

Using the C4.calc calculator for financial calculations

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This is a brief guide to using the C4.calc financial calculator on your Palm OS PDA. You can download the C4 calculator at <http://www.c4calc.com>. This sheet does not replace your instruction booklet, nor does it replace actually practicing with the calculator. In the materials below, **BOLD FACE** indicates that you press screen button with that label. # below indicates that you enter a number. To exit a screen to the one "above" it, press the x in the upper right corner.

Setting up your calculator. To set the number of digits after the decimal point, press the menu key on your PDA, go to **Options**, and then select preferences. Select the number of decimal places after the decimal point.

Financial calculations. You should use the following sign convention when you work on financial calculations:

- Treat cash flows you are receiving as positive numbers.
- Treat cash flows you are paying out as negative numbers.

For the calculations below, press the **TVM** key on your main menu. At the bottom of the screen, you will find **Mode**. For annuities at the end of period (ordinary annuities), it should be set **End**. For annuities at the start of period (annuities due), it should be set to **Begin**. You can set the number of compounding periods immediately below the **Begin/End** menu. (Very often, this should be 1 for a first finance class). In each of these calculations, remember the sign convention! If you have an error, either that or omitted data is the most likely cause.

To calculate	First clear	Next enter	Next enter	Next enter	Next enter	Push for result
Future value	CLR	# N	# I%YR	# PMT (if any). Annuity payments	# PV (if any). Single payments now	FV
Present value	CLR	# N	# I%YR	# PMT (if any). Annuity payments	# FV (if any). Single payments at time N	PV
Interest rate	CLR	# N	# PMT (if any). Annuity payments	# PV (if any). Single payments now	# FV (if any). Single payments at time N	I%YR
Annuity payment	CLR	# N	# I%YR	# PV (if any). Single payments now	# FV (if any). Single payments at time N	PMT

To amortize a loan. Do the steps for annuity payment as shown above. Then press the **Amortization Table** button. Each period is listed. To get the next set of periods, press the arrow in the lower right hand corner of the screen. To get the remaining balance at any period, press the "hash" marks to the right of "Principal" in the upper right hand corner of the screen.

To display the interest and principal for an interval (say periods 1 through 10 of a loan), first press the ←CLR button at the bottom of the screen, and then enter the first period of the interval, a space, and then the second period of the interval (for example, 1 10). Then press the summation sign (Σ).

To calculate IRR and NPV. For the calculations below, go to the initial C4.Calc screen and enter the **CFLO** menu.

- Clear previous data by pressing the "piece of paper" icon on the menu bar. Enter a name for your new set of cash flows, and press **OK**.
- To enter a flow, put it under the **Amount** column. If the cash flow repeats, put in the number of repeats under the **Times** column.
- To enter a new cash flow, press the left most icon on the **I%** line and follow the steps above.
- To insert a cash flow, click on the line below where you want to want the new line, press the right most icon on the **I%** line and follow the steps above
- To delete a cash flow, click on the line you want to delete and press the center icon on the **I%** line.
- When you have entered the final cash flow
 - If you are calculating an NPV or an NFV, clear the interest rate by backspacing over it a couple of times and enter the interest rate # **I%** followed by **NPV** or **NFV**, depending on which you want to calculate.
 - If you are calculating an IRR, enter **IRR**. You will be asked for a "guess" for the upper and lower bounds of the IRR. Entering a good guess will save calculation time. Also, if there are multiple IRR's for a problem, you can ferret them out with a good guess.