

Classpad Help Series sponsored by Casio Education Australia		www.casioed.net.au	
923	Loan Repayments in Financial	Author	Charlie Watson
		Date	14 March 2011
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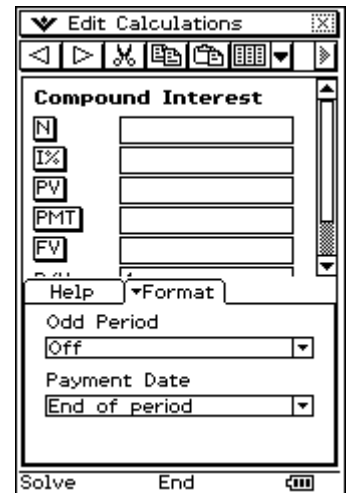
Start in the Financial application.

Tap **Edit, Clear All**.

Tap **Compound Interest**.

Tap the **Format** tab.

Check the settings are as shown. If not, adjust.



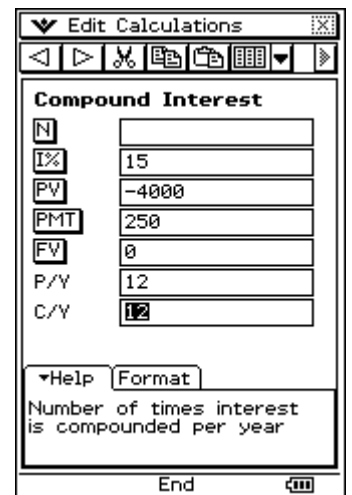
Tap the **Help** tab.

Suppose a student wishes to purchase a car priced at \$4000. The student has no savings but due to a part-time job can afford to repay \$250 every month. A bank offers the student a loan of \$4000 at an annual interest rate of 15% compounded monthly.

How many complete months will it take the student to repay the loan?

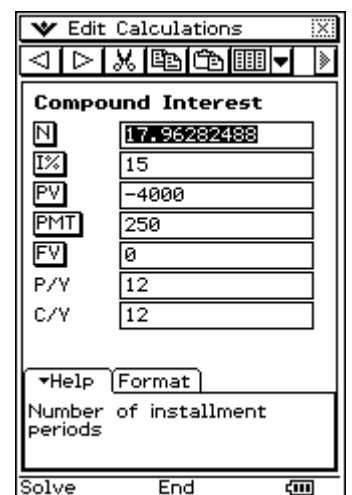
Enter the values shown at right.

As you enter each value, the Help box at the bottom of the page explains the meaning of each variable.



Tap the **N** icon.

Since the number of installment periods must, in practice, be a whole number, 17.96 is rounded up to a solution of 18 months.



Determine how much interest will be paid in total on the loan.

Set **N** to exactly **18** and tap the **FV** icon.

We can now see that the final payment of \$250 was \$9.24 too much, and so in practice should have been \$240.76.

The total repaid was 18 payments of \$250 less \$9.24, which comes to \$4490.76.

The total interest paid is \$490.76 - the total repaid less \$4000, the amount of the original loan.

Compound Interest	
N	18
I%	15
PV	-4000
PMT	250
FV	-9.238306197
P/Y	12
C/Y	12

▼Help Format
Future value

Solve End

Determine the monthly repayment to repay the loan in exactly 18 months.

Set the **FV** back to **0** and tap on the **PMT** icon.

18 monthly payments of \$249.54 would pay off the loan.

Compound Interest	
N	18
I%	15
PV	-4000
PMT	249.5391491
FV	0
P/Y	12
C/Y	12

▼Help Format
Amount paid each period

Solve End

How much could be borrowed if the student could afford \$300 payments?

Set the **PMT** to **300** and tap on the **PV** icon.

The student could afford a loan of just over \$4800.

Compound Interest	
N	18
I%	15
PV	-4808.864679
PMT	300
FV	0
P/Y	12
C/Y	12

▼Help Format

Solve End