

Lesson Three: Blended Payments

Goals:

- Calculate the portion of the regular monthly payment that will go towards interest
- Calculate the portion of the regular monthly payment that will go towards principal
- Calculate the unpaid balance and the equity after one month and two months

When the financial institution receives your mortgage payment for the month, they will split the payment into two parts:

monthly payment \rightarrow Principal
 \rightarrow Interest

- One part goes straight to the bank, without being counted against your loan.
 - This amount is the **interest** part of your payment.
- The remaining part of your payment goes toward paying down your loan – this “leftover” part lowers your unpaid balance.
 - They call this leftover amount your **payment on principal**.

This is why mortgage payments are often referred to as **blended payments**; the payment is a **blend** of **interest** payment and **principal** payment.

Example 1

Kendra arranges a mortgage for \$195 000 at an annual interest rate of 5% over 20 years.

- a) Calculate Kendra's monthly mortgage payment if it costs \$6.57 per month for each \$1000 borrowed.

$$\text{monthly mortgage} = \text{Amortization rate} \times \text{mortgage}$$

$$= \frac{6.57}{1000} \times \$195000 = \$1281.15$$

- b) Calculate the amount of interest that will be taken from her first ^(month) payment.

$$\text{Interest} = \text{Principal} \times \text{rate} \times \text{time}$$

$$I = P r t$$

$$I = 195000 \times \left(\frac{5}{100}\right) \times \left(\frac{1}{12}\right) \leftarrow \text{1 month}$$

P = Amount borrowed
 r = interest rate in decimal form
 t = time in years

$$\text{Interest of first payment} = \$812.50$$

- c) How much of Kendra's first payment will go toward paying down the principal owing?

$$\text{Principal (amount) of first payment} = \text{monthly payment} - \text{Interest (first payment)}$$

$$= \$1281.15 - \$812.50$$

$$= \underline{\underline{\$468.65}}$$