

**GRADE 12 ESSENTIAL
UNIT B - VEHICLE FINANCE
FINANCING AND LOANS**

Name: _____
Date: _____

SHOW WORK. Neatly. Use separate paper if necessary. Assume PST of **7%** and GST of 5%.

Calculate the loans manually using provided loan tables provided. You are encouraged however to also check the loan payment amounts using an App too! The suggested App is the EZ Financial one available for Android or for Apple.



1. Carly is looking to buy a Honda Pilot that sells for \$43,090 plus taxes. A down payment of \$3,000 is required. The Honda dealership is offering a loan rate of 6% over 4 years. Determine:

- a) the total cost;
- b) the amount of loan required
- c) the monthly payment
- d) the total amount paid for the vehicle by the end of 4 years

2. Rob is enjoying the spring weather and feels that he needs to buy a Mustang Convertible that sells for \$30,249 plus taxes. A down payment of \$2,050 is required. The bank offers Rob a three-year loan at 7.5% interest. (If you do not have tables for 7.5% you may need to '*interpolate*' to find what payment is halfway between 7% and 8% or use an app). Determine:

- a) the final vehicle price with taxes
- b) the amount of loan required
- c) the monthly payment
- d) the total amount paid for the vehicle by the end of 3 years

3. You are considering getting a car. You are not sure whether to lease or to buy on credit. You have **two options**:

Option 1: Purchase. A car's final price from the dealer is \$26,000. GST is 5% and PST is 7%. There is a down payment of \$7,500. The car is purchased with a loan of 4% and paid monthly for five years. Determine the following.

- a) What is the total cost of the car, including taxes?
- b) What is the total amount to be borrowed ('financed')?
- c) What is the monthly payment on the loan?
- d) For how many months do you make the monthly loan payment?
- d) What is the final total amount paid for the car purchase, including the down payment?

Option 2: Lease and then Purchase ('buyout'). There is a \$2,500 down payment. The lease payment is \$325 per month, plus GST and PST. After the five-year lease you determine that you really like the car, so you purchase the car (a 'lease buyout') for the \$7,500 residual value in the lease agreement, plus GST and PST. Determine the following:

- a) What is the monthly lease payment, including taxes?
 - b) What is the total of the lease payments over the 5-year period?
 - c) What is the total amount paid for the car after the buyout?
- Which is the better option? Explain why.

4. **Bi-Weekly Financing.** We more often now see advertisements for vehicle loans that are '*bi-weekly*', meaning that you make the loan payments every two weeks. Many people get paid bi-weekly, so every second Friday for example. Notice that a month is not four weeks! So, you actually end up making 26 smaller loan payments per year, instead of 12 bigger ones. Making payments '*bi-weekly*' makes a difference in the total overall financing cost of your vehicle (?). Determine the total cost of the Option 1 above if you make bi-weekly payments instead of monthly. Assume the dealer compounds the interest bi-weekly as well. You will need an App for this!

- a. Determine the final total amount paid for the car purchase using bi-weekly loan financing.
- b. Determine how much you saved in the purchase of your car by making bi-weekly payments instead of monthly.