Mortgage Cash Flow Engine Test

Goal

The goal is to create a program that outputs a fixed rate mortgage payments table. This is a table that shows the amount of principal and interest that a borrower would pay if they took out a new mortgage. An example of this calculation and a payments table can be found at Wolfram Alpha Mortgage:

Payments table:

year	monthly payment	ending balance	yearly principal paid	yearly interest paid
1	$921	$196 291	$3709	$7338
2	$921	$192 442	$3849	$7198
3	$921	$188 448	$3994	$7053
4	$921	$184 304	$4144	$6903
5	$921	$180 004	$4300	$6747

The program can be written in any language though C# is preferred. Please do not use VBA/Excel.

Requirements

1. The application should accept the following input parameters (same as WolframAlpha)
    a. Loan Amount ($)
    b. Loan Period (yrs)
    c. Annual Percentage Rate (%)
2. The payment table should include the following values (same as WolframAlpha)
    a. Year
    b. Ending Balance
    c. Yearly Principal Paid
    d. Yearly Interest Paid
3. Implement the method to determine the payment directly, e.g. do not use a built in library like Microsoft.Financial.Pmt.