Investigate & Apply

The Cost of Car Ownership

A car is the first major purchase that many people make.

1. Ghita plans to buy a 5-year old car for $12,500. She has $2500 saved for a down payment.
   a) The car dealership offers her the option of paying off the balance in 24 monthly instalments of $495. How much extra will she pay for the car if she chooses this option?
   b) Ghita’s bank will give her a car loan with interest at 8.5% per annum, compounded quarterly, for a term of two years. The amount will be divided by 24 to obtain the monthly instalments. What will her monthly payments be if she takes the bank loan?
   c) Which source of financing costs Ghita less, the car dealership or the bank? Do some research to find out whether this is generally the case.

2. Many factors affect how much it costs to operate a car. These include
   • distance driven per month
   • type of driving, city or highway, for which the car is used
   • frequency of repairs needed

   What is the difference between fixed car expenses and variable car expenses? Give examples of each.

3. Depreciation is a frequently-overlooked car expense. One method of computing the annual depreciation is the double-declining balance method. For this method, divide 100% by the estimated life of the car, and then double the result to obtain the rate of depreciation. Use this method to find the value of the car at the end of the third year that Ghita owns it if she can reasonably expect to keep it for 5 years.

4. a) Estimate the total operating costs in the first year. State your assumptions.
   b) Do you think that the operating costs would increase or decrease in the second year, and by how much? Explain.

5. Prepare a report that categorizes and displays all the costs involved in owning and operating the car for a two-year period. Include your assumptions.