

When using the TI-83 Plus or TI-84 Plus calculators you access **Finance** by pressing the APPS key.

Loans & Mortgages

A loan is a contract that defines the terms for repayment of a sum of money lent at interest. A mortgage confers an interest in a property as security for repayment of a loan.

Example 1:

What are the monthly payments to finance a \$12,000 car at 13% interest for 5 years?

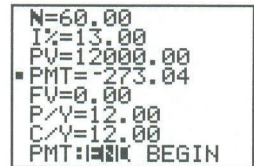
1. Press **2nd** [FINANCE] (5A)† . Choose **1:TVM Solver** from the CALC menu.
2. Enter N = 60, I% = 13, PV = 12000, FV = 0, P/Y = 12 and C/Y = 12.

Note that N is 60 because there are 12 payments per year for five years. PMT is entered as a positive number because the \$12,000 is received from the finance company.

3. Press **ALPHA** [SOLVE] (10E). (Figure 1)

The payment, \$273.04, is negative because that is the amount paid to the finance company each month.

(Figure 1)



Calculator Housekeeping Detail

When the TVM functions are used, a number of financial variables are set and available for use in other financial calculations.

$\Sigma\text{Int}(A,B)$ calculates the total interest from period A through period B. $\Sigma\text{Int}(1,12)$ calculates the interest for the months 1 through 12.

$\Sigma\text{Int}(2,2)$ would be the interest for the second period.

Other functions which operate in a similar manner include $\Sigma\text{Prn}(A,B)$ and **bal(X)**. The command **bal(X)** gives the balance at period X.

Example 1 indicates that \$273.04 must be paid monthly. An interesting question considers how much interest will be paid on the loan for the car. Use the $\Sigma\text{Int}(1,60)$ command.

1. From the **TVM Solver** screen, press **2nd** [QUIT] (2B) to go to the Home Screen.
2. Press **2nd** [FINANCE] (5A) and choose **A: $\Sigma\text{Int}()$** from the CALC menu. (Figure 2)

(Figure 2)



† Refer to the section on Key Arrangement in Chapter 1 for an explanation of the key locator codes used in this manual.

