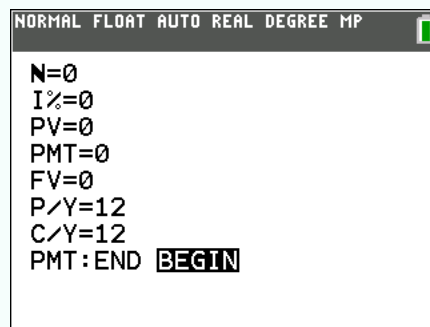


1.4 Compound interests

The very useful **TVM solver** can be used for various compound interest problems. We will first present you the solver, and then do an example.

1.4.1 Presentation of TVM Solver

To access **TVM Solver**, press   , **Finance...** and **TVM Solver...**:



N is the total Number of compounding periods (years \times compounding periods per year).

I% is the Interest rate (in percentage, so entering 5 means “5%”).

PV is the Present Value (the value at the start of the loan).

PMT is the PayMenT at each period.

FV is the Final Value (the value at the end).

P/Y is the Payments per Year.

C/Y is the Compounding periods per Year.


PMT is to set PayMenTs due at **BEGIN**ing or **END** of each period.

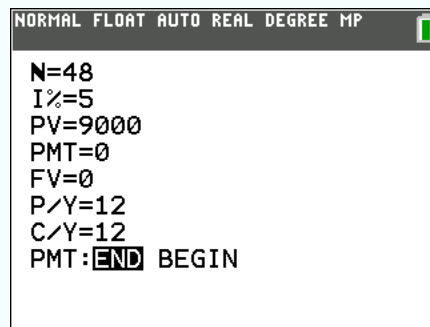


Enter cash inflows as positive numbers and cash outflows as negative numbers

1.4.2 Example of computation



You have found a car you would like to buy. You can afford payments of 250\$ at the end of each month for four years. The car costs 9,000\$. Your bank offers an interest rate of 5%, compounded monthly. What will your payments be? Can you afford it?

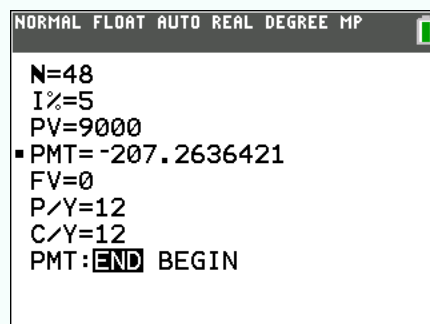
- ① Press  , **Finance...**, **TVM Solver...**, and fill the app the following way:



PV is positive because the car counts as cash inflow

S

- ② Select the value that you want to know (here: **PMT**), and press   . The following should be displayed:



The “■” on the left indicates the value solved

Thus, you **can** afford the car since you would have to pay more or less 207.25\$ (it is displayed as a negative number since it is an outflow of cash) per month, which is less than 250\$!