

NAME _____

PERIOD _____

PHYSICS HOMEWORK QUIZ #1D

ONE DIMENSIONAL KINEMATICS

1. The speed of a car increases from 12.0 m/s to a speed of 28.0 m/sec during a time period of 4.0 seconds. What is the **average acceleration** of this car during the 4.0 second period ? [3 pts]

2. An airplane is flying North with a speed of 145 mph. **How long** will it take for this plane to fly North a distance of 580 miles ? [3 pts]

3. Complete the data table below which describes the position of an accelerating object as a function of time. [3 pts]

Time [s]	Displacement [m]	Velocity [m/sec]	Acceleration [m/s ²]
0	0.000		
0.1	0.034	_____	_____
0.2	0.134	_____	_____
0.3	0.302	_____	_____
0.4	0.536	_____	

4. Suppose that the error on the displacement data above is determined to be +/- 0.003 m. What will be the corresponding **error** on the velocities ? [3 pts]

5. Why are there only four spaces provided for the velocities on this table ? [3 pts.]