

Name _____

Date _____

Commack High School
Regents Physics
Lab # _____ - The Driving Lab

Strategy – Your job is to design an experiment and take the appropriate data to best determine the distance traveled by your car in a 15 minute time interval without using the odometer. Data should be taken for each 30 second intervalbb.

Requirements : The experiment must include a stated purpose, procedure, equipment list, appropriate data tables and graphs, and a conclusion. When obtaining data in your car, there must be at least two people – one driver, one person taking the data. The driver should not, under any circumstances, be taking data while driving. You must obey the speed limit. Each student must have their own data!! Your conclusion must cite specific data and graphs which supports the conclusion. You must take care to ensure that you have good data for your analysis. Compare your distance determination with the distance as measured by your odometer, and calculate a percent error.

Suggested Equipment : Car with speedometer and odometer, timer.

DO NOT BEGIN THIS EXPERIMENT UNTIL:

_____ I have approved your procedure

_____ I have approved your data tables

- Assume Constant Velocity

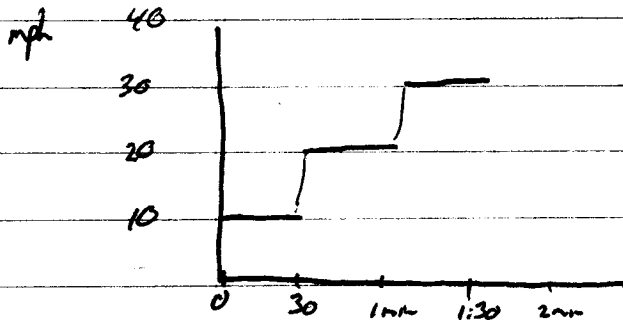
Driving Lab (Brain Storm)

15 minute intervals total

Take reading Every 30 sec

Record Speed Every 30 sec

Time	V
0	0
30	30 mph
60	20 mph
1:30	40 mph



Problem - Must be same units
mph must convert to
hours

Find Area under the curve

Given 2 Weeks

- 1 Person Drive 1 Person Stopwatch & Record
- Can not duplicate the data
- All info on the table
- Assume Constant Velocity for time within an interval

Journal: (Lab Activity)

Find the ~~Reliability~~ of the rule when changed