

Lesson 1 Mortgage Payments

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Terms:

Amortization period: the length in time, in years, required to pay off a mortgage

Equity: the difference between the value of your property and how much you owe on your mortgage (the portion of the value of your property that you own).

Unpaid Balance: the portion of the value of your property that you owe money on

Finance Charge: the interest amount paid to borrow money

Principal of the mortgage: amount borrowed at the beginning of the mortgage

Example 1

Jack and Diane purchased a home for \$385 000. They made a down payment of \$35 000. If their monthly payment is \$1890 for an amortization period of 25 years, calculate the amount of interest they would pay over the life of the mortgage.

amount borrowed
385 000
- 35 000

350 000
↑
principal

Finance charge (Interest over life of the mortgage)
 $= \text{monthly payment} \times \# \text{ of months} - \text{principal borrowed}$

of months
12 x 25
300

Interest = 1890 x 300 - 350 000
= \$217 000

Note: Total paid =
monthly payment x # of months
1890 x 300
\$567 000

Example 2

The Squarepants purchased a home for \$260 000. They made a down payment of \$35 000 and negotiated an interest rate for their mortgage of 7.25% over 25 years. The monthly payment for the Squarepants family is \$1548.75.

- a.) Determine the principal of their mortgage.

$$\begin{aligned} & \$260\,000 - \$35\,000 \\ & \quad \quad \quad \$225\,000 \end{aligned}$$

- b.) Determine the amount of interest they paid on their first payment.

$$\text{Interest portion of payment} = \text{unpaid balance} \times \text{interest rate} \div 12$$

$$\begin{aligned} \text{Interest} &= 225\,000 \times 0.0725 \div 12 \\ &= \$1359.38 \end{aligned}$$

- c.) Determine the finance charge (total interest) they would pay over the life of the mortgage.

$$\begin{aligned} \text{Finance charge} &= \$1548.75 \times 12 \times 25 - 225\,000 \\ &= \$239\,625 \end{aligned}$$

Example 3

The Lodges took a mortgage out for \$285 000 for a home they purchased for \$315 000. Their mortgage rate is 6.75% over 25 years with a monthly payment of \$1785.80.

- a.) Determine the amount of their down payment.

$$315\ 000 - 285\ 000$$

$$= \$30\ 000$$

- b.) Determine the amount of interest on the first payment.

$$\text{Interest} = 285\ 000 \times 0.0675 \div 12$$

$$= \$1603.13$$

$$6.75\% \div 100$$

$$= 0.0675$$

- c.) Determine the amount of interest they will pay over the life of the mortgage.

$$\text{Interest} = 1785.80 \times 12 \times 25 - 285\ 000$$

$$= \$250740$$

Example 4

State two ways to lower a monthly mortgage payment.

- make a larger down payment
- longer amortization period

Example 5

State two ways to decrease the finance charge over the life of the mortgage.

- shorter amortization period
- make a larger down payment