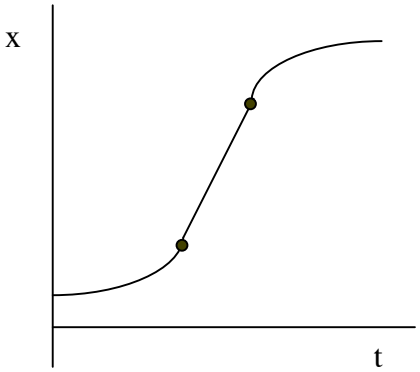
# *Graph Walking*

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

a.




Description

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Trial # _____

Initial Conditions: _____

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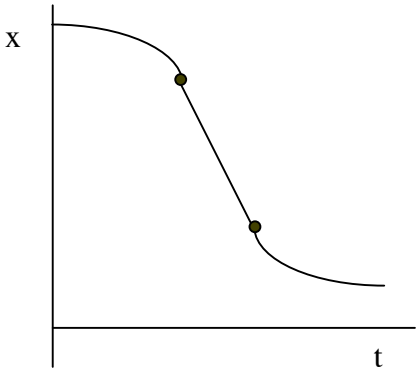
b.

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Trial # _____

Initial Conditions: _____

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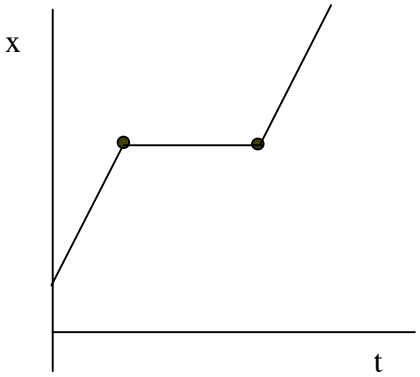
c.

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Trial # _____

Initial Conditions: _____

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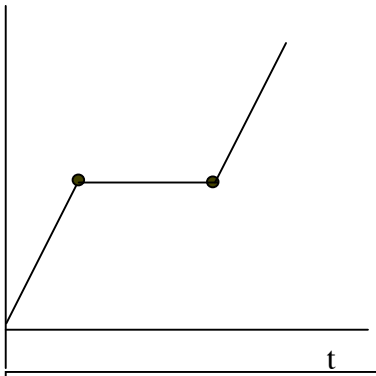
2. Produce each of the following velocity vs. time graphs on the computer. Write a description of the motion. Include the motion at the start in the initial conditions box.

a.

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Trial # _____

Initial Conditions: _____

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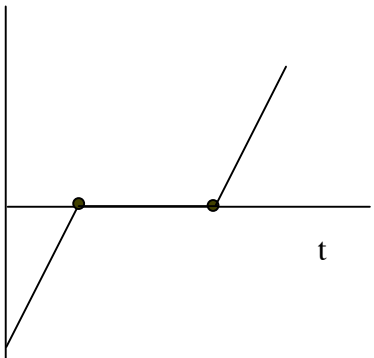
b.

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Trial # _____

Initial Conditions: _____

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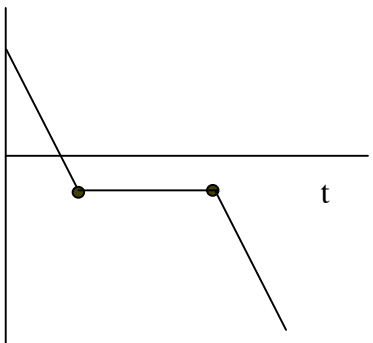
c.

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Trial # _____

Initial Conditions: _____

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

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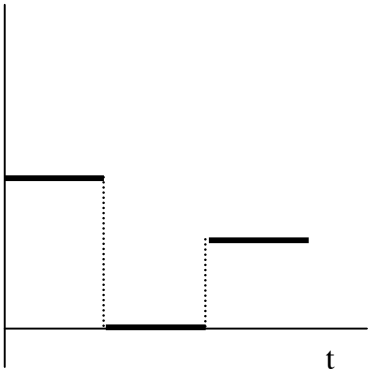


Description

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Initial Conditions: _____
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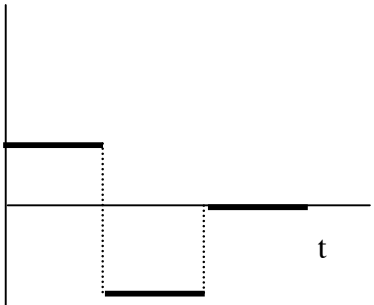
b.

