Microsoft Excel 2010 Level II

Handout Objective

Loan Payments Calculations

Using the PMT Function

Calculates the payment for a loan based on constant payments and a constant interest rate.

Rate is the interest rate per period for the loan. For example, use 6%/4 for quarterly payments at 6% APR.
The *PMT* function returns the payment amount for a loan based on an interest rate and a constant payment schedule.

The syntax for the *PMT* function is: \( PMT(\text{interest\_rate}, \text{number\_payments}, \text{PV}, \text{FV}, \text{Type}) \)

\[
\text{interest\_rate} = \text{interest rate for the loan.}
\]

\[
\text{number\_payments} = \text{number of payments for the loan.}
\]

\[
\text{PV} = \text{present value or principal of the loan.}
\]

\( FV \) (optional) = Future value or the loan amount outstanding after all payments have been made. If this parameter is omitted, the PMT function assumes a FV value of 0.

\( Type \) (optional) = Indicates when the payments are due. Type can be one of the following values:

-- 0 = Payments are due at the end of the period. (Default)
-- 1 = Payments are due at the beginning of the period.

If the Type parameter is omitted, the *PMT* function assumes a Type value of 0.

**EXAMPLE:**

Find the monthly payment for a $6,400 loan at an annual rate of 8.25%. The loan is paid off in 2 years (ie: 2 x 12). All payments are made at the beginning of the period.

\[
= \text{PMT}(8.25\%/12, 2\text{*}12, 6400, 0, 1)
\]
Open Loan Payment Schedule, and click on the cell you want the result.

Go to Formulas tab / recently used, Select PMT.

Insert the Data, and click OK
You should see the result below.

<table>
<thead>
<tr>
<th>Loan Payment Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
</tr>
<tr>
<td>Number of Months (term)</td>
</tr>
<tr>
<td>Loan Amount</td>
</tr>
<tr>
<td>Monthly Payment</td>
</tr>
</tbody>
</table>