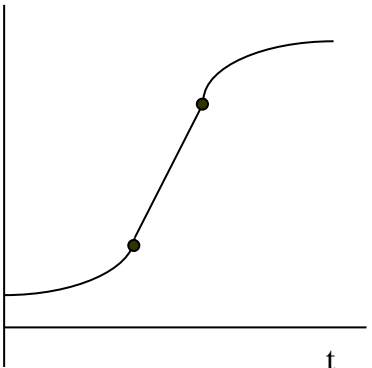


Graph Walking

1. Produce each of the following position vs. time graphs on the screen. Write a description of the motion. Include the motion at the start in the initial conditions box.

a. x

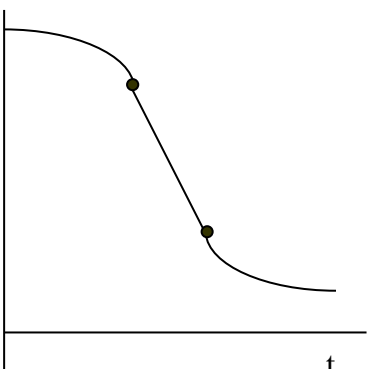


Description

Trial # _____

Initial Conditions: _____

b. x

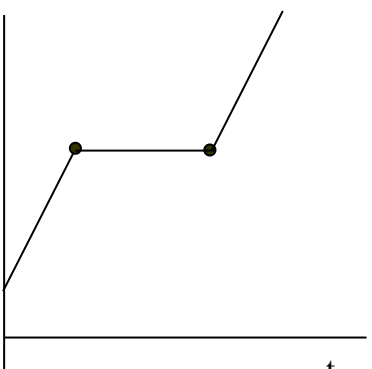


Description

Trial # _____

Initial Conditions: _____

c. x



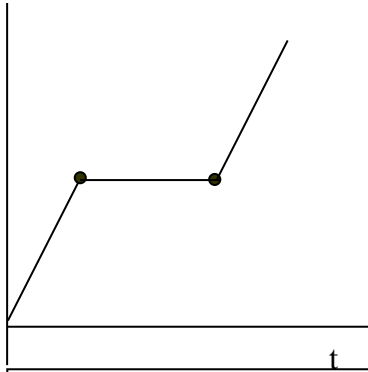
Description

Trial # _____

Initial Conditions: _____

2. Produce each of the following velocity vs. time graphs on the screen. Write a description of the motion. Include the motion at the start in the initial conditions box.

a. v

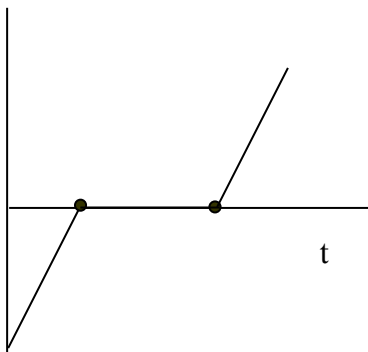


Description

Trial # _____

Initial Conditions: _____

b. v

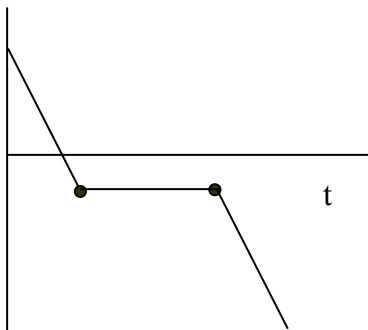


Description

Trial # _____

Initial Conditions: _____

c. v



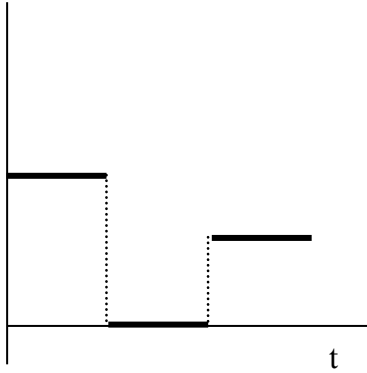
Description

Trial # _____

Initial Conditions: _____

3. Write a description of a motion that could produce the following graphs. Include the motion at the start in the initial conditions box.

