TI-Nspire™ Handheld Script

Using the Finance Solver (Tutorial E5)

http://www.atomiclearning.com/k12/en/movie/33168/play_window?type=Tutorial&sid=1670

[00:00:00.00]
You can use the Finance Solver in the Calculator application to solve standard Time-Value-Money, or TVM, calculations. In this

[00:00:10.00]
example, I need to solve for a present value. I know I need to have $50,000 in 4 years, and I want to open a savings account

[00:00:19.00]
today. The savings account has an 8% interest rate compounded monthly. I want to know how much I need to deposit into the account

[00:00:28.00]
today to have that $50,000 after 4 years. First, let's insert a new calculator page by pressing the Home key and selecting Calculator.

[00:00:40.00]
To make menu selections, you can either press the corresponding number on the keypad, or use the NavPad and the selection button.

[00:00:48.00]
To open the Finance Solver, I'll press the Menu key and then choose Calculations, followed by Finance Solver. Now I just need to

[00:01:00.00]
enter my variables in. N is the total number of periods. That interest is compounded monthly over 4 years, so that's 4 times

[00:01:11.00]
12 months a year, for a total of 48 periods. I'll type 48, and then press the Tab key to move to the next field. I is the interest

[00:01:24.00]
in percent. My interest rate is 8%, so I'll type 8, and then press Tab. PV is the present value, which is what I want to know, so

[00:01:35.00]
I'll skip over that for now by pressing Tab again. Pmt is payments. I'm not paying anything out of the savings account for 4 years.

[00:01:45.00]
So I'll make sure that it says 0 and press Tab again. FV is future value. After 4 years, I want to have $50,000, so I'll type 50,000,

[00:02:01.00]
and then press the Tab key. PpY is the number of payments per year, which in this case is once per month for a total of 12, so

[00:02:12.00]
I'll enter 12, and press the Tab key. CpY is the compounding periods per year. In this case, it's the same as the number of payments

[00:02:24.00]
per year, and you can see that the number I entered into PpY carries over, so I'll just press the Tab key again. The last field is

[00:02:33.00]
the annuity payment method. Unless otherwise specified, the interest is typically compounded at the end of the term, so we'll leave

[00:02:41.00]
it set to the default and press the Tab key. Now that we've entered all our variables, I'll press the Tab key twice to highlight the

[00:02:50.00]
Present Value, or PV variable, and then press the Enter key to evaluate it. I can see that I will need to deposit approximately

[00:03:00.00]
$36,346.03 today in order to have $50,000 in four years. It's important to note that all of these values are stored as variables. If I

[00:03:14.00]
need to use the PV variable in another calculation in the Calculator, for example, I can close this box by pressing "Esc," then press

[00:03:24.00]
the Var button, and choose tvm.pv using the NavPad and Click key. Now, if I press Enter, you can see that the value has been stored

[00:03:37.00]
in that variable.

[00:03:40.00]