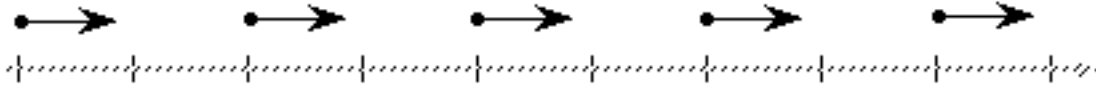


UNIT II: WORKSHEET 4



1. From the motion map above, answer the following:
- What can you conclude about the motion of the object?
 - Draw a qualitative graphical representation of x vs t (see below).
 - Draw a qualitative graphical representation of v vs t (see below).

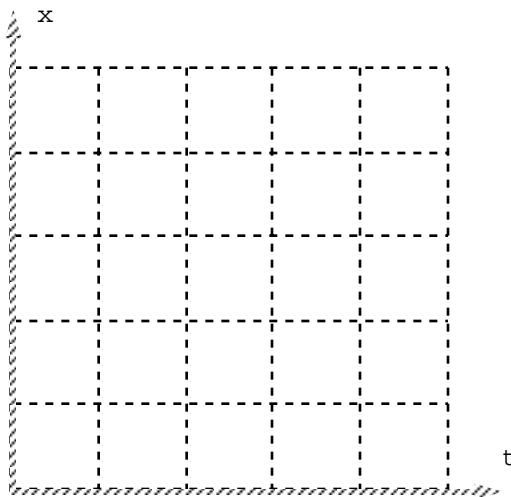


fig. 1

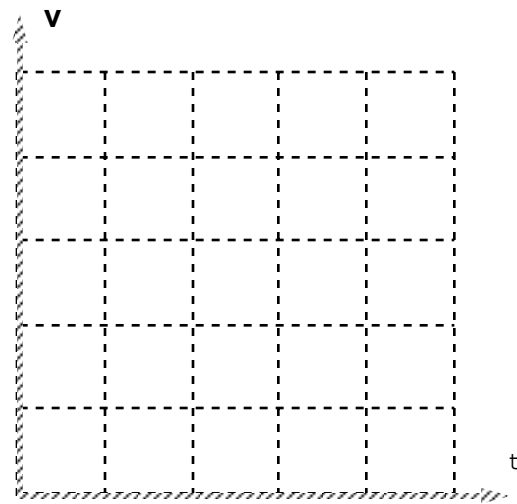


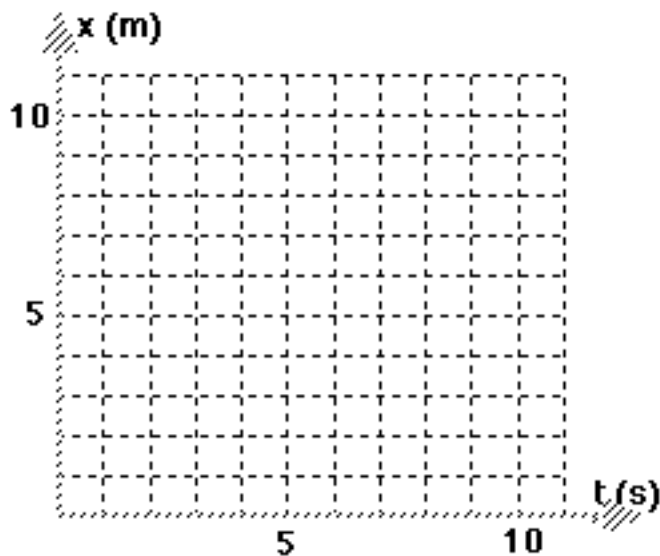
fig. 2

- Write a mathematical expression which represents the relationship between x and t , from fig. 1.
- Write a mathematical expression which represents the relationship between v and t , from fig. 2
- Describe what the area under the curve in fig. 2 represents. Cross hatch this area.

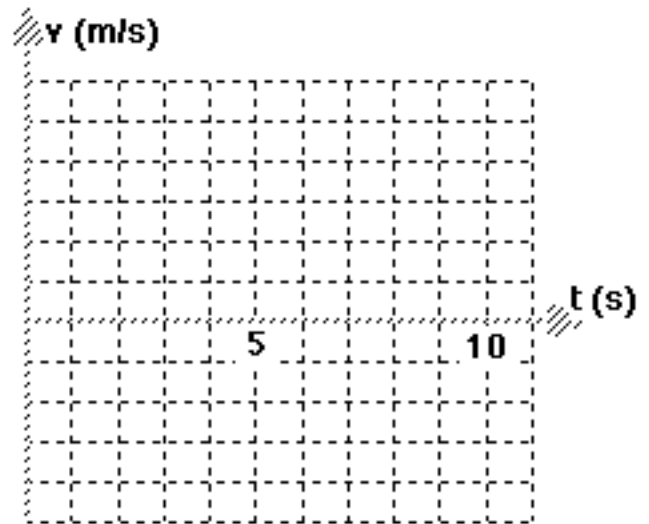
2. From the position vs time data below, answer the following questions.

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

- Construct a graph of position vs time.
- Construct a graph of velocity vs time.



(A)



(B)

- Draw a motion map for the object.
- Determine the displacement from $t = 3.0\text{s}$ to 5.0s using graph B.
- Determine the displacement from $t = 7.0\text{s}$ to 9.0s using graph B.