The Finance application is preloaded on the TI-89 Titanium but must be loaded onto the TI-89. You can find more information about this at [http://online.ohlone.edu/math/joconnell/ti/tiapps.html](http://online.ohlone.edu/math/joconnell/ti/tiapps.html). You get to the TVM solver by hitting the [APPS] key and selecting *FINANCE*. You will see a screen that looks as follows but there may be different numbers.

For our purposes, we will always set P/Y and C/Y to the same thing, the number of compoundings per year. Also all payments are made at the end of the compounding period, so END should always be highlighted.

### Compound Interest

**Example 1:** If $100 is deposited into an account that earns 5% interest compounded monthly, then how much will be in the account after 3 years?

**Solution:** Put the following into the calculator. Please note that for the percentage we put in 5 and not .05.

The PV was a cash outlay. Cash outlays always go into the calculator as a negative number. The FV is left blank since that is the question that is being asked. As always, make sure that END is highlighted and move the cursor to FV= and hit SOLVE ([F2])

The value of 116.1472231 gets filled in for FV, so the answer is $116.15.

**Example 2:** If $100 is deposited into an account that earns 5% interest compounded monthly, then how long will it take for the account to have $150?

**Solution:** Here we are given everything except N, the number of compoundings.

Since the FV is not a cash outlay we put the value in as a positive number. Now solve for N and we get N = 97.5.

### Future Value

**Example 3:** What is the value of an ordinary annuity at the end of 15 years if $100 is deposited each month into an account earning 5% compounded monthly.

**Solution:**

PV is the value of the account at the beginning which is 0. PMT is a cash outlay so it goes in as –100. Solve, and FV = $26728.89.

### Present Value

**Example 4:** You wish to set up an annuity that pays $350 per month for 5 years. How much money must be deposited into an account that pays 6% compounded monthly in order to establish the annuity?

**Solution:**

FV should be 0 since you want there to be no money in the account after the 5 years. Solve and PV = $18103.95