

## Chapter 7/ Example 10

# Using the finance app

Jack receives a loan of \$5000 from a bank at an annual interest rate of 7.5% compounded monthly. It is to be repaid in monthly instalments within a 5-year period.

- a** How much should the monthly instalments be in order to repay the loan on time?  
**b** Jack starts repaying the \$5000 loan with the monthly instalments calculated in part **a**.  
 How much will he still owe after the 10th instalment?

Press **[APPS]** 1:Finance...

Press 1:TVM Solver...

N=0  
 I%=0  
 PV=0  
 PMT=0  
 FV=0  
 P/Y=1  
 C/Y=1  
 PMT:**[END]** BEGIN

N = 60  
 I% = 7.5  
 PV = -5000  
 PMT = 0  
 FV = 0  
 P/Y = 12  
 C/Y = 12  
 PMT:END

N=60  
 I%=7.5  
 PV=-5000  
 PMT=0  
 FV=0  
 P/Y=12  
 C/Y=12  
 PMT:**[END]** BEGIN

Move the cursor back to PMT and press **[ALPHA]** **[ENTER]** **SOLVE** to get the answer.

The GDC gives the amount of the monthly instalments (PMT) to be \$100.19.

N=60  
 I%=7.5  
 PV=-5000  
 PMT=100.189743  
 FV=0  
 P/Y=12  
 C/Y=12  
 PMT:**[END]** BEGIN

N = 10  
 I% = 7.5  
 PV = -5000  
 PMT = 100.19  
 FV = 0  
 P/Y = 12  
 C/Y = 12  
 PMT:END

N=10  
 I%=7.5  
 PV=-5000  
 PMT=100.19  
 FV=0  
 P/Y=12  
 C/Y=12  
 PMT:**[END]** BEGIN

## Chapter 7/ **Example 10**

# Using the finance app

Move the cursor back to FV and press **[ALPHA]** **[ENTER]** **SOLVE** to get the answer.

The GDC gives the amount of amount of principal that remains to be repaid to be \$4290.88.

```
N=10
I%=7.5
PV=-5000
PMT=100.19
▪ FV=4290.883908
P/Y=12
C/Y=12
PMT:[END] BEGIN
```