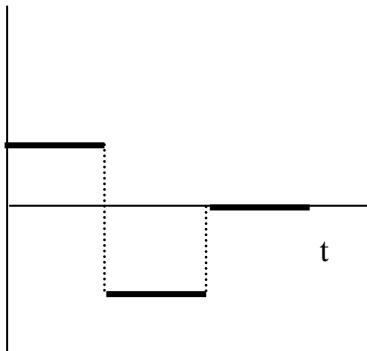
a. a



Description

Initial Conditions: _____

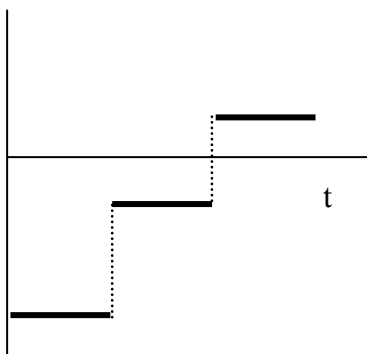
b. a



Description

Initial Conditions: _____

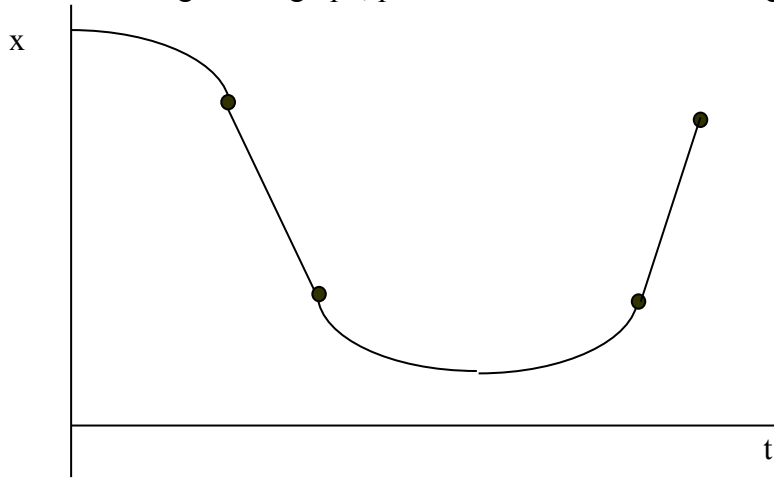
c. a



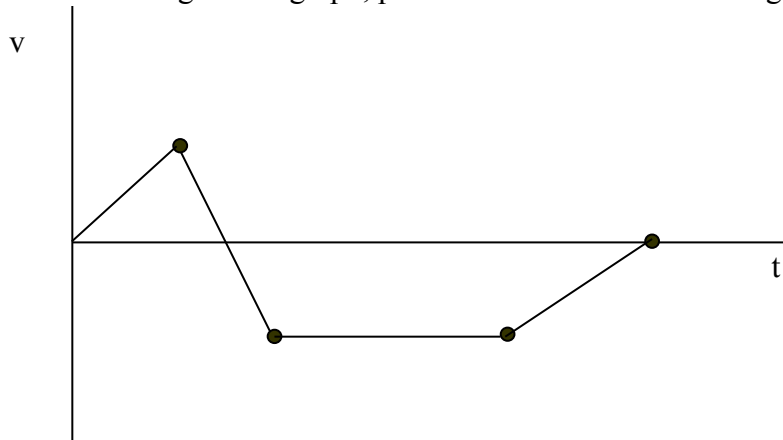
Description

Initial Conditions: _____

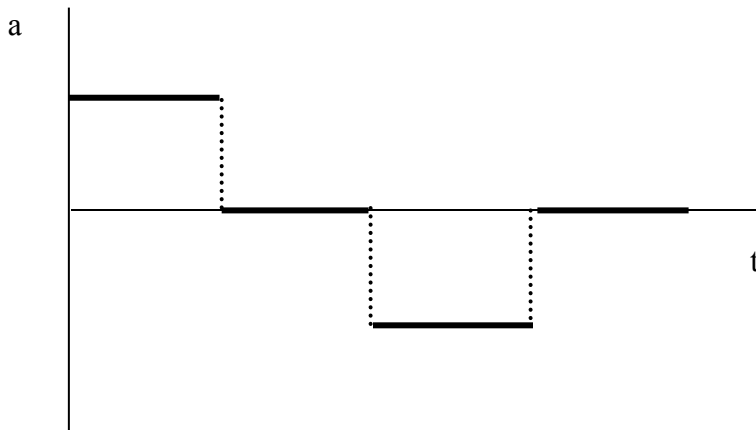
4. Given the following **x vs. t** graph, produce the **v vs. t** and **a vs. t** graphs.



5. Given the following **v vs. t** graph, produce the **x vs. t** and **a vs. t** graphs.



6. Given the following **a vs. t** graph, produce a possible set of **x vs. t** and **v vs. t** graphs.



7. If you want to sketch a **v vs. t** graph when given a graph of **x vs. t**:
 - a. how do you get the magnitudes?
 - b. how do you get the directions?

8. If you want to sketch an **a vs. t** graph when given a graph of **x vs. t**, how do you get the directions?

9. If you want to sketch an **a vs. t** graph when given a graph of **v vs. t**:
 - a. how do you get the magnitudes?
 - b. how do you get the directions?

10. Suppose you want to sketch a graph of **x vs. t** from a **v vs. t** graph.
 - a. What extra information do you need?
 - b. How could you determine the shape of the curve?
 - c. How could you determine the final value for a section?

11. Suppose you want to sketch a graph of **x vs. t** from an **a vs. t** graph.
 - a. What extra information do you need?
 - b. How could you determine the shape of the curve?
 - c. How could you determine the final value for a section?