Loan Computations

Kurt Bryan and SIMIODE

A worksheet to illustrate loan payment computations for "Money Matters" project in Chapter 2.

First, choose interest rate "r", initial borrowed amount "p[0]", number of payments "payments", monthly payment "b":

```
> r := 0.03; #interest rate, annual
  p[0] := 250000; #initial loan amount
  b := 1726.45; #monthly payment
  payments := 180; #Number of monthly payments
```

Loop over months, store balance in array "p".

```
> printf("Month %d Balance %.2f\n", 0, p[0]) :
  for k from 1 to payments do
    p[k] := (1 + r/12) p[k-1] - b :
    printf("Month %d Interest %.2f Balance %.2f\n", k, r·p[k-1]/12, p[k]) :
  od:
>
```