Lesson Six: Vehicle Loans

Many people can't afford to buy a vehicle outright, so they borrow money from a lending institution, like a bank or credit union, and pay it back over time. Borrowing money to buy a vehicle is known as ***financing*** the purchase. You can arrange a vehicle loan through most dealers, or your bank.

When you borrow money, you end up paying back the amount that you borrowed, the loan or the 'principal' plus a charge for borrowing (known as the 'interest'). In this lesson you will calculate a monthly payment, and determine how much interest is paid on a loan.

When you borrow money, you sign a contract with the lending institution that specifies the interest rate you will pay and the length of time it will take to pay the loan back. Your lending institution will set the interest rate - if you don't like the rate, you can shop around for a better rate!

You have already calculated monthly payments for loans – in both ***Essential Math 30S***, and the ***Home Finance*** unit of this course. You use all of the same processes when you work with Vehicle Loans. Using the amortization rate, you can calculate the monthly payment.

$$\textit{Monthly payment} = \textit{amount of loan} \times \textit{amortization rate} \div 1000$$

Example 1: Monthly Payment

You need to borrow a total of $31 500 to buy a new car. The dealership offers you a 5 year loan at a rate of 3.5%. The amortization rate for this loan is $18.19 per $1000 borrowed. Calculate the monthly payment for this loan.

Vehicle loans monthly payment = Amount Borrowed X Amortization rate

$= 31500 \times \frac{18.19}{1000}$

monthly loan payment $= \$572.99$