

### **Operating Costs**

1. Karen has talked to her parents and her friends to find out how often she will need to get her car's oil changed.  
How often do you think she will need to change it? \_\_\_\_\_
2. Call a local garage to find out how much she will pay for an oil change (including taxes).  
\_\_\_\_\_
3. Karen finds out from the car manufacturer that she should change the oil every 3 months or every 5000 km. Based on her estimated driving distances, how many times will she need to get the car's oil changed in one year? \_\_\_\_\_
4. How much will Karen spend in one year on oil changes? \_\_\_\_\_
5. Although it is difficult to predict all repairs that will be needed, Karen knows that she will need to get two new 14-inch tires for her vehicle this year.  
Using flyers, newspapers or the Internet, investigate prices and estimate how much she will need to spend on the tires. \_\_\_\_\_
6. Based on the information collected, how much can Karen expect to spend on operating costs (gas and maintenance) in one year? \_\_\_\_\_
7. Karen keeps track of her car's fuel consumption. She records the following information:

DATE	FUEL USED (L)	DISTANCE TRAVELED (km)	FUEL CONSUMPTION RATING (L/100 km)
October 12	32	290	
October 22	28	320	
October 30	30	300	
November 9	31	315	

- a) What is her average fuel consumption rate based on the information above? \_\_\_\_\_
- b) Assuming she continues to use fuel at this rate, calculate her annual gas cost. \_\_\_\_\_
- c) What factors might affect the fuel consumption rate of a car, causing it to be different than the rating that the original owner stated?  
\_\_\_\_\_  
\_\_\_\_\_
- d) Suggest ways that Karen can minimize her fuel consumption.  
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