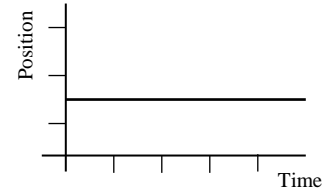


Name _____ Date _____ Partners _____

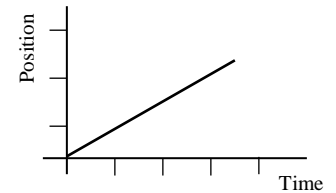
Constant Motion Homework

Describing Position-Time Graphs

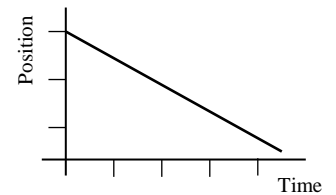
1. How would you walk to create a horizontal line on a position-time graph?



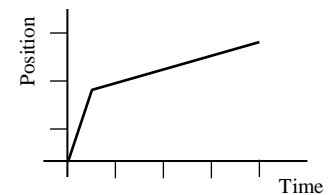
2. How would you walk to create a line that slopes up?



3. How would you walk to create a line that slopes down?



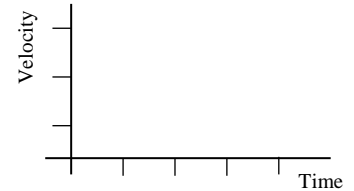
4. How would you move to create a line that slopes up steeply first, and then continues to slope less steeply?



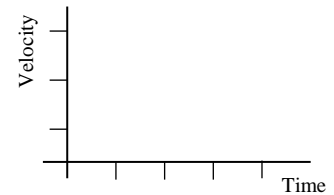
Constructing Velocity-Time Graphs

Sketch the velocity-time graph corresponding to the following descriptions of motion.

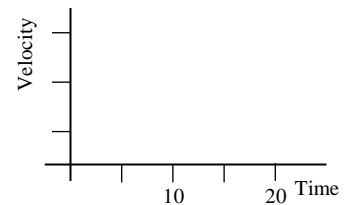
1. The object is moving away from the reference point at a steady (constant) velocity.



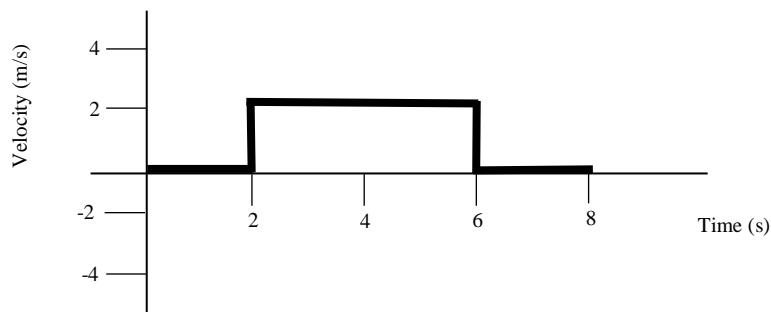
2. The object is standing still.



3. The object moves towards the reference point at a steady (constant) velocity for five seconds and then stands still for ten seconds.

