

Support Document

# Vehicle Finance

Essential Mathematics  
Grade 12



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Please note that the department could make changes to the online version.

# Vehicle Finance

## A few words about the project

This support document for the Grade 12 Essential Mathematics course is designed to be a project spanning several days in order to meet the learning outcome below and its indicators. While the document is not the only way this unit can be covered, it provides several possible approaches as well as vocabulary with which students should become familiar. Purchasing a vehicle is a major expense that few people can avoid. Unlike a house, a vehicle purchase is not an investment. What's more, what people want in a vehicle can change dramatically at different stages in their lives. It is therefore critical for students to learn all the issues involved in acquiring a vehicle.

This project allows students to explore all the factors related to the acquisition and maintenance of a vehicle in a realistic context. Students will use a decision-making process while examining the costs and benefits of each option: purchasing a new or used vehicle with cash, a loan, a lease or on a lease-to-own basis. It is important to focus on the vocabulary, which is often new to students. Each section identifies the key vocabulary and related terms. A list of all this terminology is included in [Appendix A: Lexicon](#).

While this project can be done individually, students are encouraged to work in small groups to promote discussion.

It is important for students to compare and discuss what they learn in each of the sections in order to see the possible differences and allow them to make informed decisions in the future.

The project is divided into eight sections that deal with all of the achievement indicators for this learning outcome. These sections allow students to explore elements related to vehicle finance. Students start by learning about the key aspects of vehicle acquisition. They will have to describe and determine the costs related to owning and using a vehicle such as the various acquisition options, maintenance, repairs, depreciation, fuel consumption and insurance. Lastly, students will be able to justify a decision to acquire a vehicle based on the key elements explored in the project.

The appendices identified in each section include tables and the related worksheets. [Appendix M: Answer Key](#) contains the answers.

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**Specific Learning Outcome**

12E5.V.1. Solve problems that involve the acquisition, operation, and maintenance of a vehicle when

- buying
- leasing
- leasing to buy

[C, CN, PS, R, T]

**Indicators**

- Describe and explain various options for buying, leasing, or leasing to buy a vehicle.
- Determine costs associated with buying, leasing, or leasing to buy a new or used vehicle.
- Solve, with or without technology, problems that involve the purchase, lease, or lease to purchase of a vehicle.
- Determine costs associated with operating a vehicle, including regular maintenance, repairs, fuel consumption, or depreciation.
- Determine the costs of insuring a vehicle for various uses.
- Justify a decision related to buying, leasing, or leasing to buy a vehicle, based on factors such as personal finances, intended use, maintenance, warranties, mileage, insurance, or safety considerations.

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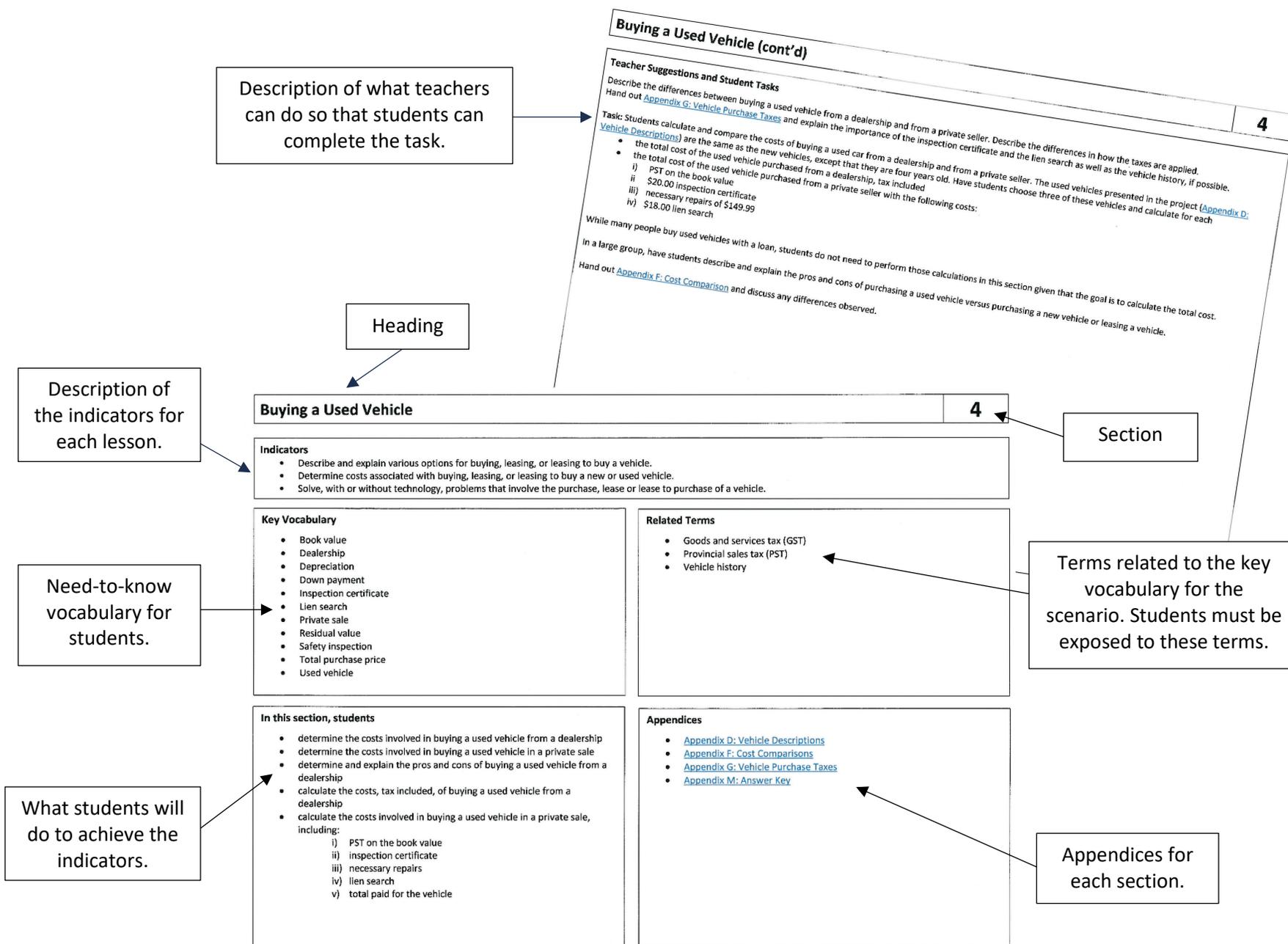
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# Overview



# Scenarios

1

## Indicator

- Justify a decision related to buying, leasing, or leasing to buy a vehicle, based on factors such as personal finances, intended use, maintenance, warranties, mileage, insurance, or safety considerations.

## Key Vocabulary

- Cargo space
- Carrying capacity
- Dealership
- Fuel consumption
- Lease
- Lien search
- Private sale
- Safety certificate
- Safety inspection
- Title search
- Trade-in-value
- Warranty

## Related Terms

- Anticipated mileage
- Insurance
- Intended use
- Maintenance cost
- Monthly payment
- Ownership
- Personal finances
- Security
- Trade-in vehicle
- Used vehicle
- Vehicle make
- Vehicle model
- Vehicle type
- Deductible

## In this section, students

- Learn about the elements that influence decisions on vehicle type as well as acquisition options.

## Appendices

- [Appendix B: Scenarios](#)

**Teaching Suggestions and Student Tasks**

Purchasing a vehicle involves many decisions that are based on personal situations. Start a discussion with students on things that can influence vehicle choice and type of ownership. Brainstorming may help identify elements such as

- make, model, colour, size, options available
- used vs. new vehicle
- fuel consumption
- reliability
- warranty
- price
- monthly payments for a loan or lease
- purchase vs. lease
- intended use
  - i) all purpose or pleasure
  - ii) city or rural (highway) driving
  - iii) cargo space
  - iv) towing capacity
  - v) carrying capacity
- anticipated mileage
- insurance cost
- trade-in vehicle

Use the opportunity to reinforce the proper terminology (e.g., lease).

**Task:** Give each student or small group the scenario cards ([Appendix B: Scenarios](#)). For each scenario, have students identify the things that will influence vehicle financial decisions.

In a large group, ask students to share their suggestions and add important points that are not presented in their analysis.

## Buying a New Vehicle: Cost

2.1

### Indicators

- Describe and explain various options for buying, leasing, or leasing to buy a vehicle.
- Determine costs associated with buying, leasing, or leasing to buy a new or used vehicle.
- Solve, with or without technology, problems that involve the purchase, lease, or lease to purchase of a vehicle.

### Key Vocabulary

- Cash purchase
- Dealership
- Fuel consumption
- Total purchase price
- Trade-in vehicle
- Trade-in-value
- Warranty
- Down Payment

### Related Terms

- Air conditioner excise tax (“air tax”)
- Base price
- Block heater
- Compact vehicle
- Electric vehicle
- Hubcap
- Hybrid vehicle
- Manitoba Public Insurance (MPI)
- Manufacturer’s suggested retail price (MSRP)
- Options package
- Remote starter
- Rim(s)
- Safety feature
- Safety recall
- Steering wheel
- Sticker price
- Sub-compact vehicle
- Sunroof
- Test drive
- Tire eco fee (“tire tax”)
- Towing package
- Transportation and preparation charges

### In this section, students

- describe and explain the pros and cons of buying a new car
- calculate the total cost of a new vehicle

### Appendices

- [Appendix C: Vehicle Feature Tables](#)
- [Appendix D: Vehicle Descriptions](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Start a discussion with students on the pros (advantages) and cons (disadvantages) of buying a new vehicle. Advantages could include: warranty, low repair cost, vehicle customization, etc. Also discuss the disadvantages of buying a new vehicle, including high vehicle cost and vehicle depreciation coupled with the purchase of additional depreciation coverage. Brainstorm key things to consider when buying a new car, including

- dealership reputation
- dealership location (e.g., for maintenance, repairs, safety recalls, etc.)
- sticker price
- manufacturer's suggested retail price (MSRP)
- available options and their cost
- warranty
- test drive
- financing plan
- fuel consumption
- safety features

**Task A:** To help students familiarize themselves with the various available options, distribute [Appendix C: Vehicle Features Table](#). Have students indicate which options are important to them, individually or in small groups. Students should identify and justify at least five (5) options.

They can then share their options and justifications in a large group session. Note: Options typically come in packages and are not always available individually. These additions to the base price have an associated cost. Discuss how the total vehicle price can be reduced. Here are a few examples:

- buying a smaller vehicle
- negotiating options packages
- time of year or special sale

Present and explain the calculations involved in the purchase of a new vehicle to students, including

- base price
- options package
- transportation and preparation charges
- air conditioner excise tax ("air tax")
- tire eco fee ("tire tax")
- vehicle trade-in value
- taxes (PST and GST)

**Task B:** Distribute the vehicle sheets ([Appendix D: Vehicle Descriptions](#)). Have students calculate the total price, including taxes, for at least three new vehicles and compare them. For easier comparison, have students use a trade-in value of \$3500.

### Indicators

- Describe and explain various options for buying, leasing, or leasing to buy a vehicle.
- Determine costs associated with buying, leasing, or leasing to buy a new or used vehicle.
- Solve, with or without technology, problems that involve the purchase, lease, or lease to purchase of a vehicle.

### Key Vocabulary

- Amortization table
- Principal
- Credit purchase
- Dealership
- Equity
- Financing a vehicle
- Loan
- Monthly payment
- Outstanding balance
- Extended warranty

### Related Terms

- Collision
- Co-signer
- Credit score
- Financial institution
- Manitoba Public Insurance (MPI)
- On approved credit (OAC)
- Write-off

### In this section, students

- calculate the costs associated with a vehicle loan
  - i) monthly payment
  - ii) interest portion of the monthly payment
  - iii) principal portion of the monthly payment
  - iv) outstanding balance
  - v) total interest paid
- learn how to reduce the monthly payment amount
- learn how to reduce the amount of interest paid

### Appendices

- [Appendix D: Vehicle Descriptions](#)
- [Appendix E: Amortization Table](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Present and explain the calculations involved in a new vehicle purchase requiring a loan, including

- down payment
- monthly payment
- interest portion of the monthly payment
- principal portion of the monthly payment
- outstanding balance
- total amount paid
- total interest paid
- 4-month amortization table

Tell students that the interest rate shown in advertisements is not necessarily the interest rate offered to younger buyers with no credit score. Ads often state that the interest rate is available “on approved credit (OAC),” which is directly related to a person’s credit score. Even with a co-signer, a loan’s interest rate can be higher.

The following task allows students to compare the impact of different interest rates and amortization periods. Hand out [Appendix D: Vehicle Descriptions](#) and [Appendix E: Amortization Table](#).

**Task:** Have students calculate and compare the monthly payment, the total loan cost paid, the interest charges, and the total paid for a new vehicle with the following three loans, using a down payment of \$1000:

- 1) A loan with an interest rate of 3% over 6 years.
- 2) A loan with an interest rate of 3% over 3 years.
- 3) A loan with an interest rate of 6% over 3 years.

Have each student or small group make an amortization table of a least four (4) periods for one of the above loans. This should be done by hand with a calculator and then checked using technology.

In a large group, compare the effect of the different interest rates and amortization periods and discuss how to lower the monthly and interest payments.

\* Note: A loan must be paid in full, even if the vehicle’s value is less than the outstanding loan balance. For instance, an owner selling the vehicle can receive an amount lower than the outstanding balance on the loan. Or, in the case of a collision resulting in a write-off, the amount the owner receives from Manitoba Public Insurance (MPI) may be less than the outstanding loan balance. In both situations, the owner must continue to pay the loan even if he is no longer able to use the vehicle.

## Indicators

- Describe and explain various options for buying, leasing, or leasing to buy a vehicle.
- Determine costs associated with buying, leasing, or leasing to buy a new or used vehicle.
- Solve, with or without technology, problems that involve the purchase, lease, or lease to purchase of a vehicle.

