# Renewing Your Mortgage

Assume you have purchased a home five years ago and your mortgage, which still has $183,000 owing, is up for renewal.

1. Determine the weekly payments for a mortgage of $183,000 at 3% per year for the remainder of the 25 year amortization period.

N = 20 × 52 (↳ 20)
I = 3
PV = 183000
PMT = ?
FV = 0
P/Y = 52
C/Y = 2

Payments = 233.60

2. How much will you pay, all together, over the remaining 20 years assuming you do not change the conditions of your mortgage over the time period?

$233.60 × 1040 = $242,944

3. Assume that you are now making more money and you want to change your payment plan to $1600 per month.
   a. How long will it take you to pay back the remainder of the mortgage under these conditions?

N = ?
I = 3%
PV = 183,000
PMT = -1600
FV = 0
P/Y = 12
C/Y = 2

N = 135 months
(11.25 years)

   b. How much will you pay, all together, over the remainder of your mortgage?

1600 × N = $216,000

   c. How much time and money did you save by increasing your regular payments?

You will save (20 - 11.25) 8.75 years and $26,944.