The PMT Function

The PMT function is used to calculate the repayments on a loan based on a constant interest rate. It can accept up to five arguments. The first three are required and often only these are used:

Rate – The interest rate expressed as a percentage (you use the percent sign when entering the rate into the cell). When entering this argument you need to take account of the frequency of the payments. For example, if the payments are monthly this value should be divided by 12 when entered into the function.

Nper – The total number of payments for the loan. For example, for a loan repaid monthly over a period of 3 years this value would be 36 (i.e. 36 months).

Pv – The present value. This represents what the total value of the loan is worth now (i.e. how much is to be borrowed). Enter this as a minus value so that the function returns a positive value for the repayments.

There are two additional optional arguments:

Fv – The future value. Enter a value here if you want to end the loan period with a cash balance (i.e. it is not being paid off completely to zero). Omit this value if the entire amount borrowed is to be repaid.

Type – Usually repayments are made at the end of each period, in which case this argument is omitted. Enter 1 if the repayment is made at the beginning of the period.

In the example illustrated below (*Fig. 1*) an additional cell has been added (**C2**) to allow for a down payment or deposit to be made. This is subtracted from the loan amount when entered into the function.
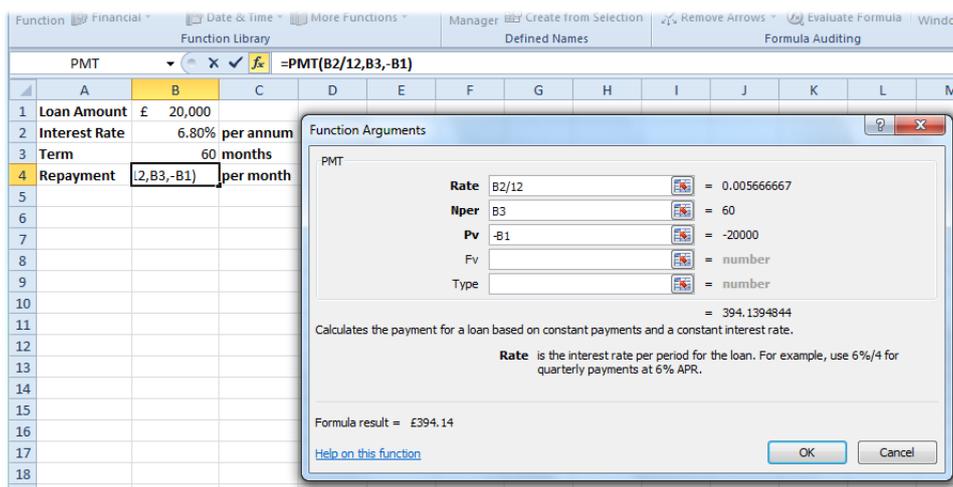
Fig. 1 Using the Insert Function tool to enter a PMT function.