

Full Name: \_\_\_\_\_

Name you go by in class: \_\_\_\_\_

This exercise is for 10 points towards your assignments/quiz grade.

On this exercise, you **may** collaborate with others,  
but each of you **MUST** turn in your own separate sheet to get credit.

If you need more space for any answer, you may continue on the back of this sheet.

Suppose you have a car.

You've recently made some changes in your driving habits to try to save gas, e.g.

- Putting more air in the tires
- Starting more gradually from red lights
- Reducing excess weight in your trunk
- etc.

You want to see if you are getting better gas mileage.

You want to end up with a number, like "I'm getting 25 miles per gallon".

- (1) What information do you need to collect?  
(I'm looking for some "numbers" that you need in order to calculate MPG.  
Give each of them a name.)
  
- (2) How do you go about collecting those numbers? Give a step by step recipe.  
(e.g. "Step 1 might be: Fill your tank with gas, and write down the odometer reading".  
What are steps 2, 3, etc.?)
  
- (3) Once you have those numbers, what do you do with them?  
(Suppose you have the numbers collected in step 2, and you have a calculator.  
Step by step, what do you do?  
E.g. Step 1: Take the starting mileage and subtract from that ... "

(end of exercise)