## Key Vocabulary

- Dealership
- Depreciation
- Down payment
- Lease
- Leasing fees
- Monthly payment
- Residual value

## Related Terms

- Break the lease
- Contract (lease)
- Excessive wear and tear
- Goods and services tax (GST)
- Ownership
- Provincial sales tax (PST)
- Windshield

## In this section, students

- learn about who is responsible for maintenance and repairs
- identify the costs involved in a lease
- describe and explain the pros and cons of leasing a vehicle
- calculate lease elements such as
  - i) total monthly loan payment
  - ii) total of monthly loan payments
  - iii) total lease cost
  - iv) residual value
  - v) purchase cost of the vehicle at lease end
  - vi) total paid for a vehicle, including the lease cost

## Appendices

- [Appendix D: Vehicle Descriptions](#)
- [Appendix F: Cost Comparison](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Introduce the leasing concept. Students need to understand that monthly payments are for using the vehicle and that its ownership remains with the dealership. Describe leasing details, including

- lease term
- financing charges
- allowed mileage without penalty
- cost of additional mileage
- monthly payment
- responsibility for maintenance and repairs
- residual value
- additional costs for excessive wear and tear
- breaking the lease

Discuss the pros and cons of leasing a vehicle with students. It is important for students to understand the difference between the maintenance and repairs that are the responsibility of the person leasing the vehicle, and the repairs covered by the dealership. Distribute the [Appendix D: Vehicle Descriptions](#) sheets.

**Task A:** Have students calculate the leasing costs for three new vehicles, including

- total monthly payments
- total cost of the lease, including monthly payments and other financial charges
- the total amount paid for the lease if the vehicle has
  - i) an accumulated mileage of 66 000 kilometres
  - ii) a stone chip in the windshield and worn tires (charge of \$450 for excessive wear and tear)
- the residual value
- purchase cost of the vehicle at lease end
- total paid for the vehicle if they purchase it at the end of the lease (including leasing cost)

N.B: Common errors

- Forgetting to add the two taxes (PST and GST) to the monthly payment
- Forgetting to calculate the vehicle's residual value for the purchase price **before** adding taxes.

In a large group, have students describe and explain the pros and cons of leasing.

*\* Note: Independent (self-employed) workers can claim monthly lease payments on their personal taxes if the vehicle is used for work.*

Hand out [Appendix F: Cost Comparison](#).

**Task B:** Have students analyze and write down what they observe. Then start a discussion, making sure to highlight the following aspects:

- In the long term, purchasing a new vehicle with a loan is cheaper than purchasing the same vehicle at lease-end.
- In the short term, the monthly payments of a lease are lower than monthly loan payments.
- A cash purchase is the cheapest option given that there are no interest payments.

## Indicators

- Describe and explain various options for buying, leasing, or leasing to buy a vehicle.
- Determine costs associated with buying, leasing, or leasing to buy a new or used vehicle.
- Solve, with or without technology, problems that involve the purchase, lease or lease to purchase of a vehicle.

## Key Vocabulary

- Book value
- Dealership
- Depreciation
- Down payment
- Inspection certificate
- Lien search
- Private sale
- Residual value
- Safety inspection
- Total purchase price
- Used vehicle

## Related Terms

- Goods and services tax (GST)
- Provincial sales tax (PST)
- Vehicle history

## In this section, students

- determine the costs involved in buying a used vehicle from a dealership
- determine the costs involved in buying a used vehicle in a private sale
- determine and explain the pros and cons of buying a used vehicle from a dealership
- calculate the costs, tax included, of buying a used vehicle from a dealership
- calculate the costs involved in buying a used vehicle in a private sale, including:
  - i) PST on the book value
  - ii) inspection certificate
  - iii) necessary repairs
  - iv) lien search
  - v) total paid for the vehicle

## Appendices

- [Appendix D: Vehicle Descriptions](#)
- [Appendix F: Cost Comparisons](#)
- [Appendix G: Vehicle Purchase Taxes](#)
- [Appendix M: Answer Key](#)

**Teacher Suggestions and Student Tasks**

Describe the differences between buying a used vehicle from a dealership and from a private seller. Describe the differences in how the taxes are applied. Hand out [Appendix G: Vehicle Purchase Taxes](#) and explain the importance of the inspection certificate and the lien search as well as the vehicle history, if possible.

**Task:** Students calculate and compare the costs of buying a used car from a dealership and from a private seller. The used vehicles presented in the project ([Appendix D: Vehicle Descriptions](#)) are the same as the new vehicles, except that they are four years old. Have students choose three of these vehicles and calculate for each

- the total cost of the used vehicle purchased from a dealership, tax included
- the total cost of the used vehicle purchased from a private seller with the following costs:
  - i) PST on the book value
  - ii) \$20.00 inspection certificate
  - iii) necessary repairs of \$149.99
  - iv) \$18.00 lien search

While many people buy used vehicles with a loan, students do not need to perform those calculations in this section given that the goal is to calculate the total cost.

In a large group, have students describe and explain the pros and cons of purchasing a used vehicle versus purchasing a new vehicle or leasing a vehicle.

Hand out [Appendix F: Cost Comparison](#) and discuss any differences observed.

## Indicators

- Describe and explain various options for buying, leasing, or leasing to buy a vehicle.
- Determine costs associated with buying, leasing, or leasing to buy a new or used vehicle.
- Solve, with or without technology, problems that involve the purchase, lease, or lease to purchase of a vehicle.

## Key Vocabulary

- Credit score
- Dealership
- End-of-lease administration fee
- Financing charges
- Initial administrative fee
- Leasing to buy

## Related Terms

- Bankruptcy
- Biweekly payment
- Finance company
- Financial institution
- Goods and services tax (GST)
- Lease
- Maintenance
- Ownership
- Possession
- Provincial sales tax (PST)
- Vehicle history
- Wear and tear
- Weekly payment

## In this section, students

- determine the reasons why someone might choose leasing to buy a vehicle
- calculate the costs involved in a lease to buy
- describe and explain the pros and cons of leasing to buy

## Appendices

- [Appendix D: Vehicle Descriptions](#)
- [Appendix F: Cost Comparisons](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Present the information below to students to discuss the implications of leasing to buy and why few people choose this option.

Some used vehicle dealerships offer leasing to buy to people with a poor credit score who cannot get a loan from a financial institution. The conditions for a lease-to-buy contract are having an official identity document as well as a proof of stable income.

With a lease to buy, the person signs a contract with a financing company associated with the dealership. The vehicle is the property of the financing company until the end of the lease. Note that the vehicle only belongs to you after you pay the initial administration fee, all of your payments and the end-of-lease administration fees. A lease to buy contract usually has a 1 to 3 year term with weekly or biweekly payments. If a payment is late, the financing company does not indicate the delay on the credit score, which is therefore not affected. However, an administrative penalty can be imposed on the individual, or the financing company may repossess the vehicle. In that case, the individual receives no money back.

Unlike a lease, maintenance and repairs are the responsibility of the individual and not the dealership (even while the latter retains ownership of the vehicle). Because the vehicles available for leasing to buy often have more wear and tear and mileage, maintenance and repair costs can add significantly to the total cost of the vehicle. It is therefore important to check a vehicle's history before signing a lease-to-buy contract.

While the initial administration fee is often a minimal amount, the payments are high enough and frequent enough that the total amount paid for a vehicle is usually a great deal more than the purchase amount paid in cash or via a loan for the same vehicle. That is why so few people choose the lease-to-buy option.

**Task:** Have students calculate the costs associated with leasing to buy, using an initial administration fee of \$395 and a lease-end administration fee of \$125, with biweekly payments. This information is presented in [Appendix D: Vehicle Descriptions](#). Have students choose three used vehicles and calculate for each

- the monthly payment, tax included
- total cost of the lease to buy, including fees

In a large group, have students describe and explain the pros and cons of leasing to buy.

Distribute [Appendix F: Cost Comparison](#) and have students analyze and write down what they observe, such as the fact that leasing to buy is more expensive than a purchase with cash or via a loan of the same used vehicle.

## Indicator

- Determine costs associated with operating a vehicle, including regular maintenance, repairs, fuel consumption, or depreciation.

## Key Vocabulary

- Depreciation
- Fuel consumption
- Labour
- Maintenance
- Material(s)
- Repair
- Vehicle tune-up

## Related Terms

- Air filter
- Antifreeze
- Brake(s)
- Coolant
- Cooling system
- Diagnostic test
- Exhaust pipe
- Exhaust system (exhaust pipe and muffler)
- Fan belt
- Fluid level
- Hourly rate
- Mechanic
- Muffler
- Oil change
- Radiator
- Service station
- Shocks
- Wheel alignment check
- Windshield wiper blade

## In this section, students

- calculate the costs involved in vehicle maintenance and repairs

## Appendices

- [Appendix H: Maintenance and Repairs](#)
- [Appendix M: Answer Key](#)

### Teaching Suggestions and Student Tasks

Explain the various costs of operating a vehicle: maintenance, repair, depreciation, and fuel consumption.

Brainstorm with students to identify examples of regular maintenance and repairs, including

- Vehicle tune-up
- Oil change
- Antifreeze, coolant, etc. check
- Fan belt inspection and replacement
- Windshield wiper replacement
- Air filter replacement
- Light replacement
- Winter tire installation and wheel alignment
- Brake replacement
- Exhaust system (exhaust pipe and muffler) check
- Shock replacement
- Radiator repair
- etc.

Here are three things to consider when calculating maintenance and repair costs

- 1) Buy multiples of some parts (e.g., windshield wipers, oil, tires)
- 2) Convert labour time from minutes into parts of an hour
- 3) Calculate both taxes (PST and GST) on the total cost, including labour

**Task:** Hand out [Appendix H: Maintenance and Repairs](#). Have students calculate the maintenance and repair costs for the various scenarios.

In a large group, discuss the importance of regular maintenance and the cost variations between different garages.

### Indicator

- Determine costs associated with operating a vehicle, including regular maintenance, repairs, fuel consumption, or depreciation.

### Key Vocabulary

- Depreciation
- Depreciation rate
- Residual value

### Related Terms

- Manitoba Public Insurance (MPI)
- Original value of the vehicle
- Trade-in-value
- Vehicle condition
- Vehicle make
- Vehicle model
- Write-off

### In this section, students

- calculate a vehicle's depreciation amount
- calculate the residual value

### Appendices

- [Appendix I: Depreciation](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Explain the concept of depreciation, including the age of the vehicle, the vehicle condition, the vehicle make, and the vehicle model. While the value lost through depreciation is not money paid, it is an amount that cannot be counted in the asset's value.

**Task:** Based on the total purchase cost (before taxes), have students determine a vehicle's depreciation during the first three years for three different vehicles ([Appendix I: Depreciation](#)). The depreciation rate is 20% the first year and 15% for subsequent years. Have the students calculate

- i) the depreciation amount at the end of each year
- ii) the vehicle's residual cost at the end of each year
- iii) the total depreciation amount after three years

It is important for students to be able to distinguish between depreciation amount and residual value.

## Indicator

- Determine costs associated with operating a vehicle, including regular maintenance, repairs, fuel consumption, or depreciation.

## Key Vocabulary

- City fuel consumption rate
- Distance travelled in kilometres
- Fuel amount
- Fuel consumption
- Fuel consumption rate
- Fuel economy
- Fuel tank
- High fuel consumption
- Highway fuel consumption rate
- Litre (L)
- Low fuel consumption
- Odometer

## Related Terms

- Diesel
- Gas
- Idle
- Model
- Traffic jam
- Vehicle type

## In this section, students

- learn to differentiate between low and high fuel consumption
- recognize factors that impact fuel consumption

## Appendices

- [Appendix J: Fuel Consumption](#)
- [Appendix M: Answer Key](#)

### Teaching Suggestions and Student Tasks

The word “fuel” includes gas and diesel.

Start a discussion with students on fuel and the fact that it is one of the main expenses related to operating a vehicle. Different vehicles require different amounts of fuel to travel the same distance. Brainstorm with students on the different elements that affect the fuel consumption rate, including

- vehicle type
- number of times the fuel tank must be filled for a given distance (fuel tank capacity)
- city or highway driving
- using air conditioning or heat
- idling time (rush hour traffic congestion, winter, while waiting, etc.)
- how you drive your vehicle
- types of optional equipment installed
- vehicle condition
- weight of vehicle and its contents

Note that a vehicle consumes more fuel when it is idling at a red light and while accelerating. Ensure that students can determine the best fuel economy and know that fuel consumption is higher for city driving than on the highway.

Fuel consumption (FC) is based on the number of litres a vehicle uses to travel 100 km. It is calculated in L/100 km.

$$FC = \frac{\text{fuel used in litres}}{\text{distance in km}} \times 100$$

Make sure that students can isolate each variable in this formula.

N.B.: Common errors

- forgetting to convert cents to dollars (100.3¢/Litre = \$1.003/Litre and explaining why the price is written in cents rather than dollars).

**Task:** Have students answer the questions on fuel consumption ([Appendix J: Fuel Consumption](#)).

In a large group, have students share their opinions about the differences in fuel consumption cost depending on vehicle type.

Note that electric cars are not included in [Appendix J: Fuel Consumption](#) because they do not use fuel.

## Indicator

- Determine the costs of insuring a vehicle for various uses.

## Key Vocabulary

- Additional coverage
- All purpose vehicle
- Autopac
- Risk of loss
- Compensation claim
- Damage(s)
- Deductible
- Demerit
- Driver safety rating
- Driver Safety Rating Scale
- Driver's licence
- Driving record
- Insurance broker
- Insurance company
- Insurance policy
- Insurance premium
- Licence plate
- Loss of use
- Manitoba Public Insurance (MPI)
- New car insurance
- Optional insurance
- Passenger vehicle
- Payment terms
- Pleasure vehicle
- Rebate
- Third-party liability
- Vehicle make
- Vehicle model
- Vehicle type

## Related Terms

- At-fault accident
- Book value
- Compact vehicle
- Documentation fee
- Excess Value (coverage)
- Immobilizer
- Lay-Up (coverage)
- No-fault accident
- Payment terms
- To be at fault
- Vehicle operation
- Write-off

## In this section, students

- determine the factors that affect insurance costs
- understand how to reduce insurance costs

## Appendices

- [Appendix K: Insurance–Service Stations](#)
- [Appendix L: Insurance–Analysis](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Start a discussion with students about the role of Manitoba Public Insurance (MPI). Brainstorm on the different factors that affect insurance costs, including

- vehicle age
- vehicle make and model
- vehicle type
- vehicle use
- where the owner lives
- driving record
- deductible amount
- third-party liability amount

Note that the following factors do not affect insurance costs:

- terms of payment (there is an administrative fee when you do not make a lump-sum (single) payment)
- vehicle colour
- no-fault collision
- owner's age (although the owner's history can affect the cost, the biological age is not a factor)

Explain optional insurance coverage, including

- Loss of use
- New vehicle protection
- Excess Value coverage for a vehicle worth more than \$50 000

**Task:** Prepare the eight (A to H) study stations ([Appendix K: Insurance–Stations](#)). Individually or in small groups, have the students compare each pair of cards at each station and complete [Appendix L: Insurance–Analysis](#). Each pair of cards contains insurance information for a specific vehicle. All of the information is identical except for one detail.

