

**213 Acceleration Timer Problems (20pts)**

To receive credit:

Write all answers in your bound journal

-1pt if you do not have a title for the entry

-1pt if you do not have a date for the entry

½ off the entire homework if you DO NOT show your math for every problem

-2pt box your answers for

- 1) total time
- 2) acceleration
- 3) experimental distance
- 4) % error

A = Space between last two dots

B = Total Dots

C = Actual known height from where object was dropped

For each group of measurements:

- Determine the acceleration rate
- The experimental distance traveled
- The % error (the known Expected theoretical distance is C)
- All answers should have 3 sigfigs.



***A = distance last two dots***

Distance 1 dot  
= .0167seconds

Problem #	Distance last two dots in cm	Total Dots	Known Expected Height
1	A	B	C
2	6.07	25	0.760
3	5.00	23	0.760
4	5.21	21	0.760
5	8.34	33	1.500
6	7.88	34	1.500

***B = all the dots on ticker tape***

***C = Theoretical known height***