
THE CAR LOAN

You plan to buy a used car in the near future. The price of the car is \$9,500. You don't have anywhere near that amount of cash, so you decide to take out a car loan. Assume that the loan is for four years, you will make no down payment, and that the annual interest rate for the loan is 12%.



1. Using the program, verify that the monthly loan payment would be \$250.17.
2. Calculate the total amount you will pay during the four-year term of the loan.

3. Explain why the total amount you will pay is significantly higher than the \$9,500 purchase price of the car.
4. Now assume that you can make a \$2000 down payment. If the interest rate is still 12%, and you plan to make 36 payments, find the monthly payment.

5. Your first plan to buy a car fell through (since you hadn't considered interest, the cost of borrowing the money). So this time you're going to approach this financial problem from a different point of view. Here are the facts:



- a) You can afford to pay a total of \$9,500 over the life of the loan.
- b) You will make 48 monthly payments to pay off the loan.
- c) The annual interest rate is 9%.

About how expensive a car can you afford to buy? _____

Also, what are the total finance charges (the amount of interest you must pay)?

6. The same loan calculator can be used to determine the monthly payment on a mortgage. If you buy a home with a purchase price of \$450,000 and you take out a 30-year fixed rate mortgage at an annual interest rate of 4.7%, what is the monthly payment?