In a large group, have students discuss the factors that affect insurance cost and how to reduce the amount of insurance paid.

N.B.: The exploration work can also be done with the insurance calculator on the Manitoba Public Insurance (MPI) website.

**Indicator:**

- Justify a decision related to buying, leasing, or leasing to buy a vehicle, based on factors such as personal finances, intended use, maintenance, warranties, mileage, insurance, or safety considerations.

**Key Vocabulary**

- Cargo space
- Carrying capacity
- Dealership
- Fuel consumption
- Lease
- Leasing to buy
- Lien search
- Private sale
- Safety certificate
- Safety inspection
- Trade-in-value
- Warranty

**Related Terms**

- Anticipated mileage
- Insurance
- Intended use
- Maintenance cost
- Monthly payment
- New vehicle
- Reliability
- Security
- Trade-in vehicle
- Used vehicle
- Vehicle make
- Vehicle model
- Vehicle type
- Warranty

**In this section, students**

- justify a decision related to buying, leasing, or leasing to buy a vehicle

**Appendices**

- [Appendix B: Scenarios](#)
- [Appendix M: Answer Key](#)

**Teaching Suggestions and Student Tasks**

Review the various factors that influence the decision to buy, lease, or lease to buy a vehicle, including

- acquisition options
  - i) purchasing a new vehicle
  - ii) purchasing a used vehicle
  - iii) leasing a vehicle
  - iv) leasing to buy a vehicle
- intended use
- maintenance and repair costs
- fuel consumption
- insurance cost

Explain that it is always necessary to reassess our personal finances to make the best decision at that time.

**Task:** Distribute the scenario cards ([Appendix B: Scenarios](#)). Individually or in small groups, have students link the scenarios to a suggested vehicle acquisition option and vehicle type. Have them justify their decisions.

While suggested answers are provided in [Appendix M: Answer Key](#), students may give a good explanation in defence of a different answer. It is important for students to develop the habit of justifying a decision based on the factors above.

A

---

Accident  
Acquisition  
Additional coverage  
Additional warranty  
Administrative fee  
Airbag  
All purpose vehicle  
Amortization table  
Anticipated mileage  
Antifreeze  
At-fault accident  
Autopac

B

---

Bankruptcy  
Base price  
Block heater  
Book value  
Brakes  
Break the lease  
Buyback value

C

---

Car  
Cargo space  
Carrying capacity  
Cash purchase  
Claim for compensation  
Claim risk  
Collision  
Compact vehicle  
Company  
Contract  
Cooling system  
Co-signer  
Credit charges  
Credit purchase  
Credit score

---

---

**D**

---

Damages  
Dealership  
Deductible  
Demerit  
Depreciation rate  
Diagnostic test  
Differed payment  
Discount  
Documentation fees  
Down payment  
Driver Safety Rating  
Driver Safety Rating Scale  
Driver's licence  
Driving record

---

**E**

---

Electric vehicle  
Equity  
Excess value  
Excise tax on air conditioners  
Exhaust pipe  
Exhaust system

---

**F**

---

Fan belt  
Farm vehicle  
Filter  
Financial institution  
Fluid levels  
Fuel  
Fuel consumption  
Fuel economy  
Fuel tank

---

**G**

---

Gas  
Goods and services tax (GST)

---

**H**

---

Hourly rate  
Hybrid vehicle

---

**I**

---

Immobilizer  
Inspection certificate  
Insurance broker  
Insurance company  
Insurance premium

---

**L**

---

Labour  
Lay-up coverage  
Lease  
Lease to buy  
Licence plate  
Lien search  
Lights  
Loan  
Loss of use  
Lump sum payment

---

**M**

---

Maintenance  
Make of a vehicle  
Manitoba Public Insurance (MPI)  
Manufacturer  
Manufacturer's suggested retail price (MSRP)  
Mechanic  
Model of a vehicle  
Monthly leasing costs  
Monthly payment  
Motorist  
Muffler

---

**N**

---

Navigation system

---

**O**

---

Odometer  
Oil  
Oil change  
On approved credit (OAC)  
Operation of a vehicle  
Optional insurance  
Options package  
Original value of a vehicle  
Owner  
Ownership

---

**P**

---

Passenger vehicle  
Pleasure vehicle  
Previously leased vehicle  
Principal  
Private sale  
Provincial sales tax

---

**R**

---

Radiator  
Registration  
Reliability  
Remote starter  
Repair  
Resale value  
Residual cost  
Residual value  
Rims

---

**S**

---

Safety inspection  
Security feature  
Sedan  
Service station  
Shocks  
Sound system  
Sport utility vehicle (SUV)  
Steering wheel  
Sticker price  
Sub-compact vehicle  
Sun-roof

T

---

Territory  
Test drive  
Third party liability  
Tire  
Tire eco fee  
To be at fault  
To buy insurance  
To finance a vehicle  
To lease  
To register a vehicle  
To report a claim  
To tow  
To tune up  
Total purchase price  
Towing package  
Trade-in value  
Traffic light  
Trailer  
Transmission system  
Transportation fees  
Trunk  
Tune-up  
Type of vehicle

U

---

Use  
Used vehicle

V

---

Van  
Vehicle  
Vehicle condition

W

---

Warranty  
Wear and tear  
Windshield  
Windshield wiper blade  
Write off



## Scenario A

Julie just got her college diploma and will be starting her first job soon. She would like to be able to take a car to work, which is 20 km away. Given that she will be driving mostly in the city (average of 1000 km/month), she would like a car that is easy to park. She does not want monthly payments that are too high, given that she has to repay her student loans. She is also looking for a vehicle that is good on gas. She has saved \$1000 to buy a car and has no vehicle to trade in.

## Scenario B

Leo has a job in the city but lives in the country. He drives roughly 3000 km a month. He is looking for a vehicle to get to work and to transport his snowmobile in the winter. He does not want to spend too much money. He is prepared to do the vehicle maintenance himself, as he is mechanically inclined. He also has a vehicle with a trade-in value of \$2500.

## Scenario C

Mackenzie runs his own courier company. He therefore needs a vehicle with a lot of cargo space. He drives roughly 2000 km a month. His vehicle's trade-in value is \$3000.

## Scenario D

Lisa and Benjamin are married with three children. Their vehicle, which has a \$4500 trade-in value, no longer meets their needs. They would like a vehicle that is big enough for the entire family and the kids' sports equipment. For them, vehicle safety and reliability are the most important features. The family drives around 3000 km/month, including getting Lisa and Benjamin to and from work and taking the children to their various activities.

## Scenario E

Annika is attending a post-secondary institution. She would like to purchase her first vehicle to get from school to work four times a week. She estimates she travels around 100 km/week. Annika wants to keep her monthly and insurance payments as low as possible. Her friend is a mechanic and could help her with vehicle maintenance. Annika has only saved \$500, which she will use as a down payment.

## Scenario F

Chloe wants to purchase a vehicle with all the available technological options. Given that she takes the bus to work, she will only use her vehicle to go shopping and to visit her family, about 40 km/week. She is not interested in doing a lien search, diagnostic test, or safety inspection.

## Scenario G

Coralie has been retired for 15 years. She travels around 800 km/month between the city and her cottage. She is looking for a reliable vehicle with a warranty. She always takes her vehicle into the dealership for maintenance and repairs. She has nothing to offer as a trade-in because she leased her last vehicle.

## Scenario H

Heidi has a poor credit score. She just started a new job after being on social assistance for two years. There is no bus or other means of transportation to take her to work, so she needs a vehicle. Unfortunately, no dealership or financial institution will give her a loan.

Identify at least five options that you feel are important and rank them in order of importance. Justify your decision.

| Vehicle Features Table                                     |                                |      |
|--|--------------------------------|------|
| Options  | Options you feel are important | Rank |
| Standard (manual) transmission                             |                                |      |
| Automatic transmission                                     |                                |      |
| Fuel consumption rate                                      |                                |      |
| Airbag—driver/passenger/side                               |                                |      |
| Warranty   |                                |      |
| Remote starter   |                                |      |
| Block heater   |                                |      |
| Aluminium rims   |                                |      |
| Power seats  |                                |      |
| Disc brakes with four-wheel anti-lock braking system (ABS) |                                |      |
| Power windows  |                                |      |
| Heated steering wheel                                      |                                |      |
| Dual-zone electronic climate control                       |                                |      |
| Heated seats   |                                |      |
| LED headlights   |                                |      |
| Fog lights   |                                |      |
| Heated mirrors   |                                |      |
| Parking assistance system                                  |                                |      |
| Tinted windows   |                                |      |
| Sunroof  |                                |      |
| Winter tires   |                                |      |
| Lane keep assist system                                    |                                |      |
| All-season tires   |                                |      |
| Navigation system  |                                |      |
| Voice-activated telephone                                  |                                |      |
| Spoiler(s)   |                                |      |
| Other:   |                                |      |
| Other:   |                                |      |



## Sub-compact Vehicle

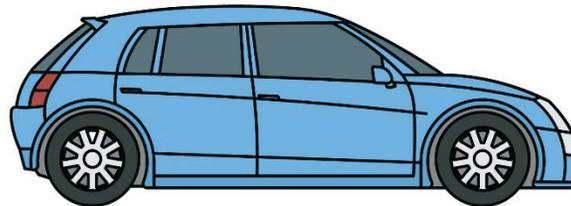
*New*

### Cash purchase

- Base price: \$18,635.00
- Options package: \$2,255.00
- Transportation and delivery charges: \$1,675.00
- Air conditioner excise tax ("air tax"): \$100.00
- Tire eco fee ("tire tax"): \$20.00

### Lease (3-year contract)

- Monthly payment: \$324.76
- Acquisition charges: \$450.00
- Residual value: 58%
- Annual mileage allowance: 24 000 km
- Additional charge: \$0.08/km



### Features

- 1.5 litre, 4-cylinder engine
- 15-inch wheels with hubcaps
- Multi-angle rear-view camera
- Heated seats
- Voice-activated telephone
- 4 doors
- Warranty: 5 years or 100 000 km
- 40-L fuel tank

### Fuel Consumption

- Highway: 5.9 L/100 km
- City: 7.9 L/100 km

*Used, 4 years old*

### Purchase

- Dealership: \$9790.00
- Private sale: \$8370.00
- Book value: \$9,080.00

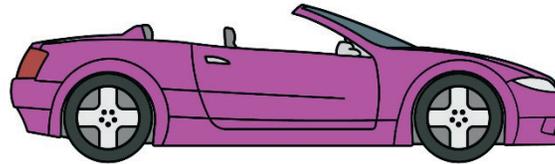
### Lease to buy (3-year contract)

- Initial administrative fee: \$395.00
- Biweekly payment: \$155.08
- End of contract administration charge: \$125.00

**Compact Vehicle**

*New*

*Used, 4 years old*



**Cash purchase**

**Purchase**

- Base price: \$26,745.00
- Options package: \$1,875.00
- Transportation and preparation charges: \$1,715.00
- Air conditioner excise tax ("air tax"): \$100.00
- Tire eco fee ("tire tax"): \$18.75

- Dealership: \$13,400.00
- Private sale: \$11,030.00
- Book value: \$12,250.00

**Lease (3-year contract)**

**Lease to buy (3-year contract)**

- Monthly payment: \$355.21
- Acquisition charges: \$520.00
- Residual value: 54%
- Annual mileage allowance: 20 000 km
- Additional charge: \$0.08/km

- Initial administrative fee: \$395.00
- Biweekly payment: \$213.06
- End of contract administration charge: \$125.00

**Features**

- 2.5 L 4-cylinder engine
- 16-inch aluminium alloy wheels
- 4-seat convertible
- Heated seats
- Six-speaker sound system with 7-inch screen, voice-activated telephone and backup camera
- 2 doors
- Warranty: 3 years or 60 000 km
- 64-L fuel tank

**Fuel Consumption**

- Highway: 5.7 L/100 km
- City: 8.1 L/100 km

## Sport Utility Vehicle (SUV)

*New*

### Cash purchase

- Base price: \$40,490.00
- Options package: \$2,750.00
- Transportation and preparation charges: \$1,895.00
- Air conditioner excise tax ("air tax"): \$100.00
- Tire eco fee ("tire tax"): \$14.00

### Lease (3-year contract)

- Monthly payment: \$594.00
- Acquisition charges: \$468.00
- Residual value: 55%
- Annual mileage allowance: 24 000 km
- Additional charge: \$0.16/km



### Features

- 6-cylinder engine
- 2 wheel drive
- Wheels: 17 x 6.5 inch steel, with hubcaps
- LED fog lamps
- 12-way power driver's seat
- Multimedia centre with 7-inch touch screen
- Warranty: 5 years or 100 000 km
- 93-L fuel tank

### Fuel Consumption

- Highway: 9.6 L/100 km
- City: 12.7 L/100 km

*Used, 4 years old*

### Purchase

- Dealership: \$21,900.00
- Private sale: \$18,875.00
- Book value: \$20,405.00

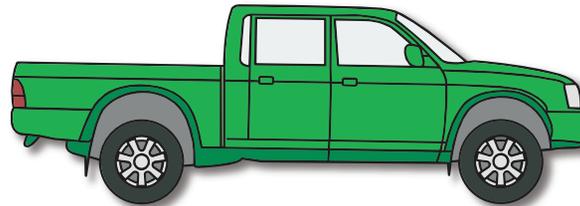
### Lease to buy (3-year contract)

- Initial administrative fee: \$395.00
- Biweekly payment: \$348.21
- End of contract administration charge: \$125.00

Truck

*New*

*Used, 4 years old*



Cash purchase

Purchase

- Base price: \$28,949.00
- Options package: \$895.00
- Transportation and preparation charges: \$1,800.00
- Air conditioner excise tax ("air tax"): \$100
- Tire eco fee ("tire tax"): \$28.00

- Dealership: \$15,980.00
- Private sale: \$12,925.00
- Book value: \$14,450.00

Lease (3-year contract)

Lease to buy (3-year contract)

- Monthly payment: \$535.00
- Acquisition charges: \$650.00
- Residual value: 55%
- Annual mileage allowance: 20 000 km
- Additional charge: \$0.16/km

