

### 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.