

Getting Your Own Wheels

Are you dreaming of buying your own car? Olivia Johnson is. So far she's saved \$3,000. Olivia has her eye on a used car that costs \$9,000. Based on her budget, Olivia figures she can afford a monthly car payment of no more than \$200. The interest rate for an automobile loan at her local bank is 8%, and she would like to have the loan paid off in three years. Using the interest formula below, Olivia calculates the monthly payment needed to repay her car loan.

Principle X Rate X Time

Olivia's Loan Story

Cost of Car	\$9,000.00
Less the down payment	<u>-3,000.00</u>
Amount of loan	\$6,000.00

Interest Calculation

$$\$6,000 \times .08 \times 3 = \$1,440$$

Total Loan Cost

$$\$6,000 + 1,440 = \$7,440$$

Monthly Payment Calculation

$$\$7,440 \div 36 = \$206.67 \text{ per month}$$

Can Olivia afford this car?

Over →

Now you try it . . .

Look on the Internet for a car you would like to buy. Suppose you can afford \$1,000 as the down payment. The bank's interest rate is currently at 7%.

Answer the following questions. For all mathematical calculations, **show your work**.

1. What kind of car are you interested in?
2. How much does the car cost?
3. What Web site did you find your information on?
4. Print proof of your responses to questions 1 – 3 (your printout should be only 1 page).
5. How much money will you need to borrow to pay for the car—don't forget about your \$1,000 down payment?
6. How much interest will you pay if you plan on paying off the loan in 5 years?
7. What will the total cost of the loan be if the loan term is 5 years?
8. How much will your monthly payment be for a 5 year loan?
9. Which payment plan will allow you to have the lowest monthly payment? A loan for 3 years or one for 5 years? Explain.
10. Which payment plan will enable you to pay the least amount of money for your car? A loan for 3 years or one for 5 years? Explain.

Extra Credit –

What will the **total cost of the car** be if you borrow money for 5 years?
This answer is not the same as #7 above.