- Initial administrative fee: \$395.00
- Biweekly payment: \$254.08
- End of contract administration charge: \$125.00

Features

- 17-inch silver steel rims
- 2.3-inch productivity screen
- Trailer stabilization function
- 6-speed electronic transmission with traction and sport settings
- 12-volt plug—front
- 12-volt plug—rear
- Pro trailer backup assist
- Trailer hitch
- 4 doors
- Warranty: 5 years or 100 000 km
- 87-L fuel tank

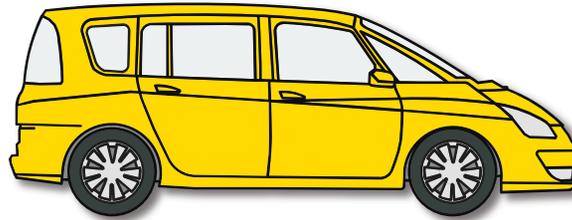
**Fuel Consumption**

- Highway: 9.3 L/100 km
- City: 12.3 L/100 km

**Van**

*New*

*Used, 4 years old*



**Cash purchase**

**Purchase**

- Base price: \$26,140.00
- Options package: \$1,450.00
- Transportation and preparation charges: \$1,895.00
- Air conditioner excise tax ("air tax"): \$100.00
- Tire eco fee ("tire tax"): \$16.50

- Dealership: \$16,495.00
- Private sale: \$14,500.00
- Book value: \$15,946.00

**Lease (3-year contract)**

**Lease to buy (3-year contract)**

- Monthly payment: \$501.00
- Acquisition charges: \$321.00
- Residual value: 56%
- Annual mileage allowance: 24 000 km
- Additional charge: \$0.16/km

- Initial administrative fee: \$395.00
- Biweekly payment: \$262.27
- End of contract administration charge: \$125.00

**Features**

- Highly fuel-efficient
- 3.6 L V6 engine
- Towing capacity of 1650 kg with the appropriate equipment
- 17-inch aluminium wheels
- Rear passenger DVD entertainment system
- Warranty: 5 years or 60 000 km
- 76-L fuel tank

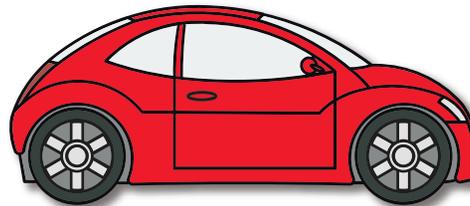
**Fuel Consumption**

- Highway: 9.4 L/100 km
- City: 13.7 L/100 km

## Electric Vehicle

*New*

*Used, 4 years old*



### Cash purchase

- Base price: \$35,145.00
- Options package: \$850.00
- Transportation and preparation charges: \$1,785.00
- Air conditioner excise tax ("air tax"): \$100.00
- Tire eco fee ("tire tax"): \$18.50

### Purchase

- Dealership: \$13,100.00
- Private sale: \$11,810.00
- Book value: \$12,455.00

### Lease (3-year contract)

- Monthly payment: \$734.17
- Acquisition charges: \$510.00
- Residual value: 38%
- Annual mileage allowance: 20 000 km
- Additional charge: \$0.12/km

### Features

- 109 hp engine
- Quiet operation
- LED dashboard
- Parking assistance system
- Smart key and remote starter
- Six airbags
- 480V fast charger
- Warranty: 8 years or 160 000 km

### Fuel Consumption

- Maximum driving range of 179 km

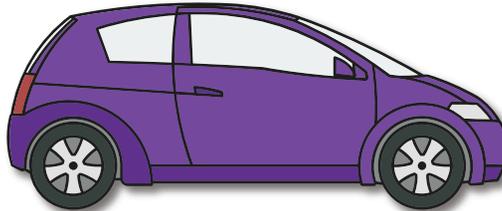
### Lease to buy (3-year contract)

- Initial administrative fee: \$395.00
- Biweekly payment: \$208.29
- End of contract administration charge: \$125.00

## Hybrid Vehicle

*New*

*Used, 4 years old*



### Cash purchase

### Purchase

- Base price: \$27,480.00
- Options package: \$1,215.00
- Freight and delivery charges: \$1,717.00
- Air conditioner excise tax ("air tax"): \$100.00
- Tire eco fee ("tire tax"): \$20.00

- Dealership: \$19,726.00
- Private sale: \$17,146.00
- Book value: \$18,436.00

### Lease (3-year contract)

### Lease to buy (3-year contract)

- Monthly payment: \$374.37
- Acquisition charges: \$620.00
- Residual value: 52%
- Annual mileage allowance: 20 000 km
- Additional charge: \$0.08/km

- Initial administrative fee: \$395.00
- Biweekly payment: \$313.62
- End of contract administration charge: \$125.00

### Features

- Sound system with 6.1-inch touch screen
- Heated sports seats
- Smart key and remote starter
- 15-inch alloy wheels
- LED headlights
- Eight airbags
- Warranty: 5 years or 100 000 km
- 43-L fuel tank

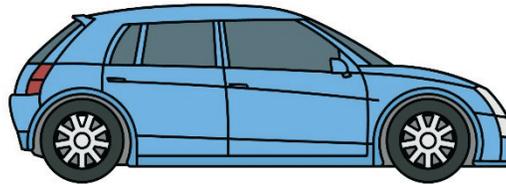
#### Fuel Consumption

- Highway: 4.4 L/100 km
- City: 4.6 L/100 km



| Amortization Table  |         |         |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|---------|---------|
| Monthly payment (principal and interest) per \$1000 of loan |         |         |         |         |         |         |         |
| Interest Rate   | 1 year  | 2 years | 3 years | 4 years | 5 years | 6 years | 7 years |
| 0.50%   | \$83.56 | \$41.88 | \$27.99 | \$21.05 | \$16.88 | \$14.10 | \$12.12 |
| 1.00%   | \$83.79 | \$42.10 | \$28.21 | \$21.26 | \$17.09 | \$14.32 | \$12.33 |
| 1.50%   | \$84.02 | \$42.32 | \$28.43 | \$21.48 | \$17.31 | \$14.53 | \$12.55 |
| 2.00%   | \$84.24 | \$42.54 | \$28.64 | \$21.70 | \$17.53 | \$14.75 | \$12.77 |
| 2.50%   | \$84.47 | \$42.32 | \$28.86 | \$21.92 | \$17.75 | \$14.97 | \$12.99 |
| 3.00%   | \$84.70 | \$42.98 | \$29.08 | \$22.14 | \$17.97 | \$15.19 | \$13.21 |
| 3.50%   | \$84.93 | \$43.21 | \$29.30 | \$21.92 | \$18.19 | \$15.42 | \$13.44 |
| 4.00%   | \$85.16 | \$43.43 | \$29.53 | \$22.58 | \$18.42 | \$15.65 | \$13.67 |
| 4.50%   | \$85.39 | \$43.65 | \$29.75 | \$22.81 | \$18.65 | \$15.88 | \$13.90 |
| 5.00%   | \$85.62 | \$43.88 | \$29.98 | \$23.03 | \$18.87 | \$16.11 | \$14.14 |
| 5.50%   | \$85.85 | \$44.10 | \$30.20 | \$23.36 | \$19.10 | \$16.34 | \$14.37 |
| 6.00%   | \$86.07 | \$44.33 | \$30.43 | \$23.49 | \$19.34 | \$16.58 | \$14.61 |
| 6.50%   | \$86.30 | \$44.56 | \$30.66 | \$23.72 | \$19.57 | \$16.81 | \$14.85 |
| 7.00%   | \$86.53 | \$44.78 | \$30.88 | \$23.95 | \$19.81 | \$17.05 | \$15.01 |
| 7.50%   | \$86.76 | \$45.01 | \$31.11 | \$24.19 | \$20.05 | \$17.29 | \$15.34 |
| 8.00%   | \$86.99 | \$45.24 | \$31.34 | \$24.42 | \$20.28 | \$17.54 | \$15.59 |





**Sub-compact Vehicle**

*New*

*Used*

**Cash purchase**

**Total amount paid: \$21,487.20**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$288.42

Interest charges: \$1,778.72

**Total amount paid: \$23,265.92**

**Cash purchase after a 3-year lease**

Monthly payment: \$363.73

**Total amount paid: \$28,784.50**

**Purchase with a 3-year loan at an interest rate of 6% after a 3-year lease**

Residual value after tax: \$14,736.18

Monthly payment: \$448.42

Interest charges: \$1,407.01

**Total amount paid: \$30,191.51**

**Purchase through a dealership with a 3-year loan at an interest rate of 6%**

Loan amount: \$10,964.80

Monthly payment: \$333.66

Interest charges: \$1,046.92

**Total amount paid: \$12,011.72**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$9,212.59

Monthly payment: \$280.34

Interest charges: \$879.62

**Total amount paid: \$10,092.21**

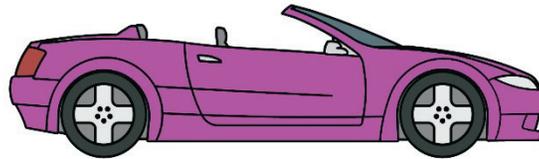
**Dealership lease buyout with a 2-year contract**

Vehicle cost: \$10,964.80

Biweekly payment: \$173.69

Financing costs: \$3,102.99

**Total amount paid: \$14,067.79**



**Compact Vehicle**

*New*

*Used*

**Cash purchase**

**Total amount paid: \$30,188.20**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$420.58  
Interest charges: \$2,593.83

**Total amount paid: \$32,782.03**

**Cash purchase after a 3-year lease**

Monthly payment: \$397.84  
**Total amount paid: \$34,302.10**

**Purchase with a 3-year loan at an interest rate of 6% at the end of a 3-year lease**

Residual value after tax: \$18,418.43  
Monthly payment: \$560.47  
Interest charges: \$1,758.59  
**Total amount paid: \$30,060.69**

**Purchase through a dealership with a 3-year loan at an interest rate of 6%**

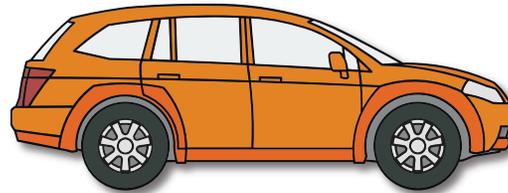
Loan amount: \$15,008.00  
Monthly payment: \$456.69  
Interest charges: \$1,432.96  
**Total amount paid: \$16,440.96**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$12,094.49  
Monthly payment: \$368.04  
Interest charges: \$1,154.78  
**Total amount paid: \$13,249.27**

**A dealership lease buyout with a 2-year contract**

Vehicle cost: \$15,008.00  
Biweekly payment: \$238.63  
Finance charges: \$4,124.92  
**Total amount paid: \$19,132.92**



*New*

Sport Utility Vehicle (SUV)

*Used*

**Cash purchase**

**Total amount paid: \$46,758.88**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$672.29  
Interest charges: \$4,146.17

**Total amount paid: \$50,905.05**

**Cash purchase at the end of a 3-year lease**

Monthly payment: \$665.28  
**Total amount paid: \$52,795.46**

**Purchase with a 3-year loan at an interest rate of 6% at the end of a 3-year lease**

Residual value after tax: \$27,873.38  
Monthly payment: \$848.19  
Interest charges: \$2,661.35  
**Total amount paid: \$55,456.81**

**Purchase through a dealership with a 3-year loan at an interest rate of 6%**

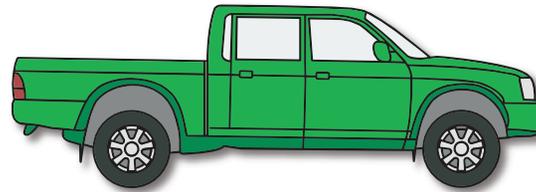
Loan amount: \$24,528.00  
Monthly payment: \$746.39  
Interest charges: \$2,341.93  
**Total amount paid: \$26,869.93**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$20,510.34  
Monthly payment: \$624.13  
Interest charges: \$1,958.33  
**Total amount paid: \$22,468.67**

**A dealership lease buyout with a 2-year contract**

Vehicle Cost: \$24,528.00  
Biweekly payment: \$390.00  
Finance charges: \$6,411.63  
**Total amount paid: \$30,939.63**



*New*

Truck

*Used*

**Cash purchase**

**Total amount paid: \$31,664.64**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$443.01  
Interest charges: \$2,732.14

**Total amount paid: \$34,396.78**

**Cash purchase at the end of a 3-year lease**

Monthly payment: \$599.20  
**Total amount paid: \$43,371.95**

**Purchase with a 3-year loan at an interest rate of 6% at the end of a 3-year lease**

Residual value after tax: \$19,571.55  
Monthly payment: \$595.56  
Interest charges: \$1,868.69  
**Total amount paid: \$45,240.64**

**Purchase through a dealership sale with a 3-year loan at an interest rate of 6%**

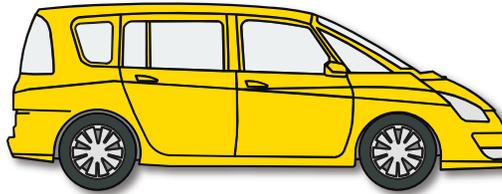
Loan amount: \$17,897.60  
Monthly payment: \$544.62  
Interest charges: \$1,708.86  
**Total amount paid: \$19,606.46**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$14,143.49  
Monthly payment: \$430.39  
Interest charges: \$1,350.42  
**Total amount paid: \$15,493.91**

**A dealership lease buyout with a 2-year contract**

Vehicle cost: \$17,897.60  
Biweekly payment: \$284.57  
Finance charges: \$4,818.83  
**Total amount paid: \$22,716.43**



*New*

Van

*Used*

**Cash purchase**

**Total amount paid: \$29,233.68**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$406.08  
Interest charges: \$2,504.41

**Total amount paid: \$31,738.09**

**Cash purchase at the end of a 3-year lease**

Monthly payment: \$561.12  
**Total amount paid: \$39,591.38**

**Purchase with a 3-year loan at an interest rate of 6% at the end of a 3-year lease**

Residual value after tax: \$18,566.06  
Monthly payment: \$564.97  
Interest charges: \$1,772.69  
**Total amount paid: \$41,364.07**

