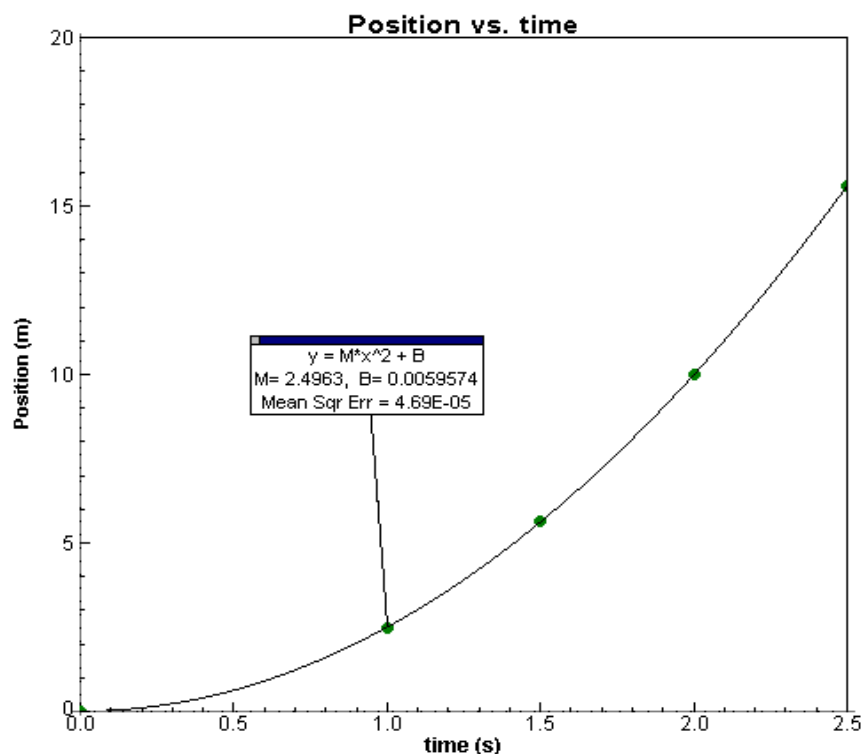


Instantaneous Velocity Worksheet

Name _____

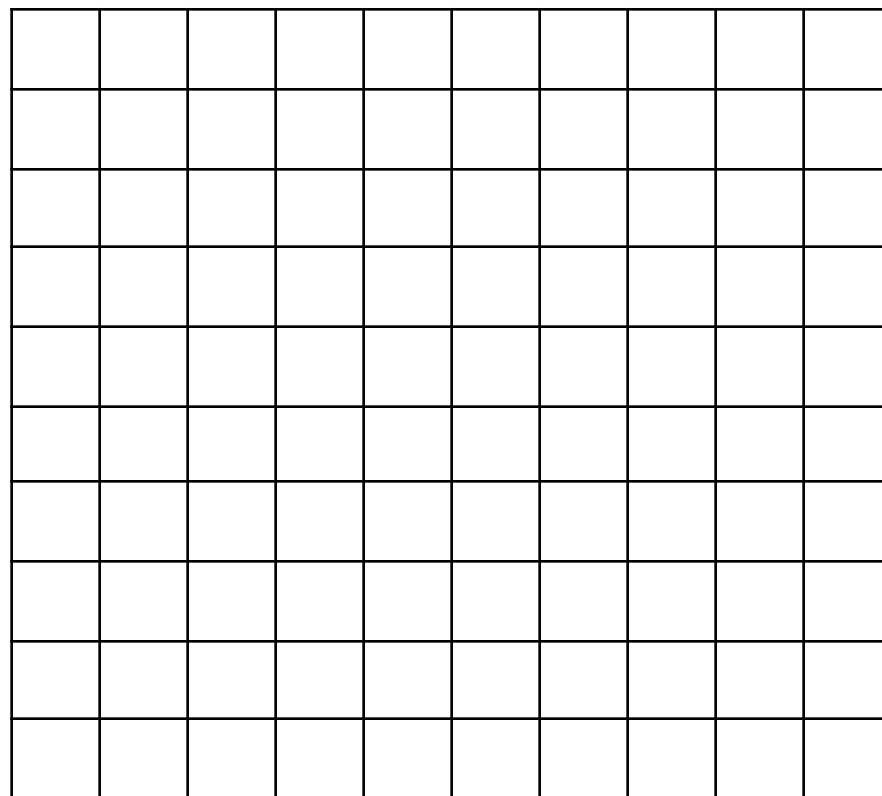
The data below was collected for a ball rolling down a ramp. The data was then graphed. The resulting graph is shown below.

Time (s)	Position (m)	Inst. Velocity (m/s)
0	0	
1	2.5	
1.5	5.63	
2	10	
2.5	15.6	



Evaluation of Graph:

1. Draw tangent lines to the curve at 1 s, 1.5 s, 2 s and 2.5 s.
2. Find the slope of each tangent line. Remember the slope of the tangent line is the instantaneous velocity at that point in time.
3. Record the value of the velocity in the table using red ink.
4. Graph your instantaneous velocity (y) vs time (x) on the graph below.



5. How does the slope of the velocity vs time graph compare to the slope of the position vs time graph?