

**GRADE 12 ESSENTIAL
UNIT B – VEHICLE FINANCE
PURCHASE ASSIGNMENT**

Name: _____

Date: _____

SHOW WORK! Use separate paper if necessary
Use provided loan tables or an App for loan calculations.

Instructions. Use a Manitoba PST of 7% and Federal GST of 5%, but be aware you may find some older references with a PST of 8%. Prior to the pandemic the PST was supposedly going to be reduced to 6% but never was. Tax rates change occasionally with government policy.

1. Prima buys a new two door Neon Sport Coupe with a Manufacturer's Suggested Retail Price (MSRP) of \$17,218. She pays \$2,490 in an option package plus a stereo system for \$665. There is a freight charge of \$850 and an air conditioning federal excise tax of \$100. How much will she pay for this car including taxes?

VEHICLE PRICE =

SUBTRACT TRADE IN =

ADD TAXES (GST & PST) =

TOTAL PURCHASE PRICE WITH TAXES =

2. Anthony decides to buy a new Honda Accord. He pays the base price of \$24,673 and chooses an option package for \$2,614. He adds an automatic transmission for an extra \$695. There is a freight charge of \$850 and an air conditioning federal excise tax of \$100. Anthony receives a trade-in allowance of \$4 500 for his old car. How much will he pay for his Accord including taxes?

VEHICLE PRICE =

LESS (Subtract) TRADE IN =

PLUS TAXES (GST & PST) =

PURCHASE PRICE W/TAXES =

3. Alexa wants a new Ford Focus. The base sticker price (MSRP) is \$22,995 plus freight. There is a freight charge of \$850 and an air conditioning federal excise tax of \$100. She would like power windows and power locks for an extra \$300 and \$285, respectively. Determine how much the car will cost her.

4. Sean buys a new light duty truck with a base price of \$18,059. He orders the upgrade decor package for \$354, bucket seats for \$235, and a larger engine for \$1,120. There is a freight charge of \$850 and an air conditioning federal excise tax of \$100.

- a. Find the total cost for this truck if he gets a trade-in allowance of \$2 600.
- b. Determine the **value** (aka: the Blue Book value') of his truck in 12 years if that model has a depreciation of 16% per year.

5. **Affordability (TDSR)**. [TDSR is no longer a learning outcome but it is included here regardless] Anders is trying to decide whether he can afford a new car. The car he wishes to purchase will cost him \$109 *bi-weekly*. He is currently living in an apartment that costs him \$800 a *month*. Heating costs an additional \$50 a month. Anders also has a credit card debt that he is paying off with monthly payments of \$90. Anders' gross monthly income is \$3,700.

- a) Calculate his TDSR if he decides to buy the car.
- b) Can Anders afford to purchase this car? Explain.

$$TDSR = \frac{\text{Monthly Housing Costs} + \text{All other monthly debts}}{\text{Gross Monthly Income}}$$

TDSR should not exceed 40% otherwise the debt cannot be managed.

6. Max Trucker purchases a four-wheel-drive vehicle from Deal-a-Car Dealership for \$40,285. He receives a trade-in allowance of \$8,500 for his old car. There is a freight charge of \$850 and an air conditioning federal excise tax of \$100. Calculate the total purchase price of his new vehicle, if, in addition to the PST and GST, he must pay a documentation fee of \$149 and a tire tax of \$14 (an Eco-fee each tire). [This particular dealership charges this tire tax separately instead of part of the vehicle 'sticker' price, this is why there is recent government regulations (circa 2018) about how a dealer is required to more clearly document the vehicle price]

7. **Financing the Vehicle Purchase.** Max Trucker (from question 6) is able to make a down payment of \$3,500 on the four-wheel-drive vehicle. In order to finance the remaining portion, he takes out a 4-year car loan at a fixed interest rate of 9%.

- a) Calculate his monthly payment for the vehicle. (same method as Grade 11)
- b) Calculate his total finance charge for the vehicle (ie: what is paid in interest).

(check your monthly loan payment answer on-line with any loan calculator)

8. Here is a curious question! How much does the \$100 Eco fee (excise tax) for air conditioners cost you? [Hint: there is a tax on a tax!]