**Purchase through a dealership with a 3-year loan at an interest rate of 6%**

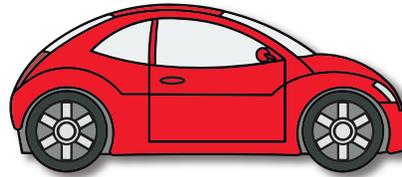
Loan amount: \$18,474.40  
Monthly payment: \$562.18  
Interest charges: \$1,763.94  
**Total amount paid: \$20,238.34**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$15,823.21  
Monthly payment: \$481.50  
Interest charges: \$1,510.80  
**Total amount paid: \$17,334.01**

**A dealership lease buyout with a 2-year contract**

Vehicle cost: \$18,474.40  
Biweekly payment: \$293.74  
Finance charges: \$4,957.51  
**Total amount paid: \$23,431.91**



*New*

**Electric Vehicle**

*Used*

**Cash purchase**

**Total amount paid: \$38,526.32**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$547.24  
Interest charges: \$3,374.95

**Total amount paid: \$41,901.27**

**Cash purchase at the end of a 3-year lease**

Monthly payment: \$822.27  
**Total amount paid: \$47,551.74**

**Purchase with a 3-year loan at an interest rate of 6% at the end of a 3-year lease**

Residual value after tax: \$16,129.60  
Monthly payment: \$490.82  
Interest charges: \$1,540.05  
**Total amount paid: \$49,091.79**

**Purchase through a dealership with a 3-year loan at an interest rate of 6%**

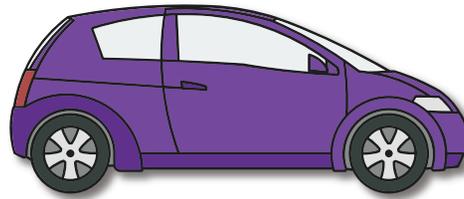
Loan amount: \$14,672.00  
Monthly payment: \$446.47  
Interest charges: \$1,400.88  
**Total amount paid: \$16,072.88**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$12,888.84  
Monthly payment: \$392.21  
Interest charges: \$1,230.63  
**Total amount paid: \$14,119.47**

**A dealership lease buyout with a 2-year contract**

Vehicle cost: \$14,672.00  
Biweekly payment: \$233.28  
Finance charges: \$4,044.21  
**Total amount paid: \$18,716.21**



*New*

Hybrid Vehicle

*Used*

**Cash purchase**

**Total amount paid: \$30,275.84**

**Purchase with a 6-year loan at an interest rate of 3%**

Monthly payment: \$421.92

Interest charges: \$2,602.04

**Total amount paid: \$32,877.88**

**Cash purchase at the end of a 3-year lease**

Monthly payment: \$419.29

**Total amount paid: \$34,278.04**

**Purchase with a 3-year loan at an interest rate of 6% at the end of a 3-year lease**

Residual value after tax: \$17,781.84

Monthly payment: \$541.10

Interest charges: \$1,697.81

**Total amount paid: \$35,975.84**

**Purchase through a dealership with a 3-year loan at an interest rate of 6%**

Loan amount: \$22,093.12

Monthly payment: \$672.29

Interest charges: \$2,109.45

**Total amount paid: \$24,202.57**

**Purchase through a private sale with a 3-year loan at an interest rate of 6%**

Loan amount: \$18,643.51

Monthly payment: \$567.32

Interest charges: \$1,780.08

**Total amount paid: \$20,423.59**

**A dealership lease buyout with a 2-year contract**

Vehicle cost: \$22,093.12

Biweekly payment: \$351.25

Finance charges: \$5,824.72

**Total amount paid: \$27,917.84**



| <b>Vehicle Purchase Taxes</b>                   |  |            |
|---|--|------------|
|   | <b>PST</b>   | <b>GST</b> |
| Purchase of a new vehicle                       | PST  | GST        |
| Purchase of a used vehicle<br>(at a dealership) | PST  | GST        |
| Purchase of a used vehicle<br>(private sale)    | PST calculated based<br>on the higher of the<br>book value and<br>purchase price | No GST     |
| Inspection certificate                          | No PST   | GST        |
| Materials and labour                            | PST  | GST        |
| Lien search                                     | No PST   | No GST     |



## Maintenance and Repairs

Determine the maintenance and repair costs in the following situations:

1. Céline takes her vehicle to the garage for maintenance. She needs an oil change and a new air filter. The labour charge is \$75/hour. The following table provides the maintenance details.

| Materials and labour | Details         | Cost      |
|----------------------|-----------------|-----------|
| Oil change           | Filters and oil | \$45      |
| Labour               | 0.75 hours      | \$75/hour |

Calculate the total maintenance cost after taxes.

2. Nathalie takes her vehicle to the garage for a tune-up and winter tire change. The maintenance includes the following:

| Materials and labour               | Details                   | Cost        |
|------------------------------------|---------------------------|-------------|
| Windshield wiper blade replacement | 2 windshield wiper blades | \$18/pair   |
| Oil change                         | 5 litres oil              | \$4/litre   |
|                                    | 1 filter                  | \$20/filter |
| Winter tire installation           | 4 tires                   | \$150/tire  |
| Labour                             | 3.5 hours                 | \$95/hour   |

Calculate the total maintenance cost after taxes.

3. Philip takes his vehicle to the garage for maintenance that includes the following:

| <b>Materials and labour</b> | <b>Details</b>         | <b>Cost</b>    |
|-----------------------------|------------------------|----------------|
| Oil change                  | 4 litres oil           | \$2.50/litre   |
|                             | 1 filter               | \$21.00/filter |
| Air filter change           | 1 filter               | \$7.00/filter  |
| Antifreeze replacement      | 8 litres of antifreeze | \$2.00/litre   |
| Fan belt replacement        | 2 belts                | \$29/belt      |
| Labour                      | 1 hour 15 minutes      | \$60/hour      |

Calculate the total maintenance cost after taxes.

4. Kris takes his vehicle to the garage for annual maintenance. He needs 4 litres of oil at \$4.05/L, an oil filter that costs \$25.60, and windshield wiper blades that cost \$19.75/pair. The job requires 45 minutes of labour at \$65/hour. Calculate the total maintenance cost after taxes.
5. Scott takes his vehicle to the garage for exhaust system repairs. The repair includes a new exhaust pipe that costs \$250 and a new muffler costing \$150. The mechanic also discovers that the vehicle needs two headlight bulbs that cost \$10 each. The mechanic does all the repairs in 1 hour 40 minutes. Labour is \$85/hour. Calculate the total maintenance cost after taxes.

*Information about new vehicles*

*Determine the depreciation for three vehicles over their first three years*

Sub-compact Vehicle

Total price before taxes  
**\$19,185.00**



Compact Vehicle

Total price before taxes  
**\$26,953.75**



Truck

Total price before taxes  
**\$28,272.00**



Sport Utility Vehicle (SUV)

Total price before taxes  
**\$41,749.00**



Hybrid Vehicle

Total price before taxes  
**\$27,032.00**



Electric Vehicle

Total price before taxes  
**\$34,398.50**



Van

Total price before taxes  
**\$26,101.50**



**Vehicle:** \_\_\_\_\_

| Year                       | Calculations | Depreciation Amount | Residual Value |
|----------------------------|--------------|---------------------|----------------|
|                            |              |                     |                |
|                            |              |                     |                |
|                            |              |                     |                |
| <b>Depreciation Amount</b> |              |                     |                |

**Vehicle:** \_\_\_\_\_

| Year                       | Calculations | Depreciation Amount | Residual Value |
|----------------------------|--------------|---------------------|----------------|
|                            |              |                     |                |
|                            |              |                     |                |
|                            |              |                     |                |
| <b>Depreciation Amount</b> |              |                     |                |

**Vehicle:** \_\_\_\_\_

| Year                       | Calculations | Depreciation Amount | Residual Value |
|----------------------------|--------------|---------------------|----------------|
|                            |              |                     |                |
|                            |              |                     |                |
|                            |              |                     |                |
| <b>Depreciation Amount</b> |              |                     |                |



### Fuel Consumption

1. a) Determine the fuel consumption of various vehicles for each of the following trips using the odometer readings.

| Vehicle | Initial odometer reading (km) | Final odometer reading (km) | Distance travelled (km) | Amount of fuel used (L) | Fuel consumption (L/100 km) |
|---------|-------------------------------|-----------------------------|-------------------------|-------------------------|-----------------------------|
| A       | 71 416.0                      | 71 739.0                    |                         | 26.2                    |                             |
| B       | 481 758.4                     | 482 943.0                   |                         | 54.9                    |                             |
| C       | 23 165.2                      | 23 721.9                    |                         | 70.7                    |                             |
| D       | 135 714.8                     | 136 028.3                   |                         | 43.1                    |                             |
| E       | 87 158.1                      | 88 031.4                    |                         | 68.9                    |                             |
| F       | 15 632.1                      | 16 341.8                    |                         | 87.3                    |                             |

- b) Complete the following sentences:

Letter \_\_\_\_\_ corresponds to the vehicle with the lowest fuel consumption.

Letter \_\_\_\_\_ corresponds to the vehicle with the highest fuel consumption.

- c) The table below shows the fuel consumption of the various vehicles. Match the letter (A–F) with the appropriate vehicle.

| Vehicle Type                |         | Sub-compact Vehicle | Compact Vehicle | Sport Utility Vehicle (SUV) | Truck | Van  | Hybrid Vehicle |
|-----------------------------|---------|---------------------|-----------------|-----------------------------|-------|------|----------------|
| Fuel Consumption (L/100 km) | Highway | 5.9                 | 5.7             | 9.6                         | 9.3   | 9.4  | 4.4            |
|                             | City    | 7.9                 | 8.1             | 12.7                        | 12.3  | 13.7 | 4.6            |
| Vehicle Letter              |         |                     |                 |                             |       |      |                |

2. a) While on vacation in Montreal, Susan plans to rent a vehicle and expects to drive 800 km in the city and 1000 km on the highway. The table below shows the different rental vehicles available. If fuel costs \$1.129 a litre, calculate the total fuel cost for each rental vehicle available.

| Vehicle type                           |         | Sub-compact vehicle | Compact vehicle | Sport utility vehicle (SUV) | Truck | Van  | Hybrid vehicle |
|--|---------|---------------------|-----------------|-----------------------------|-------|------|----------------|
| Fuel consumption (L/100 km)            | Highway | 5.9                 | 5.7             | 9.6                         | 9.3   | 9.4  | 4.4            |
|  | City    | 7.9                 | 8.1             | 12.7                        | 12.3  | 13.7 | 4.6            |
| Amount of fuel used in the city (L)    |         |                     |                 |                             |       |      |                |
| Amount of fuel used on the highway (L) |         |                     |                 |                             |       |      |                |
| Total amount of fuel used (L)          |         |                     |                 |                             |       |      |                |
| Total cost (\$)                        |         |                     |                 |                             |       |      |                |

- b) Based on your calculations, which vehicle is more fuel efficient?

3. a) Indicate the maximum number of highway kilometres that each vehicle can travel without stopping for gas, and the cost of a fill-up.

| Vehicle type                |         | Sub-compact vehicle | Compact vehicle | Sport utility vehicle (SUV) | Truck | Van  | Hybrid vehicle |
|-----------------------------|---------|---------------------|-----------------|-----------------------------|-------|------|----------------|
| Fuel consumption (L/100 km) | Highway | 5.9                 | 5.7             | 9.6                         | 9.3   | 9.4  | 4.4            |
|                             | City    | 7.9                 | 8.1             | 12.7                        | 12.3  | 13.7 | 4.6            |
| Fuel tank size              |         | 40                  | 64              | 93                          | 87    | 76   | 43             |
| Maximum distance (km)       |         |                     |                 |                             |       |      |                |
| Cost of fill-up (\$)        |         |                     |                 |                             |       |      |                |

- b) Explain how these calculations can influence your choice of vehicle. Justify your answer with a positive and a negative decision for two different vehicle types.



## Sheet A-1

**Insurance Premium****Customer Information**

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 5%                        |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

**Vehicle Information**

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2014                            |
| <b>Model</b>             | Compact Vehicle                 |
| <b>Body Style</b>        | 4 doors                         |
| <b>Other Information</b> | 4 cylinders, gas, 2-wheel drive |

**Insurance Policy Information**

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

**Warranty Information**

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$500       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

**Estimated Cost**

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,648 |
|-----------------------------|---------|

## Sheet A-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 5%                        |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2014                            |
| <b>Model</b>             | Compact Vehicle                 |
| <b>Body Style</b>        | 4 doors                         |
| <b>Other Information</b> | 4 cylinders, gas, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$100       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,991 |
|-----------------------------|---------|

## Sheet B-1

**Insurance Premium****Customer Information**

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 30%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

**Vehicle Information**

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2015                            |
| <b>Model</b>             | Compact Vehicle                 |
| <b>Body Style</b>        | 4 doors                         |
| <b>Other Information</b> | 4 cylinders, gas, 2-wheel drive |

**Insurance Policy Information**

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

**Warranty Information**

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$200       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

**Estimated Cost**

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,357 |
|-----------------------------|---------|

## Sheet B-2

**Insurance Premium****Customer Information**

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 30%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

**Vehicle Information**

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2011                            |
| <b>Model</b>             | Compact Vehicle                 |
| <b>Body Style</b>        | 4 doors                         |
| <b>Other Information</b> | 4 cylinders, gas, 2-wheel drive |

**Insurance Policy Information**

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

**Warranty Information**

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$200       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

**Estimated Cost**

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,026 |
|-----------------------------|---------|

## Sheet C–1

**Insurance Premium****Customer Information**

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 15%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

**Vehicle Information**

---

|                          |                         |
|--------------------------|-------------------------|
| <b>Type</b>              | Passenger Vehicle       |
| <b>Year</b>              | 2015                    |
| <b>Model</b>             | Compact Vehicle         |
| <b>Body Style</b>        | 4 doors                 |
| <b>Other Information</b> | Electric, 2-wheel drive |

**Insurance Policy Information**

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

**Warranty Information**

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$200       |
| <b>Basic Third-Party Liability Coverage</b> | \$5,000,000 |

**Estimated Cost**

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,696 |
|-----------------------------|---------|

## Sheet C-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 15%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                         |
|--------------------------|-------------------------|
| <b>Type</b>              | Passenger Vehicle       |
| <b>Year</b>              | 2015                    |
| <b>Model</b>             | Compact Vehicle         |
| <b>Body Style</b>        | 4 doors                 |
| <b>Other Information</b> | Electric, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |           |
|---|-----------|
| <b>Deductible</b>                           | \$200     |
| <b>Basic Third-Party Liability Coverage</b> | \$200,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,665 |
|-----------------------------|---------|

