coordinate (stack-X = Radius; stack-Y = Angle) to orthogonal coordinates (X→stack-X, Y→stack-Y).
[g] [→P]	Convert a orthogonal coordinate (stack-X, stack-Y) to polar coordinate (Radius→stack-X, Angle→stack-Y).

Examples (assumes FIX mode with 4 decimals)

Calculation	Keystrokes	Display (stack-X)	Last-X
55.2 ∠ 23° to Rectangular	[g] [DEG] “23” [ENTER] “55.2”	55.2	
	[f] [→R]	50.8119	55.2000
	[X⇌Y]	21.5684	55.2000
(24.5, 33.2) to Polar in rads	[g] [RAD] “33.2” [ENTER] “24.5”	24.5	
	[g] [→P]	41.2612	24.5
	[X⇌Y]	0.9351	24.5

Probability Functions

Keys	Description
[f] [Py,x]	Calculates the permutations of stack-X elements chosen from a total of stack-Y elements; $y! / (Y - X)! \rightarrow$ stack-X.
[g] [Cy,x]	Calculates the combination of stack-X elements chosen from a total of stack-Y elements: $y! / [X! \cdot (Y - X)!] \rightarrow$ stack-X.

Examples (assumes FIX mode with 4 decimals)

Calculation	Keystrokes	Display (stack-X)	Last-X
Permutations of 12 items taking 4 at a time	"12" [ENTER] "4" [f] [Py,x]	11,880.0000	4.0000
Combinations of 12 items taking 4 at a time	"12" [ENTER] "4" [g] [Cy,x]	495.0000	4.0000

As a special feature, the RLM-11CX calculator includes a tool for calculating with Complex Numbers. To show it, press the **OPT key, select the "Scientific" menu and then the "Complex Math" option.**