

Cash Flows Calculations Tool

This menu extends the calculator functionality to perform calculations over the current CFLO data. To show it, touch the “**Cash Flows**” menu button in the main menu.



This menu allows to perform calculations using a series of cash flows of unequal amounts that occur at regular time intervals. The calculations are performed over a previously created “data list”.

CFLO Menu Buttons	
[List ►]	If enabled, shows all previously saved data list available to use in all the calculations.
[Editor]	Shows the “ CFLO Data Editor ” view to create a new Cash Flows list or to edit the current one.
[i%]	Stores the Interest Rate to calculate NPV or, calculates the i% for the current NPV value.
[NPV]	Stores the Net Present Value to calculate i% or, calculates the NPV for the current i% value.
[IRR%]	Calculates the Internal Rate of Return.

CFLO Menu Buttons

[NFV]	Calculates the Net Future Value of the cash flows in the current list using the i% interest rate.
[NUS]	Calculates the Net Uniform Series of payments that produces the same NPV at the i% interest rate.
[TOTAL]	Calculates the total sum of the current “data list”.
[#CF's]	Calculates the Number of cash flows. This is the sum of repetitions not including the initial cash flow.
[PV(-)]	Calculates the Present Value of Negative cash flows only. Used in the MIRR calculation(see the example).
[FV(+)]	Calculates the Future Value of Positive cash flows only. Used in the MIRR calculation (see the example).
[MIRR]	Calculates the Modified Internal Rate of Return using the previously calculated PV(-) and FV(+) .
[SPPV]	Calculates the Single Payment Present Value: $\text{SPPV} (i\% , n) = (1 + i\% / 100)^{-n}$
[SPFV]	Calculates the Single Payment Present Value: $\text{SPPV} (i\% , n) = (1 + i\% / 100)^{-n}$
[USPV]	Calculates the Uniform Series Present Value: $\text{SPPV} (i\% , n) = [1 - \text{SPPV} (i\% , n)] / (i\% / 100)$
[USFV]	Calculates the Uniform Series Future Value: $\text{SPPV} (i\% , n) = [\text{SPFV} (i\% , n) - 1] / (i\% / 100)$

This view adds a convenient way to create, visualize and edit a list of values with repetitions. To show it, touch the “**OPT**” key select the “**Cash Flows**” menu and touch the “**Editor**” button.

The editor has three areas: the data listing, the keypad to enter numbers and the actions buttons.

Data Listing:

- Shows the current content of the list.
- Touch a “Value” or “#T” item in the list to select it for editing. The row
- Use the Keypad to to enter numbers in the selected cell.

Keypad:

- The keyboard contains the common 15 keys for number entry including the change sign, exponent and backspace.
- A number in edition is actually entered in the list when the **[INPUT]** key is pressed

Action Buttons:

[Add]	Creates a new data row at the end of the list.
[Insert]	Inserts a new empty CFj, Nj data above the current line.
[Delete]	Deletes the current CFj, Nj data and shift up the list.
[Clear]	Clears the current CFj, Nj data to “0.0” & “1” respectively.
[Action ►]	Shows a list of actions that affects the whole list: “ Load ‘CF’ List ”: Load a previous saved list into the editor. “ Save ‘CF’ List ”: Name and Save the list for further use. “ Clear ‘CF’ List ”: Clear the list.
[Done]	Ask to discard all changes or save the list to the calculator. After either options, close the editor.

Example: Create the following cash flows list in the editor and calculate:

- 1.- Net Present value at 5% of interest.
- 2.- The rate necessary to obtain a Net Present value of 1000.
- 3.- The Internal rate of return (IRR%).
- 4.- Calculate the Net Uniform Series (NUS) at 9% of interest.
- 5.- Calculate the Net Future Value at 5% of interest.
- 6.- Calculate the Cash Flows average.
- 7.- Calculate the Modified Rate of Return (MIRR) using a safe rate of 8% per period and a reinvestment (risk) rate of 13%.
- 8.- Calculate SPPV, SPFV, USPV and USFV at 9.0%

Year	Cash Flow	Year	Cash Flow
0	-\$79,000	6	\$9,100
1	\$14,000	7	\$9,000
2	\$11,000	8	\$9,000
3	\$10,000	9	\$4,500
4	\$10,000	10	\$100,000
5	\$10,000		

Solution: Touch “**OPT**” key and the “**Cash Flows**” menu button.

Keys	Comment
[Editor]	Show the current CFLO data values.
[Action▶] [Clear ‘CF’ List]	Initialize the list for data entry.
[Nj?:OFF]	Set to skip repetitions (Nj) entry.
79000 [+/-] [INPUT]	Enters the initial cash flow (CF ₀).

Keys	Comment
14000 [INPUT]	Enters the CF#1.
11000 [INPUT]	Enters the CF#2.
[Nj?:ON]	Set to enter repetitions (Nj).
10000 [INPUT] 3 [INPUT]	Enters the CF#3 and Nj = 3.
9100 [INPUT] [INPUT]	Enters the CF#4 and maintain Nj = 1.
9000 [INPUT] 2 [INPUT]	Enters the CF#5 and Nj = 2.
[Nj?:OFF]	Set to skip repetitions (Nj) entry.
4500 [INPUT]	Enters the CF#6.
100000 [INPUT]	Enters the CFj #7.
[Done] [Save]	Save the list to the calculator.
"5" [r%] [NPV]	1) NPV(5%) = 52,581.63
"1000" [NPV] [r%]	2) r%(NPV = 1000) => r% = 13.48%
[IRR]	3) Internal Rate of Return = 13.72%
"9" [r%] [NUS]	4) NUS(9%) = 3,675.34
"5" [r%] [NFV]	5) NFV(5%) = 85,649.94
[TOT] [÷] [#CF's] [=]	6) Cash Flows Mean = 9,781.82
8 [PV(-)] 13 [FV(+)] [MIRR]	7) Modified Rate of return = 13.43%
"9" [r%] [SPPV] [SPFV] [USPV] [USFV]	8) Enter the interest rate SPPV(9%) = 0.4224 SPFV(9%) = 2.3674 USPV(9%) = 6.4177 USFV(9%) = 15.1929