## Sheet D-1

**Insurance Premium****Customer Information**

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 10%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

**Vehicle Information**

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2017                            |
| <b>Model</b>             | Sport Utility Vehicle (SUV)     |
| <b>Body Style</b>        | 5 doors                         |
| <b>Other Information</b> | 6 cylinders, gas, 4-wheel drive |

**Insurance Policy Information**

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

**Warranty Information**

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$300       |
| <b>Basic Third-Party Liability Coverage</b> | \$2,000,000 |

**Estimated Cost**

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,474 |
|-----------------------------|---------|

## Sheet D-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 10%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2017                            |
| <b>Model</b>             | Sport Utility Vehicle (SUV)     |
| <b>Body Style</b>        | 5 doors                         |
| <b>Other Information</b> | 6 cylinders, gas, 4-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$300       |
| <b>Basic Third-Party Liability Coverage</b> | \$2,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,234 |
|-----------------------------|---------|

## Sheet E-1

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 33%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |  |
|--------------------------|--|
| <b>Type</b>              | Passenger Vehicle                        |
| <b>Year</b>              | 2017                                     |
| <b>Model</b>             | Sport Utility Vehicle (SUV)              |
| <b>Body Style</b>        | 5 doors                                  |
| <b>Other Information</b> | 4 cylinders, gas/electric, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$100       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,694 |
|-----------------------------|---------|

## Sheet E-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 0%                        |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |  |
|--------------------------|--|
| <b>Type</b>              | Passenger Vehicle                        |
| <b>Year</b>              | 2017                                     |
| <b>Model</b>             | Sport Utility Vehicle (SUV)              |
| <b>Body Style</b>        | 5 doors                                  |
| <b>Other Information</b> | 4 cylinders, gas/electric, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$100       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$2,449 |
|-----------------------------|---------|

## Sheet F-1

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 20%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Type</b>              | Truck                              |
| <b>Year</b>              | 2017                               |
| <b>Model</b>             | Truck                              |
| <b>Body Style</b>        | Light Pickup                       |
| <b>Other Information</b> | 8 cylinders, diesel, 4-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Truck               |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$200       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,520 |
|-----------------------------|---------|

## Sheet F-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 20%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Type</b>              | Truck                              |
| <b>Year</b>              | 2017                               |
| <b>Model</b>             | Truck                              |
| <b>Body Style</b>        | Light Pickup                       |
| <b>Other Information</b> | 8 cylinders, diesel, 4-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Truck               |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$200       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,496 |
|-----------------------------|---------|

## Sheet G-1

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 28%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2017                            |
| <b>Model</b>             | Van                             |
| <b>Body Style</b>        | Passenger Van                   |
| <b>Other Information</b> | 6 cylinders, gas, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$100       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |
| <b>Loss of Use Protection— Level 2</b>      | \$68.00     |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,990 |
|-----------------------------|---------|

## Sheet G-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 28%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2017                            |
| <b>Model</b>             | Van                             |
| <b>Body Style</b>        | Passenger Van                   |
| <b>Other Information</b> | 6 cylinders, gas, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$100       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,843 |
|-----------------------------|---------|

## Sheet H-1

## Insurance Premium

## Customer Information

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 10%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

## Vehicle Information

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2018                            |
| <b>Model</b>             | Compact Vehicle                 |
| <b>Body Style</b>        | Convertible                     |
| <b>Other Information</b> | 3 cylinders, gas, 2-wheel drive |

## Insurance Policy Information

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

## Warranty Information

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$100       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |
| <b>New Vehicle Protection</b>               | \$18,000    |

## Estimated Cost

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$2,128 |
|-----------------------------|---------|

## Sheet H-2

## Insurance Premium

### Customer Information

---

|                         |                           |
|-------------------------|---------------------------|
| <b>Postal Code</b>      | R3G 0T3                   |
| <b>Autopac Discount</b> | 10%                       |
| <b>Terms of Payment</b> | Lump-sum (single) payment |

### Vehicle Information

---

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Type</b>              | Passenger Vehicle               |
| <b>Year</b>              | 2018                            |
| <b>Model</b>             | Compact Vehicle                 |
| <b>Body Style</b>        | Convertible                     |
| <b>Other Information</b> | 3 cylinders, gas, 2-wheel drive |

### Insurance Policy Information

---

|  |                     |
|--|---------------------|
| <b>Vehicle Registration Classification</b> | Passenger Vehicle   |
| <b>Insurance Rate Group</b>                | All-Purpose Vehicle |

### Warranty Information

---

|   |             |
|---|-------------|
| <b>Deductible</b>                           | \$200       |
| <b>Basic Third-Party Liability Coverage</b> | \$1,000,000 |

### Estimated Cost

---

|                             |         |
|-----------------------------|---------|
| <b>Total Insurance Cost</b> | \$1,975 |
|-----------------------------|---------|

**Compare sheets 1 and 2 of each station (A–H) and complete the following sentences:**

---

**Sheet A**

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_

\_\_\_\_\_.

**Sheet B**

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_

\_\_\_\_\_.

**Sheet C**

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_

\_\_\_\_\_.

**Sheet D**

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_

\_\_\_\_\_.

## Sheet E

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_  
\_\_\_\_\_.

## Sheet F

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_  
\_\_\_\_\_.

## Sheet G

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_  
\_\_\_\_\_.

## Sheet H

The factor that is different is \_\_\_\_\_.

The insurance cost is higher when \_\_\_\_\_  
\_\_\_\_\_.

## Section 2.1

| Vehicle Type                           | Sub-Compact Vehicle | Compact Vehicle    | Sport Utility Vehicle (SUV) | Truck              | Van                | Electric Vehicle   | Hybrid Vehicle     |
|--|---------------------|--------------------|-----------------------------|--------------------|--------------------|--------------------|--------------------|
| Base Price                             | \$18,635.00         | \$26,745.00        | \$40,490.00                 | \$28,949.00        | \$26,140.00        | \$35,145.00        | \$27,480.00        |
| Options                                | \$2,255.00          | \$1,875.00         | \$2,750.00                  | \$895.00           | \$1,450.00         | \$850.00           | \$1,215.00         |
| Transportation and Preparation Charges | \$1,675.00          | \$1,715.00         | \$1,895.00                  | \$1,800.00         | \$1,895.00         | \$1,785.00         | \$1,717.00         |
| Air Conditioner Excise Tax ("air tax") | \$100.00            | \$100.00           | \$100.00                    | \$100.00           | \$100.00           | \$100.00           | \$100.00           |
| Tire Eco Fee ("tire tax")              | \$20.00             | \$18.75            | \$14.00                     | \$28.00            | \$16.50            | \$18.50            | \$20.00            |
| Trade-in Value                         | \$3,500.00          | \$3,500.00         | \$3,500.00                  | \$3,500.00         | \$3,500.00         | \$3,500.00         | \$3,500.00         |
| <b>Total Price</b>                     | \$19,185.00         | \$26,953.75        | \$41,749.00                 | \$28,272.00        | \$26,101.50        | \$34,398.50        | \$27,032.00        |
| Taxes                                  | \$2,302.20          | \$3,234.45         | \$5,009.88                  | \$3,392.64         | \$3,132.18         | \$4,127.82         | \$3,243.84         |
| <b>Total Cost</b>                      | <b>\$21,487.20</b>  | <b>\$30,188.20</b> | <b>\$46,758.88</b>          | <b>\$31,664.64</b> | <b>\$29,233.68</b> | <b>\$38,526.32</b> | <b>\$30,275.84</b> |

## Section 2.2

| Down Payment             | \$2,500.00          |                 |                             |             |             |                  |                |
|--------------------------|---------------------|-----------------|-----------------------------|-------------|-------------|------------------|----------------|
| Vehicle Type             | Sub-Compact Vehicle | Compact Vehicle | Sport Utility Vehicle (SUV) | Truck       | Van         | Electric Vehicle | Hybrid Vehicle |
| Total Cost               | \$21,487.20         | \$30,188.20     | \$46,758.88                 | \$31,664.64 | \$29,233.68 | \$38,526.32      | \$30,275.84    |
| Down Payment             | \$2,500.00          | \$2,500.00      | \$2,500.00                  | \$2,500.00  | \$2,500.00  | \$2,500.00       | \$2500.00      |
| Loan Amount              | \$18,987.20         | \$27,688.20     | \$44,258.88                 | \$29,164.64 | \$26,733.68 | \$36,026.32      | \$27,775.84    |
| Loan Term (years)        | 6                   |                 |                             |             |             |                  |                |
| Interest Rate            | 3%                  |                 |                             |             |             |                  |                |
| Amount paid per \$1000   | \$15.19             |                 |                             |             |             |                  |                |
| Monthly Payment          | \$288.42            | \$420.58        | \$672.29                    | \$443.01    | \$406.08    | \$547.24         | \$421.92       |
| Total Cost of Loan       | \$20,765.92         | \$30,282.03     | \$48,405.05                 | \$31,896.78 | \$29,238.09 | \$39,401.27      | \$30,377.88    |
| Interest Charges         | \$1,778.72          | \$2,593.83      | \$4,146.17                  | \$2,732.14  | \$2,504.41  | \$3,374.95       | \$2,602.04     |
| <b>Total Amount Paid</b> | \$23,265.92         | \$32,782.03     | \$50,905.05                 | \$34,396.78 | \$31,738.09 | \$41,901.27      | \$32,877.88    |
| Loan Term (years)        | 3                   |                 |                             |             |             |                  |                |
| Interest Rate            | 3%                  |                 |                             |             |             |                  |                |
| Amount paid per \$1000   | \$29.08             |                 |                             |             |             |                  |                |
| Monthly Payment          | \$552.15            | \$805.17        | \$1,287.05                  | \$848.11    | \$777.42    | \$1,047.65       | \$807.72       |
| Total Cost of Loan       | \$19,877.32         | \$28,986.22     | \$46,333.74                 | \$30,531.88 | \$27,986.95 | \$37,715.23      | \$29,077.97    |
| Interest Charges         | \$890.12            | \$1,298.02      | \$2,074.86                  | \$1,367.24  | \$1,253.27  | \$1,688.91       | \$1,302.13     |
| <b>Total Amount Paid</b> | \$22,377.32         | \$31,486.22     | \$48,833.74                 | \$33,031.88 | \$30,486.95 | \$40,215.23      | \$31,577.97    |

|                          |                            |                        |                                    |                    |                    |                         |                       |
|--------------------------|----------------------------|------------------------|------------------------------------|--------------------|--------------------|-------------------------|-----------------------|
| Down Payment             | \$2,500.00                 |                        |                                    |                    |                    |                         |                       |
| <b>Vehicle Type</b>      | <b>Sub-Compact Vehicle</b> | <b>Compact Vehicle</b> | <b>Sport Utility Vehicle (SUV)</b> | <b>Truck</b>       | <b>Van</b>         | <b>Electric Vehicle</b> | <b>Hybrid Vehicle</b> |
| Total Cost               | \$21,487.20                | \$30,188.20            | \$46,758.88                        | \$31,664.64        | \$29,233.68        | \$38,526.32             | \$30,275.84           |
| Down Payment             | \$2,500.00                 | \$2,500.00             | \$2,500.00                         | \$2,500.00         | \$2,500.00         | \$2,500.00              | \$2500.00             |
| Loan Amount              | \$18,987.20                | \$27,688.20            | \$44,258.88                        | \$29,164.64        | \$26,733.68        | \$36,026.32             | \$27,775.84           |
| Loan Term (years)        | 3                          |                        |                                    |                    |                    |                         |                       |
| Interest Rate            | 6%                         |                        |                                    |                    |                    |                         |                       |
| Amount paid per \$1000   | \$30.43                    |                        |                                    |                    |                    |                         |                       |
| Monthly Payment          | \$577.78                   | \$842.55               | \$1,346.80                         | \$887.48           | \$813.51           | \$1,096.28              | \$845.22              |
| Total Cost of Loan       | \$20,800.10                | \$30,331.87            | \$48,484.72                        | \$31,949.28        | \$29,286.21        | \$39,466.11             | \$30,427.88           |
| Interest Charges         | \$1,812.90                 | \$2,643.67             | \$4,225.84                         | \$2,784.64         | \$2,552.53         | \$3,439.79              | \$2,652.04            |
| <b>Total Amount Paid</b> | <b>\$23,300.10</b>         | <b>\$32,831.87</b>     | <b>\$50,984.72</b>                 | <b>\$34,449.28</b> | <b>\$31,786.21</b> | <b>\$41,966.11</b>      | <b>\$32,927.88</b>    |

**Amortization Table 1**

|               |            |
|---------------|------------|
| Down Payment  | \$2,500.00 |
| Term (years)  | 6          |
| Interest Rate | 3%         |

**Sub-compact Vehicle**

Monthly payment **\$288.42**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$18,987.20         | \$2,500.00 |
| 1     | \$288.42        | \$47.47                             | \$240.95                             | \$18,746.25         | \$2,740.95 |
| 2     | \$288.42        | \$46.87                             | \$241.55                             | \$18,504.70         | \$2,982.50 |
| 3     | \$288.42        | \$46.26                             | \$242.15                             | \$18,262.55         | \$3,224.65 |
| 4     | \$288.42        | \$45.66                             | \$242.76                             | \$18,019.79         | \$3,467.41 |

**Compact Vehicle**

Monthly payment **\$420.58**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$27,688.20         | \$2,500.00 |
| 1     | \$420.58        | \$69.22                             | \$351.36                             | \$27,336.84         | \$2,851.36 |
| 2     | \$420.58        | \$68.34                             | \$352.24                             | \$26,984.60         | \$3,203.60 |
| 3     | \$420.58        | \$67.46                             | \$353.12                             | \$26,631.47         | \$3,556.73 |
| 4     | \$420.58        | \$66.58                             | \$354.01                             | \$26,277.47         | \$3,910.73 |

**Sport Utility Vehicle (SUV)**Monthly payment **\$672.29**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$44,258.88         | \$2,500.00 |
| 1     | \$672.29        | \$110.65                            | \$561.65                             | \$43,697.23         | \$3,061.65 |
| 2     | \$672.29        | \$109.24                            | \$563.05                             | \$43,134.19         | \$3,624.69 |
| 3     | \$672.29        | \$107.84                            | \$564.46                             | \$42,569.73         | \$4,189.15 |
| 4     | \$672.29        | \$106.42                            | \$565.87                             | \$42,003.86         | \$4,755.02 |