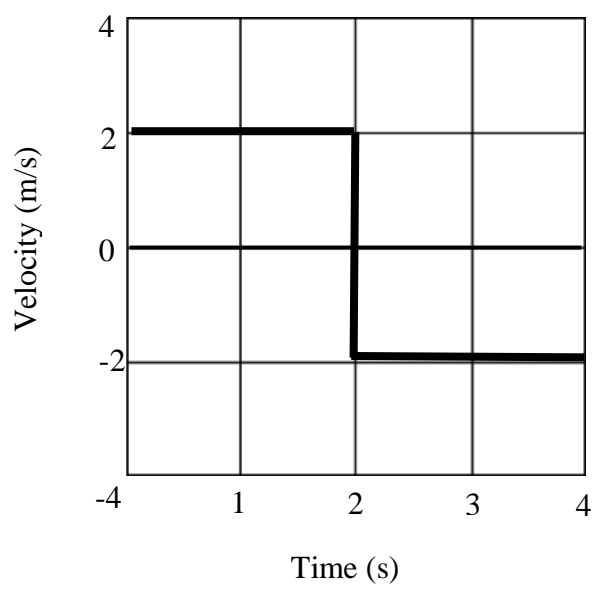
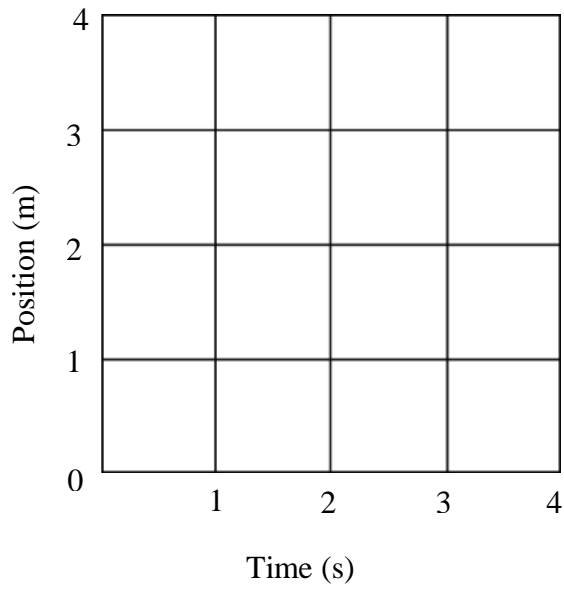
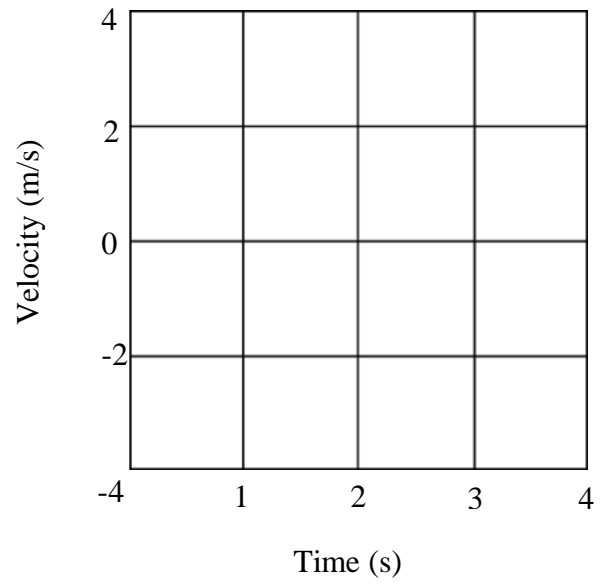
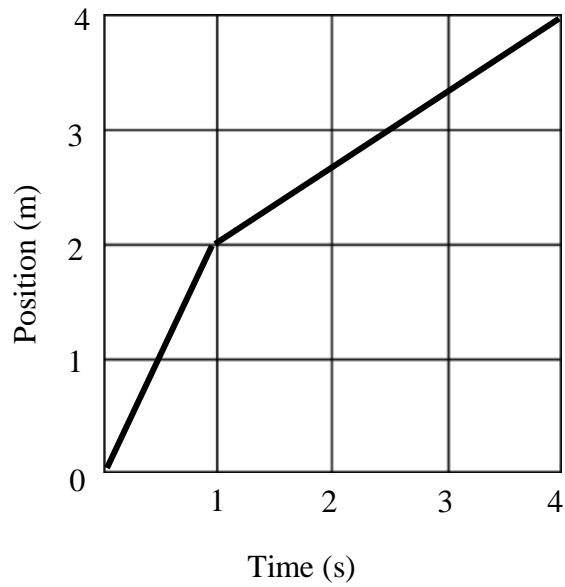


4. The velocity-time graph of an object is shown below. What is the change in position (displacement) of the object? Show your work.



Coordinating Representations

Draw the corresponding missing graphs with accurate values for an object's motion.



Draw the corresponding position-time graph and the velocity-time graph with accurate values for the following description of an object's motion.

An object moves with a velocity of 2 m/s for 10 seconds in the positive direction and then instantaneously changes speed to 4 m/s in the positive direction for another 10 seconds. The object's total displacement is 60 meters from the reference point.

