

SATPREP

Calculation of Annuity and Using Finance Solver of TI-nspire

Interest rates and the frequency of the payments will greatly affect the amount of money earned / repaid.

Process to open Finance solver window

Calculator -Menu - Finance - Finance solver

N = No of total compounding periods

I% = Rate of Interest (annually)

PV = Present Value (0 if unknown)

Pmt = Payment

FV = Future value (0 if unknown)

PpY = Payments per year

CpY = Compounding periods per year

PmtAt = When is the payment made (leave as END)

Note: PpY and CpY must always be the same

In three years time, Lajos' s friends want him join them on a back-packing trip across Europe. The trip will cost about \$ 4500. The best investment plan he could find offers her 4% per year, compounded quarterly? How much money does he need to invest now to be able to pay for her trip in three years time ?

$$N = 12$$

$$I\% = 4$$

$$PV = ? \text{ 3993.52}$$

$$Pmt = 0$$

$$FV = 4500$$

$$PpY = 4$$

$$CpY = 4$$

$$PmtAt = \text{End}$$

What annual interest rate was charges if an \$ 800 credit card bill grew to \$920.99 in 6 months and interest was compounded monthly?

$$N = 6$$

$$I\% = ? \text{ 28.5}$$

$$PV = \$800$$

$$Pmt = 0$$

$$FV = -920.99$$

$$PpY = 12$$

$$CpY = 12$$

$$Pmt At = \text{End}$$

Istvan makes deposits of \$300 half yearly into an account that pay 4% per annum . How much money will be in his account after 5 years?

$$N = 10$$

$$I \% = 4$$

$$PV = 0$$

$$Pmt = 300$$

$$FV = ? \text{ 3284.92}$$

$$PpY = 2$$

$$CpY = 2$$

$$Pmt \text{ At} = \text{End}$$

John has purchased a bike for \$ 1500. He is making monthly payments to the store for 2 years. The store charges 11% per year interest compounded monthly. How much is each monthly payment.

$$N = 24$$

$$I \% = 11$$

$$PV = 1500$$

$$Pmt = ? \text{ 69.91}$$

$$FV = 0$$

$$PpY = 12$$

$$CpY = 12$$

$$Pmt \text{ At} = \text{End}$$