**Truck**Monthly payment **\$443.01**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$29,164.64         | \$2,500.00 |
| 1     | \$443.01        | \$72.91                             | \$370.10                             | \$28,794.54         | \$2,870.10 |
| 2     | \$443.01        | \$71.99                             | \$371.02                             | \$28,423.52         | \$3,241.12 |
| 3     | \$443.01        | \$71.06                             | \$371.95                             | \$28,051.56         | \$3,613.08 |
| 4     | \$443.01        | \$70.13                             | \$372.88                             | \$27,678.68         | \$3,985.96 |

**Van**

Monthly payment

**\$406.08**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$26,733.68         | \$2,500.00 |
| 1     | \$406.08        | \$66.83                             | \$339.25                             | \$26,394.43         | \$2,839.25 |
| 2     | \$406.08        | \$65.99                             | \$340.10                             | \$26,054.33         | \$3,179.35 |
| 3     | \$406.08        | \$65.14                             | \$340.95                             | \$25,713.38         | \$3,520.30 |
| 4     | \$406.08        | \$64.28                             | \$341.80                             | \$25,371.58         | \$3,862.10 |

**Electric Vehicle**

Monthly payment

**\$547.24**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$36,026.32         | \$2,500.00 |
| 1     | \$547.24        | \$90.07                             | \$457.17                             | \$35,569.15         | \$2,957.17 |
| 2     | \$547.24        | \$88.92                             | \$458.32                             | \$35,110.83         | \$3,415.49 |
| 3     | \$547.24        | \$87.78                             | \$459.46                             | \$34,651.37         | \$3,874.95 |
| 4     | \$547.24        | \$86.63                             | \$460.61                             | \$34,190.75         | \$4,335.57 |

**Hybrid Vehicle**

Monthly payment

**\$421.92**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$27,775.84         | \$2,500.00 |
| 1     | \$421.92        | \$69.44                             | \$352.48                             | \$27,423.36         | \$2,852.48 |
| 2     | \$421.92        | \$68.56                             | \$353.36                             | \$27,070.01         | \$3,205.83 |
| 3     | \$421.92        | \$67.68                             | \$354.24                             | \$26,715.77         | \$3,560.07 |
| 4     | \$421.92        | \$66.79                             | \$355.13                             | \$26,360.64         | \$3,915.20 |

**Amortization Table 2**

|               |            |
|---------------|------------|
| Down Payment  | \$2,500.00 |
| Term (years)  | 3          |
| Interest Rate | 3%         |

**Sub-compact Vehicle**

Monthly payment **\$552.15**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$18,987.20         | \$2,500.00 |
| 1     | \$552.15        | \$47.47                             | \$504.68                             | \$18,482.52         | \$3,004.68 |
| 2     | \$552.15        | \$46.21                             | \$505.94                             | \$17,976.58         | \$3,510.62 |
| 3     | \$552.15        | \$44.94                             | \$507.21                             | \$17,469.37         | \$4,017.83 |
| 4     | \$552.15        | \$43.67                             | \$508.47                             | \$16,960.90         | \$4,526.30 |

**Compact Vehicle**

Monthly payment **\$805.17**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$27,688.20         | \$2,500.00 |
| 1     | \$805.17        | \$69.22                             | \$735.95                             | \$26,952.25         | \$3,235.95 |
| 2     | \$805.17        | \$67.38                             | \$737.79                             | \$26,214.46         | \$3,973.74 |
| 3     | \$805.17        | \$65.54                             | \$739.64                             | \$25,474.82         | \$4,713.38 |
| 4     | \$805.17        | \$63.69                             | \$741.49                             | \$24,733.33         | \$5,454.87 |

**Sport Utility Vehicle (SUV)**Monthly payment **\$1287.05**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$44,258.88         | \$2,500.00 |
| 1     | \$1,287.05      | \$110.65                            | \$1,176.40                           | \$43,082.48         | \$3,676.40 |
| 2     | \$1,287.05      | \$107.71                            | \$1,179.34                           | \$41,903.14         | \$4,855.74 |
| 3     | \$1,287.05      | \$104.76                            | \$1,182.29                           | \$40,720.85         | \$6,038.03 |
| 4     | \$1,287.05      | \$101.80                            | \$1,185.25                           | \$39,535.60         | \$7,223.28 |

**Truck**Monthly payment **\$848.11**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$29,164.64         | \$2,500.00 |
| 1     | \$848.11        | \$72.91                             | \$775.20                             | \$28,389.44         | \$3,275.20 |
| 2     | \$848.11        | \$70.97                             | \$777.13                             | \$27,612.31         | \$4,052.33 |
| 3     | \$848.11        | \$69.03                             | \$779.08                             | \$26,833.23         | \$4,831.41 |
| 4     | \$848.11        | \$67.08                             | \$781.02                             | \$26,052.21         | \$5,612.43 |

**Van**

Monthly payment

**\$777.42**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$26,733.68         | \$2,500.00 |
| 1     | \$777.42        | \$66.83                             | \$710.58                             | \$26,023.10         | \$3,210.58 |
| 2     | \$777.42        | \$65.06                             | \$712.36                             | \$25,310.74         | \$3,922.94 |
| 3     | \$777.42        | \$63.28                             | \$714.14                             | \$24,596.60         | \$4,637.08 |
| 4     | \$777.42        | \$61.49                             | \$715.92                             | \$23,880.68         | \$5,353.00 |

**Electric Vehicle**

Monthly payment

**\$1047.65**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$36,026.32         | \$2,500.00 |
| 1     | \$1,047.65      | \$90.07                             | \$957.58                             | \$35,068.74         | \$3,457.58 |
| 2     | \$1,047.65      | \$87.67                             | \$959.97                             | \$34,108.77         | \$4,417.55 |
| 3     | \$1,047.65      | \$85.27                             | \$962.37                             | \$33,146.39         | \$5,379.93 |
| 4     | \$1,047.65      | \$82.87                             | \$964.78                             | \$32,181.61         | \$6,344.71 |

**Hybrid Vehicle**

Monthly payment

**\$807.72**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$27,775.84         | \$2,500.00 |
| 1     | \$807.72        | \$69.44                             | \$738.28                             | \$27,037.56         | \$3,238.28 |
| 2     | \$807.72        | \$67.59                             | \$740.13                             | \$26,297.43         | \$3,978.41 |
| 3     | \$807.72        | \$65.74                             | \$741.98                             | \$25,555.45         | \$4,720.39 |
| 4     | \$807.72        | \$63.89                             | \$743.83                             | \$24,811.62         | \$5,464.22 |

**Amortization Table 3**

|               |            |
|---------------|------------|
| Down Payment  | \$2,500.00 |
| Term (years)  | 3          |
| Interest Rate | 6%         |

**Sub-compact Vehicle**

Monthly payment **\$577.78**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$18,987.20         | \$2,500.00 |
| 1     | \$577.78        | \$94.94                             | \$482.84                             | \$18,504.36         | \$2,982.84 |
| 2     | \$577.78        | \$92.52                             | \$485.26                             | \$18,019.10         | \$3,468.10 |
| 3     | \$577.78        | \$90.10                             | \$487.69                             | \$17,531.41         | \$3,955.79 |
| 4     | \$577.78        | \$87.66                             | \$490.12                             | \$17,041.29         | \$4,445.91 |

**Compact Vehicle**

Monthly payment **\$842.55**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$27,688.20         | \$2,500.00 |
| 1     | \$842.55        | \$138.44                            | \$704.11                             | \$26,984.09         | \$3,204.11 |
| 2     | \$842.55        | \$134.92                            | \$707.63                             | \$26,276.46         | \$3,911.74 |
| 3     | \$842.55        | \$131.38                            | \$711.17                             | \$25,565.29         | \$4,622.91 |
| 4     | \$842.55        | \$127.83                            | \$714.73                             | \$24,850.56         | \$5,337.64 |

**Sport Utility Vehicle (SUV)**Monthly payment **\$1346.80**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$44,258.88         | \$2,500.00 |
| 1     | \$1,346.80      | \$221.29                            | \$1,125.50                           | \$43,133.38         | \$3,625.50 |
| 2     | \$1,346.80      | \$215.67                            | \$1,131.13                           | \$42,002.25         | \$4,756.63 |
| 3     | \$1,346.80      | \$210.01                            | \$1,136.79                           | \$40,865.46         | \$5,893.42 |
| 4     | \$1,346.80      | \$204.33                            | \$1,142.47                           | \$39,722.99         | \$7,035.89 |

**Truck**Monthly payment **\$887.48**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$29,164.64         | \$2,500.00 |
| 1     | \$887.48        | \$145.82                            | \$741.66                             | \$28,422.98         | \$3,241.66 |
| 2     | \$887.48        | \$142.11                            | \$745.37                             | \$27,677.62         | \$3,987.02 |
| 3     | \$887.48        | \$138.39                            | \$749.09                             | \$26,928.53         | \$4,736.11 |
| 4     | \$887.48        | \$134.64                            | \$752.84                             | \$26,175.69         | \$5,488.95 |

**Van**

Monthly payment

**\$813.51**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$26,733.68         | \$2,500.00 |
| 1     | \$813.51        | \$133.67                            | \$679.84                             | \$26,053.84         | \$3,179.84 |
| 2     | \$813.51        | \$130.27                            | \$683.24                             | \$25,370.61         | \$3,863.07 |
| 3     | \$813.51        | \$126.85                            | \$686.65                             | \$24,683.95         | \$4,549.73 |
| 4     | \$813.51        | \$123.42                            | \$690.09                             | \$23,993.87         | \$5,239.81 |

**Electric Vehicle**

Monthly payment

**\$1096.28**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$36,026.32         | \$2,500.00 |
| 1     | \$1,096.28      | \$180.13                            | \$916.15                             | \$35,110.17         | \$3,416.15 |
| 2     | \$1,096.28      | \$175.55                            | \$920.73                             | \$34,189.44         | \$4,336.88 |
| 3     | \$1,096.28      | \$170.95                            | \$925.33                             | \$33,264.11         | \$5,262.21 |
| 4     | \$1,096.28      | \$166.32                            | \$929.96                             | \$32,334.15         | \$6,192.17 |

**Hybrid Vehicle**

Monthly payment

**\$845.22**

| Month | Monthly Payment | Interest Portion of Monthly Payment | Principal Portion of Monthly Payment | Outstanding Balance | Equity     |
|-------|-----------------|-------------------------------------|--------------------------------------|---------------------|------------|
| 0     |                 |                                     |                                      | \$27,775.84         | \$2,500.00 |
| 1     | \$845.22        | \$138.88                            | \$706.34                             | \$27,069.50         | \$3,206.34 |
| 2     | \$845.22        | \$135.35                            | \$709.87                             | \$26,359.63         | \$3,916.21 |
| 3     | \$845.22        | \$131.80                            | \$713.42                             | \$25,646.21         | \$4,629.63 |
| 4     | \$845.22        | \$128.23                            | \$716.99                             | \$24,929.22         | \$5,346.62 |

## Section 3

| Vehicle Type                                      | Sub-Compact | Compact     | Sport Utility Vehicle (SUV) | Truck       | Van         | Electric    | Hybrid      |
|---|-------------|-------------|-----------------------------|-------------|-------------|-------------|-------------|
| Monthly Payment                                   | \$324.76    | \$355.21    | \$594.00                    | \$535.00    | \$501.00    | \$734.17    | \$374.37    |
| Acquisition Charges                               | \$450.00    | \$520.00    | \$468.00                    | \$650.00    | \$321.00    | \$510.00    | \$360.00    |
| Residual Value                                    | 58%         | 54%         | 55%                         | 55%         | 56%         | 38%         | 52%         |
| Maximum Annual Mileage                            | 24 000      | 20 000      | 24 000                      | 20 000      | 24 000      | 20 000      | 20 000      |
| Additional Charge (\$/km)                         | \$0.08      | \$0.08      | \$0.16                      | \$0.16      | \$0.16      | \$0.12      | \$0.08      |
| Calculations                                      |             |             |                             |             |             |             |             |
| Total Monthly Payment                             | \$363.73    | \$397.84    | \$665.28                    | \$599.20    | \$561.12    | \$822.27    | \$419.29    |
| Total Monthly Payments                            | \$13,094.32 | \$14,322.07 | \$23,950.08                 | \$21,571.20 | \$20,200.32 | \$29,601.73 | \$15,094.60 |
| Total Paid for Lease                              | \$13,544.32 | \$14,842.07 | \$24,418.08                 | \$22,221.20 | \$20,521.32 | \$30,111.73 | \$15,454.60 |
| Additional Mileage                                | 0           | 6000        | 0                           | 6000        | 0           | 6000        | 6000        |
| Additional Mileage Cost                           | \$ -        | \$480.00    | \$ -                        | \$960.00    | \$ -        | \$720.00    | \$480.00    |
| Additional Costs                                  | \$450.00    | \$450.00    | \$450.00                    | \$450.00    | \$450.00    | \$450.00    | \$450.00    |
| Taxes   | \$54.00     | \$111.60    | \$54.00                     | \$169.20    | \$54.00     | \$140.40    | \$111.60    |
| Total Paid at Lease End                           | \$14,048.32 | \$15,883.67 | \$24,922.08                 | \$23,800.40 | \$21,025.32 | \$31,422.13 | \$16,496.20 |
| Residual Value                                    |             |             |                             |             |             |             |             |
| Price: Cash Purchase                              | \$22 685.00 | \$30,453.75 | \$45,249.00                 | \$31,772.00 | \$29,601.50 | \$37,898.50 | \$30,532.00 |
| Residual Value                                    | \$13 157.30 | \$16,445.03 | \$24,886.95                 | \$17,474.60 | \$16,576.84 | \$14,401.43 | \$15,876.64 |
| Total Purchase Price                              | \$14,736.18 | \$18,418.43 | \$27,873.38                 | \$19,571.55 | \$18,566.06 | \$16,129.60 | \$17,781.84 |
| Total Paid: Lease and Purchase                    | \$28,784.50 | \$34,302.10 | \$52,795.46                 | \$43,371.95 | \$39,591.38 | \$47,551.74 | \$34,278.04 |
| Comparison  |             |             |                             |             |             |             |             |
| Additional Amount Compared to Cash Purchase       | \$7,297.30  | \$4,113.90  | \$6,036.58                  | \$11,707.31 | \$10,357.70 | \$9,025.42  | \$4,002.20  |
| Additional Amount Compared to a 3-Year Loan at 3% | \$6,407.18  | \$2,815.87  | \$3,961.73                  | \$10,340.07 | \$9,104.43  | \$7,336.50  | \$2,700.06  |

