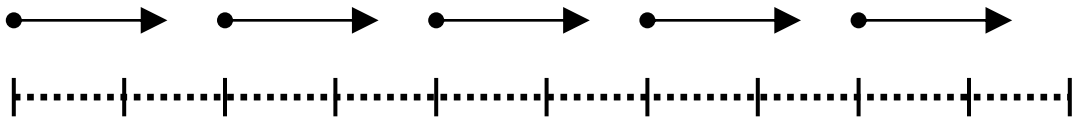
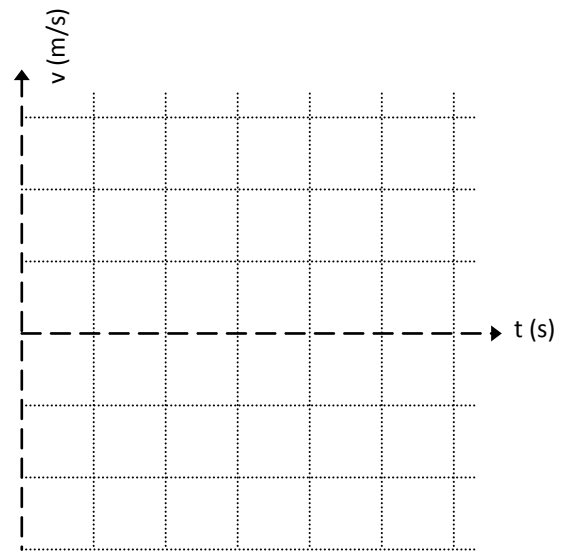
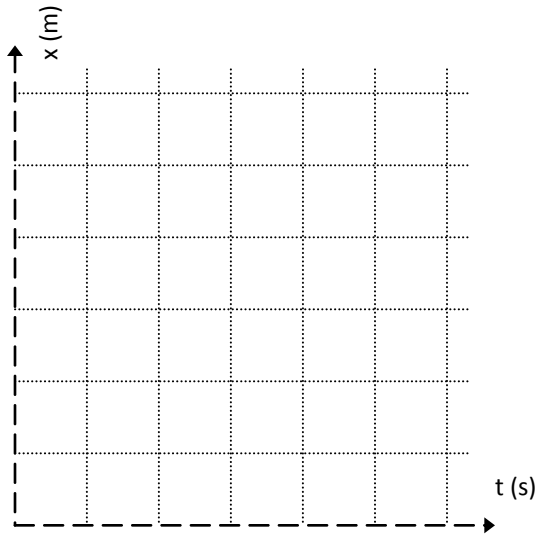


Velocity Homework 4

Name: _____



1. From the motion map above, answer the following:
 - a. What can you conclude about the motion of the object? How do you know?
 - b. Draw a position vs. time graph for the motion above.
 - c. Draw a velocity vs. time graph for the motion above.



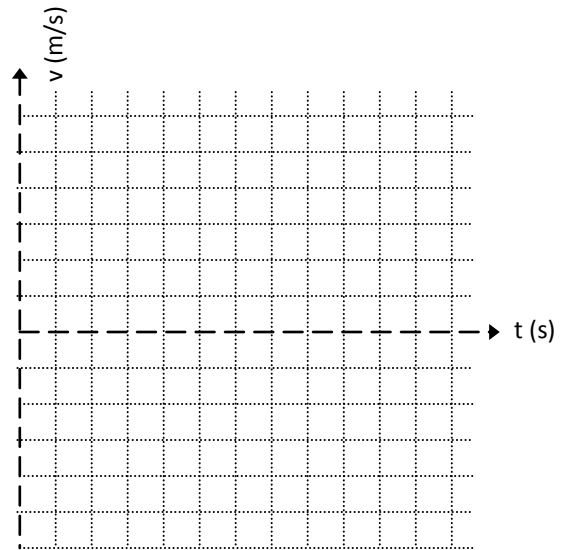
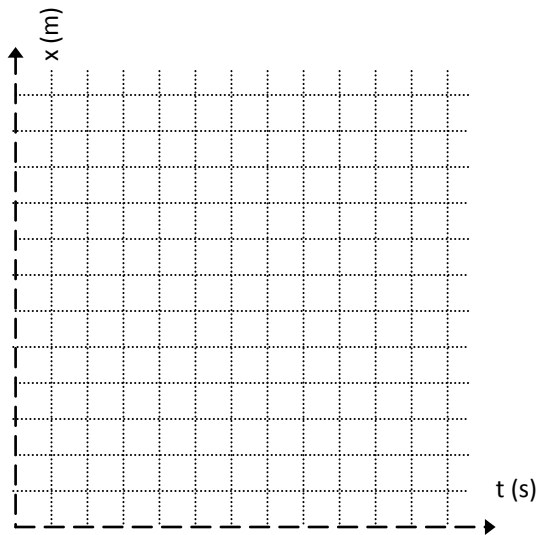
- d. Write a mathematical equation (think $y = mx + b$) from the position vs. time graph above.
- e. Write a mathematical model from the velocity vs. time graph above.
- f. Find and shade the area under the curve (between your line and the horizontal axis) on the velocity vs. time graph above. What does that velocity vs. time graph represent?

Velocity Homework 4

2. From the position vs. time data below, answer the following:

x (m)	0	2	4	4	7	10	10	10	5	0
t (s)	0	1	2	3	4	5	6	7	8	9

- Construct a position vs. time graph for the above data.
- Construct a velocity vs. time graph for the above data.



c. Draw a motion map for the object.



d. Determine the displacement for the object between $t = 3.0$ s and $t = 5.0$ s.

e. Determine the displacement for the object between $t = 7.0$ s and $t = 9.0$ s.

f. Determine the total displacement for the object.