PHY 123 EXPT 2 Acceleration - Worksheet

D+/-*ΔD*=_____ *d*+/-*Δd*=_____

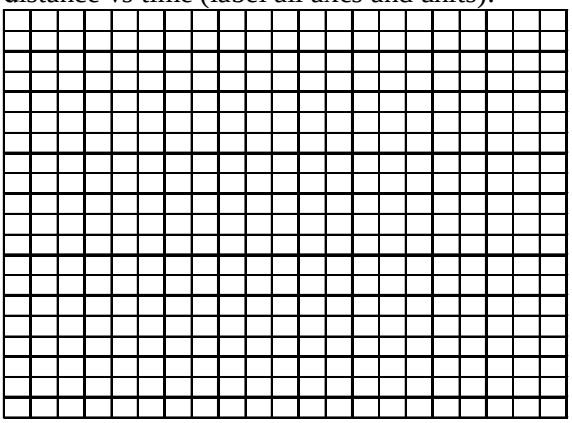
velocity vs. time data for graph; be sure to write the proper units in each space between brackets: [ ]

measurement #	time (*t*) [ ]	velocity (*v*) [ ]	Δv [ ]
1			
2			
3			
4			
5			

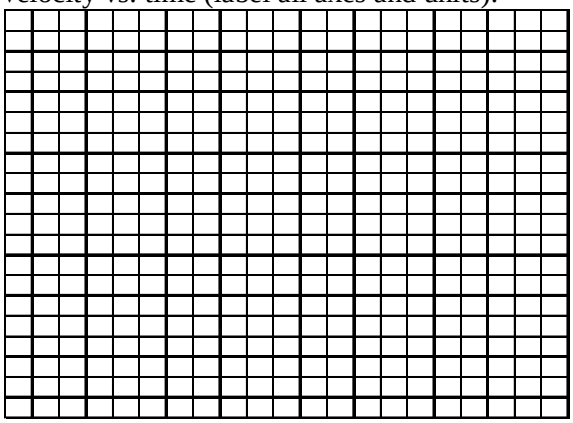
From your graph made using the above data: $g_{exp} \pm \Delta g_{exp}$ = _____ ?

Is this consistent with the expected value of g?_____

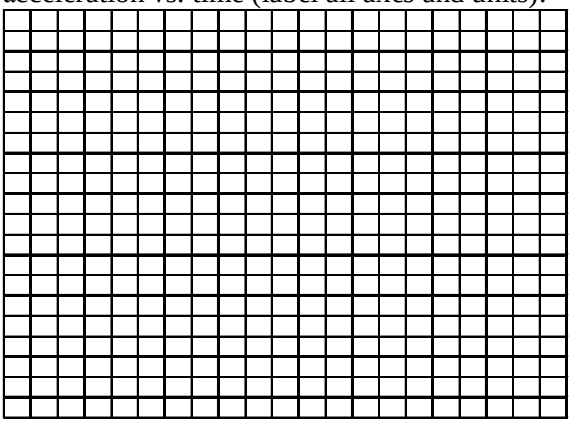
distance vs time (label all axes and units):



velocity vs. time (label all axes and units):



acceleration vs. time (label all axes and units):



A different approach to getting g and its uncertainty

Measurement #$_i$	[ ]
M_1	
M_2	
M_3	
M_4	
M_5	

Average of the 5 measurements and its uncertainty (show both calculations explicitly; include units):

Is this consistent with the accepted value for g?_____

Which approach do you think gave you a better value of *g*? Why? Think and then write something to be graded by your TA.

Value of v_o determined from "far-above" ruler drop: _____ [ ]