## Section 4

| Vehicle Type           | Sub-Compact | Compact     | Sport Utility Vehicle (SUV) | Truck       | Van         | Electric    | Hybrid      |
|------------------------|-------------|-------------|-----------------------------|-------------|-------------|-------------|-------------|
| <b>Dealership Sale</b> |             |             |                             |             |             |             |             |
| Sticker Price          | \$9790.00   | \$13,400.00 | \$21,900.00                 | \$15,980.00 | \$16,495.00 | \$13,100.00 | \$19,726.00 |
| Taxes                  | \$1,174.80  | \$1,608.00  | \$2,628.00                  | \$1,917.60  | \$1,979.40  | \$1,572.00  | \$2,367.12  |
| Total Cost             | \$10,964.80 | \$15,008.00 | \$24,528.00                 | \$17,897.60 | \$18,474.40 | \$14,672.00 | \$22,093.12 |
|                        |             |             |                             |             |             |             |             |
| <b>Private Sale</b>    |             |             |                             |             |             |             |             |
| Price                  | \$8370.00   | \$11,030.00 | \$18,875.00                 | \$12,925.00 | \$14,500.00 | \$11,810.00 | \$17,146.00 |
| Book Value             | \$9080.00   | \$12,250.00 | \$20,405.00                 | \$14,450.00 | \$15,946.00 | \$12,455.00 | \$18,436.00 |
| PST                    | \$635.60    | \$857.50    | \$1,428.35                  | \$1,011.50  | \$1,116.22  | \$871.85    | \$1,290.52  |
| Inspection Certificate | \$20.00     | \$20.00     | \$20.00                     | \$20.00     | \$20.00     | \$20.00     | \$20.00     |
| GST                    | \$1.00      | \$1.00      | \$1.00                      | \$1.00      | \$1.00      | \$1.00      | \$1.00      |
| Necessary Repairs      | \$149.99    | \$149.99    | \$149.99                    | \$149.99    | \$149.99    | \$149.99    | \$149.99    |
| Taxes                  | \$18.00     | \$18.00     | \$18.00                     | \$18.00     | \$18.00     | \$18.00     | \$18.00     |
| Lien Search            | \$18.00     | \$18.00     | \$18.00                     | \$18.00     | \$18.00     | \$18.00     | \$18.00     |
|                        |             |             |                             |             |             |             |             |
| Total                  | \$9,212.59  | \$12,094.49 | \$20,510.34                 | \$14,143.49 | \$15,823.21 | \$12,888.84 | \$18,643.51 |
| Difference             | \$1,752.21  | \$2,913.51  | \$4,017.66                  | \$3,754.11  | \$2,651.19  | \$1,783.16  | \$3,449.61  |

## Section 5

Term (years)                      3

| Vehicle Type                    | Sub-Compact | Compact     | Sport Utility Vehicle (SUV) | Truck       | Van         | Electric    | Hybrid      |
|---------------------------------|-------------|-------------|-----------------------------|-------------|-------------|-------------|-------------|
| Sticker Price                   | \$9790.00   | \$13,400.00 | \$21,900.00                 | \$15,980.00 | \$16,495.00 | \$13,100.00 | \$19,726.00 |
| Total Cost                      | \$10,964.80 | \$15,008.00 | \$24,528.00                 | \$17,897.60 | \$18,474.40 | \$14,672.00 | \$22,093.12 |
|                                 |             |             |                             |             |             |             |             |
| Initial Administrative Fee      | \$395.00    | \$395.00    | \$395.00                    | \$395.00    | \$395.00    | \$395.00    | \$395.00    |
| Biweekly Payments               | \$155.08    | \$213.06    | \$348.21                    | \$254.08    | \$262.27    | \$208.29    | \$313.62    |
| End-of-Lease Administration Fee | \$125.00    | \$125.00    | \$125.00                    | \$125.00    | \$125.00    | \$125.00    | \$125.00    |
|                                 |             |             |                             |             |             |             |             |
| Biweekly Payments               | \$173.69    | \$238.63    | \$390.00                    | \$284.57    | \$293.74    | \$233.28    | \$351.25    |
| Total Weekly Payments           | \$13,547.79 | \$18,612.92 | \$30,419.63                 | \$22,196.43 | \$22,911.91 | \$18,196.21 | \$27,397.84 |
| Total Amount Paid               | \$14,067.79 | \$19,132.92 | \$30,939.63                 | \$22,716.43 | \$23,431.91 | \$18,716.21 | \$27,917.84 |

## Section 6.1

GST 5%  
PST 7%

| Question 1 |              |      |                 |
|------------|--------------|------|-----------------|
| Material   |              |      | \$45.00         |
| Hours      |              | 0.75 |                 |
| Labour     |              |      | \$75.00         |
|            | Sub-total    |      | \$101.25        |
|            | Taxes        |      | \$12.15         |
|            | <b>Total</b> |      | <b>\$113.40</b> |
|            |              |      |                 |
|            |              |      |                 |
|            |              |      |                 |

| Question 2        |              |     |                  |
|-------------------|--------------|-----|------------------|
| Windshield Wipers |              |     | \$18.00          |
| Oil               |              |     | \$20.00          |
| Filter            |              |     | \$20.00          |
| Tires             |              |     | \$600.00         |
| Hours             |              | 3.5 |                  |
| Labour            |              |     | \$95.00          |
|                   | Sub-total    |     | \$990.50         |
|                   | Taxes        |     | \$118.86         |
|                   | <b>Total</b> |     | <b>\$1109.36</b> |

| Question 3 |              |      |                 |
|------------|--------------|------|-----------------|
| Oil        |              |      | \$10.00         |
| Oil Filter |              |      | \$21.00         |
| Air Filter |              |      | \$7.00          |
| Antifreeze |              |      | \$16.00         |
| Belts      |              |      | \$58.00         |
| Hours      |              | 1.25 |                 |
| Labour     |              |      | \$60.00         |
|            | Sub-total    |      | \$187.00        |
|            | Taxes        |      | \$22.44         |
|            | <b>Total</b> |      | <b>\$209.44</b> |

| <b>Question 4</b> |              |      |                 |
|-------------------|--------------|------|-----------------|
| Oil               |              |      | \$16.20         |
| Filter            |              |      | \$25.60         |
| Windshield Wipers |              |      | \$19.75         |
| Hours             |              | 0.75 |                 |
| Labour            |              |      | \$65.00         |
|                   | Sub-total    |      | \$110.30        |
|                   | Taxes        |      | \$13.24         |
|                   | <b>Total</b> |      | <b>\$123.54</b> |

| <b>Question 5</b> |              |      |                 |
|-------------------|--------------|------|-----------------|
| Exhaust pipe      |              |      | \$250.00        |
| Muffler           |              |      | \$150.00        |
| Lights            |              |      | \$20.00         |
| Hours             |              | 1.67 |                 |
| Labour            |              |      | \$85.00         |
|                   | Sub-total    |      | \$561.67        |
|                   | Taxes        |      | \$67.40         |
|                   | <b>Total</b> |      | <b>\$629.07</b> |

## Section 6.2

### Depreciation

|                    |                   | Sub-compact Vehicle |                | Compact Vehicle     |                | Sport Utility Vehicle (SUV) |                | Truck               |                |
|--------------------|-------------------|---------------------|----------------|---------------------|----------------|-----------------------------|----------------|---------------------|----------------|
| Purchase Cost      |                   | \$19 185.00         |                | \$26 953.75         |                | \$41 749.00                 |                | \$28 272.00         |                |
| Vehicle Age        | Depreciation Rate | Depreciation Amount | Residual Value | Depreciation Amount | Residual Value | Depreciation Amount         | Residual Value | Depreciation Amount | Residual Value |
| 1                  | 20%               | \$3,837.00          | \$15,348.00    | \$5,390.75          | \$21,563.00    | \$8,349.80                  | \$33,399.20    | \$5,654.40          | \$22 617.60    |
| 2                  | 15%               | \$2,302.20          | \$13,045.80    | \$3,234.45          | \$18,328.55    | \$5,009.88                  | \$28,389.32    | \$3,392.64          | \$19 224.96    |
| 3                  | 15%               | \$1,956.87          | \$11,088.93    | \$2,749.28          | \$15,579.27    | \$4,258.40                  | \$24,130.92    | \$2,883.74          | \$16 341.22    |
| Total Depreciation | (\$)              | \$8,096.07          |                | \$11,374.48         |                | \$17,618.08                 |                | \$11,930.78         |                |
|                    | (%)               | 42.20%              |                | 42.20%              |                | 42.20%                      |                | 42.20%              |                |

|                    |                   | Van                 |                | Electric Vehicle    |                | Hybrid Vehicle      |                |
|--------------------|-------------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|
| Purchase Cost      |                   | \$26,101.50         |                | \$34,398.50         |                | \$27,032.00         |                |
| Vehicle Age        | Depreciation Rate | Depreciation Amount | Residual Value | Depreciation Amount | Residual Value | Depreciation Amount | Residual Value |
| 1                  | 20%               | \$5,220.30          | \$20,881.20    | \$6,879.70          | \$27,518.80    | \$5,406.40          | \$21,625.60    |
| 2                  | 15%               | \$3,132.18          | \$17,749.02    | \$4,127.82          | \$23,390.98    | \$3,243.84          | \$18,381.76    |
| 3                  | 15%               | \$2,662.35          | \$15,086.67    | \$3,508.65          | \$19,882.33    | \$2,757.26          | \$15,624.50    |
| Total Depreciation | (\$)              | \$11,014.83         |                | \$14,516.17         |                | \$11,407.50         |                |
|                    | (%)               | 42.20%              |                | 42.20%              |                | 42.20%              |                |

## Section 6.3

| Vehicle Type                       | Sub-Compact | Compact | Sport Utility Vehicle (SUV) | Truck | Van  | Electric | Hybrid |
|------------------------------------|-------------|---------|-----------------------------|-------|------|----------|--------|
| Fuel Tank Size (Litres)            | 40          | 64      | 93                          | 87    | 76   | 0        | 43     |
| <b>Fuel Consumption (L/100 km)</b> |             |         |                             |       |      |          |        |
| City                               | 7.9         | 8.1     | 12.7                        | 12.3  | 13.7 | 0        | 4.6    |
| Highway                            | 5.9         | 5.7     | 9.6                         | 9.3   | 9.4  | 0        | 4.4    |

| <b>Question 1(a)</b> |                 |               |                    |             |                  |
|----------------------|-----------------|---------------|--------------------|-------------|------------------|
|                      | Initial Reading | Final Reading | Distance Travelled | Litres Used | Fuel Consumption |
| A                    | 71 416.0        | 71 739.0      | <b>323.0</b>       | 26.2        | <b>8.11</b>      |
| B                    | 481 758.4       | 482 943.0     | <b>1184.6</b>      | 54.9        | <b>4.63</b>      |
| C                    | 23 165.2        | 23 721.9      | <b>556.7</b>       | 70.7        | <b>12.70</b>     |
| D                    | 135 714.8       | 136 028.3     | <b>313.5</b>       | 43.1        | <b>13.75</b>     |
| E                    | 87 158.1        | 88 031.4      | <b>873.3</b>       | 68.9        | <b>7.89</b>      |
| F                    | 15 632.1        | 16 341.8      | <b>709.7</b>       | 87.3        | <b>12.30</b>     |

**Question 1(b)**    B  
                           D

## Question 1(c)

| Vehicle Type | Sub-Compact | Compact | Sport Utility Vehicle (SUV) | Truck | Van | Hybrid |
|--------------|-------------|---------|-----------------------------|-------|-----|--------|
|              | E           | A       | C                           | F     | D   | B      |

## Question 2(a)

|                   | City km     | Highway km | Cost                        |          |          |         |
|-------------------|-------------|------------|-----------------------------|----------|----------|---------|
|                   | 800         | 1000       | \$1.129                     |          |          |         |
| Vehicle Type      | Sub-Compact | Compact    | Sport Utility Vehicle (SUV) | Truck    | Van      | Hybrid  |
| City Litres       | 63.2        | 64.8       | 101.6                       | 98.4     | 109.6    | 36.8    |
| Highway Litres    | 59.0        | 57.0       | 96.0                        | 93.0     | 94.0     | 44.0    |
| Total Litres Used | 122.2       | 121.8      | 197.6                       | 191.4    | 203.6    | 80.8    |
| Cost              | \$137.96    | \$137.51   | \$223.09                    | \$216.09 | \$229.86 | \$91.22 |

## Question 2(b)

Hybrid Vehicle

## Question 3(a)

| Vehicle Type          | Sub-Compact | Compact | Sport Utility Vehicle (SUV) | Truck  | Van    | Hybrid |
|-----------------------|-------------|---------|-----------------------------|--------|--------|--------|
| Fuel Tank (litres)    | 40          | 64      | 93                          | 87     | 76     | 43     |
| Highway               | 5.9         | 5.7     | 9.6                         | 9.3    | 9.4    | 4.4    |
| Maximum Distance (km) | 677.97      | 1122.81 | 968.75                      | 935.48 | 808.51 | 977.27 |

## Section 7

| <b>Sheet</b> | <b>The factor that is different is</b> |
|--------------|--|
| A            | Deductible                             |
| B            | Year                                   |
| C            | Basic third-party liability coverage   |
| D            | Insurance rate group                   |
| E            | Autopac discount                       |
| F            | Postal code                            |
| G            | Loss of use protection                 |
| H            | New vehicle protection                 |

## Section 8

### Possible Answers

|                   | <b>Ownership</b> | <b>Vehicle Type</b>                           |
|-------------------|------------------|---|
| <b>Scenario A</b> | Lease            | Sub-compact/compact                           |
| <b>Scenario B</b> | Used             | Truck   |
| <b>Scenario C</b> | Lease            | Sport utility vehicle (SUV)                   |
| <b>Scenario D</b> | New              | Sport utility vehicle (SUV)/van               |
| <b>Scenario E</b> | Used             | Sub-compact/compact                           |
| <b>Scenario F</b> | Used             | Sport utility vehicle (SUV) from a dealership |
| <b>Scenario G</b> | Lease            | Sub-compact/compact                           |
| <b>Scenario H</b> | Lease to buy     | Sub-compact/compact                           |





