

## Using the Finance Solver (Tutorial E5)

[http://www.atomiclearning.com/k12/en/movie/85867/play\\_window?type=Tutorial&sid=2410](http://www.atomiclearning.com/k12/en/movie/85867/play_window?type=Tutorial&sid=2410)

[00:00:00.00]

You can use the Finance Solver in the Calculator application to solve standard Time-Value-Money, or TVM, calculations.

[00:00:10.00]

In this 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

[00:00:20.00]

a savings account today. The savings account has an 8% interest rate compounded monthly. I want to know how much I need

[00:00:29.00]

to deposit into the account today to have that 50,000 after 4 years. First, let's insert a new calculator page by pressing

[00:00:39.00]

the Home key and selecting Calculator. To make menu selections, you can use the Touchpad and the Click key. To open the

[00:00:50.00]

Finance Solver, I'll press the Menu key and then choose Finance followed by Finance Solver. Now I just need to

[00:01:01.00]

enter my variables in. N is the total number of periods that interest is compounded monthly over 4 years, so that's

[00:01:10.00]

4 times 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

[00:01:22.00]

field. I is the interest in percent. My interest rate is 8%, so I'll type 8, and then press Tab. PV is the present

[00:01:36.00]

value, which is what I want to know, so I'll skip over that for now by pressing Tab again. Pmt is payments. I'm

[00:01:46.00]

not paying anything out of the savings account for 4 years.  
So I'll make sure that this says 0 and press Tab again.

[00:01:55.00]

FV is future value. After 4 years, I want to have \$50,000,  
so I'll type 50,000, and then press the Tab key. PpY is

[00:02:11.00]

the number of payments per year, which in this case is  
once per month for a total of 12, so I'll enter 12, and

[00:02:20.00]

press the Tab key. CpY is the compounding periods per year.  
In this case, it's the same as the number of payments per

[00:02:30.00]

year, and you can see that the number I entered into PpY  
carries over, so I'll just press the Tab key again. The

[00:02:40.00]

last field is the annuity payment method. Unless otherwise  
specified, the interest is typically compounded at the

[00:02:47.00]

end of the term, so we'll leave it set to the default and  
press the Tab key. Now that we've entered all our variables,

[00:02:56.00]

I'll press the Tab key twice to highlight the Present Value,  
or PV variable, and then press the Enter key to evaluate

[00:03:05.00]

it. I can see that I will need to deposit approximately  
\$36,346.03 today in order to have \$50,000 in four years.

[00:03:18.00]

It's important to note that all of these values are stored  
as variables. If I need to use the PV variable in another

[00:03:28.00]

calculation in the Calculator, for example, I can close  
this box by pressing "Esc," then press the Var key, and



# TI-Nspire™ Handheld Script

[00:03:38.00]

choose tvn.pv using the Touchpad and Click key. Now, if I press Enter, you can see that the value has been stored

[00:03:50.00]

in that variable.

[00:03:54.00]