Programming Exercise 12.1

A Simple Mortgage Calculator, v.4.0

Purpose. Learn to use a simple object, to collect all the data about a single item into one variable.

Requirements. Modify Exercise 10.5's `MortgageCalculator3.java` by replacing its separate variables with a single object with data fields that replace the variables. Name the new file **MortgageCalculator4.java**.

Create an object specification named **class Mortgage**, with the data fields for:

1. the amount borrowed

2. interest rate (r in previous versions)

3. number of monthly payments (n in previous versions)

4. the payment (p in previous versions)

Then in your program, declare an *object* of type **Mortgage***,* and use its data fields instead of the four separate variables. Include any additional data fields that you may wish to include beyond these four.

Program I/O. Exactly the same as v.3.0**.**

Example. Console part of the I/O, with user input in blue:

```
What's the amount borrowed? 270000
What's the annual interest rate? 5.125

Amount borrowed (user input) = $270000
Annual interest rate (user input)  = 5.125%
Payback period (programmer input)  = 30 Years
Monthly payment (output)  = $1470.11
```