

```

In[1]:= MPayment[p_, k_, apr_] := Module[{r, n, m}, $RecursionLimit = k + 1;
  r = (1 + apr) ^ (1 / 12) - 1; m = m /. Solve[p (1 + r) ^ k - m ((1 + r) ^ k - 1) / r == 0, m][[1]];
  Print["Loan amount = $", p, "\tAnnual interest rate = ", 100 apr,
  "%\tDuration of loan = ", k, " months"]; Print["Monthly payment = $", m]; Print[
  ListPlot[Table[{n, p (1 + r) ^ n - m ((1 + r) ^ n - 1) / r}, {n, 0, k, 1}], ImageSize -> 600,
  Joined -> True, GridLines -> {Table[12 1, {1, 1, Floor[k / 12]}], Automatic},
  AxesLabel -> {"months", "amount owed"}, BaseStyle -> {14, Bold}, Ticks ->
  {Table[12 1, {1, 1, Floor[k / 12]}], Automatic}]]; Print["Total payment = $", km]

```

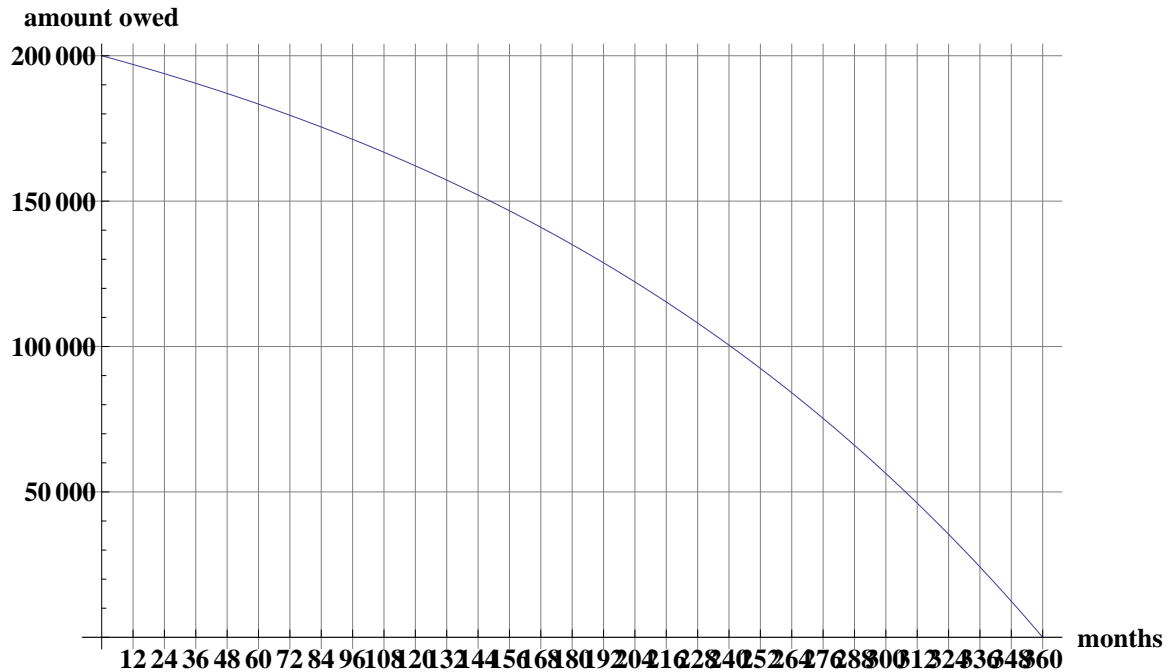
```

In[2]:= MPayment[200 000, 360, .05]

```

Loan amount = \$200 000 Annual interest rate = 5% Duration of loan = 360 months

Monthly payment = \$1060.11



Total payment = \$381 640.