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Initial Conditions: _____
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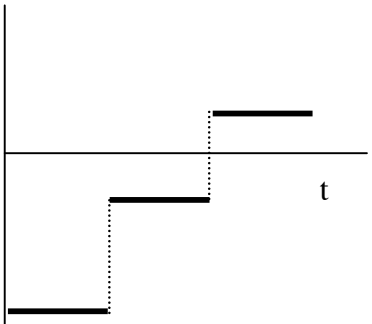
c.




Description

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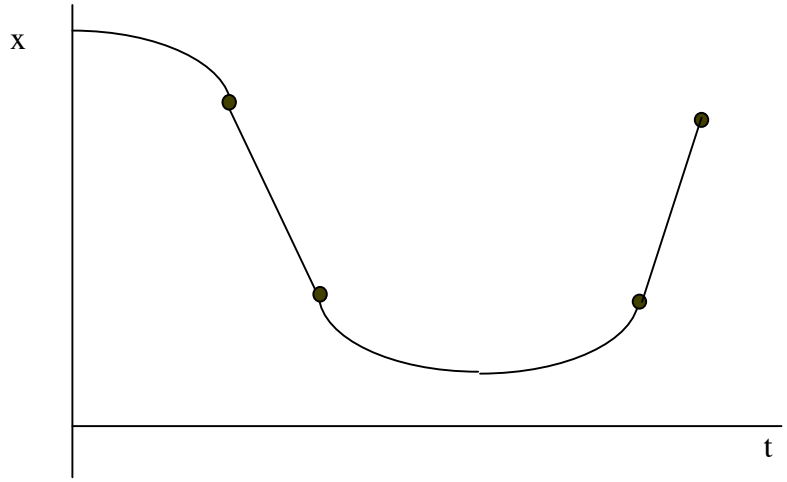
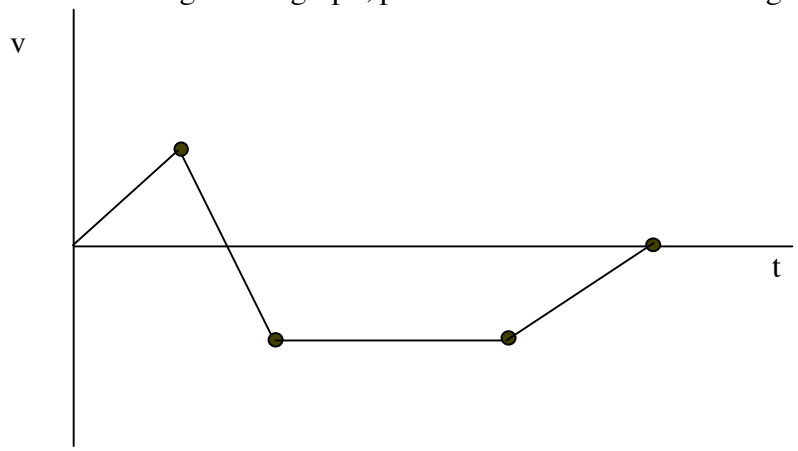
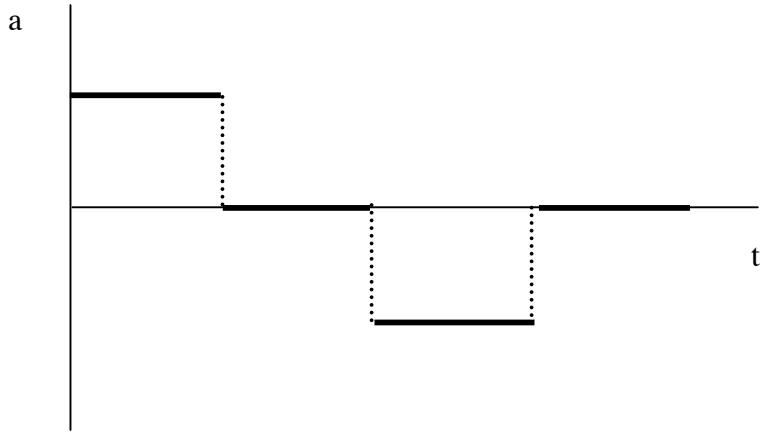
4. Given the following **x vs. t** graph, produce the **v vs. t** and **a vs. t** graphs.




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?