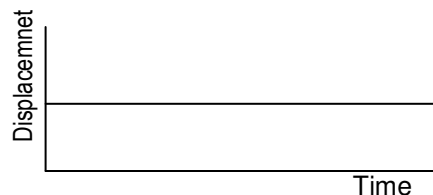


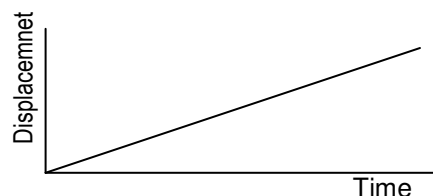
1. What do you walk to create a horizontal line on a displacement-time graph?

You don't walk; stay still



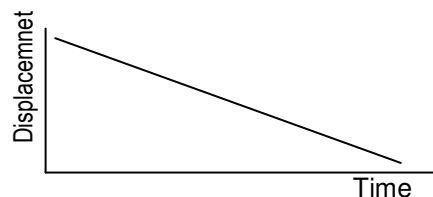
2. How do you walk to create a straight line graph that slopes up?

Walk away from the origin, in the positive direction, with a constant speed (go the same distance in each time interval)



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

Start away from the origin at a positive position and walk toward the origin with a constant speed.



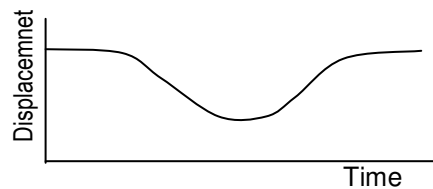
4. How do you move so the graph goes up steeply at first, and then continues up gradually?

Walk away from the origin, in the positive direction, with a constant speed and then suddenly decrease your speed but continue walking in the same direction.



5. How do you walk to create a U-shaped graph?

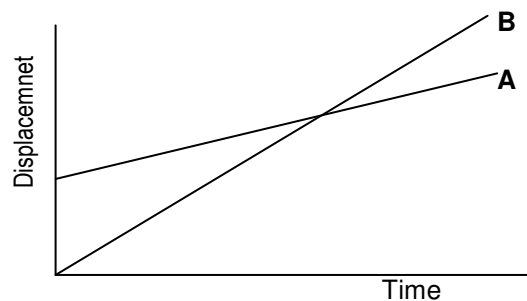
Starting at a positive position stand still for a while. Then begin to slowly walk towards the origin and suddenly speed up. Then begin to slow down, and reverse direction and walk slowly. Suddenly speed up, and then slow down. Then stand still.



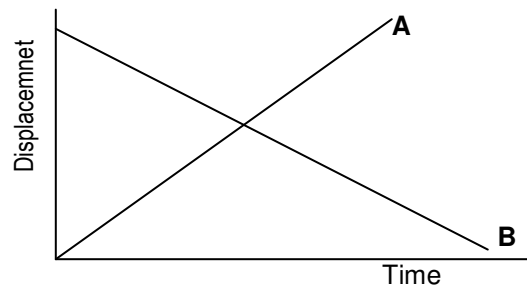
Answer the following about two objects, A and B, whose motion produced the following position-time graphs.

6. a) Which object is moving faster, A or B? B
 b) Which starts ahead? A or B? A
 c) What does the intersection of the lines mean? _____

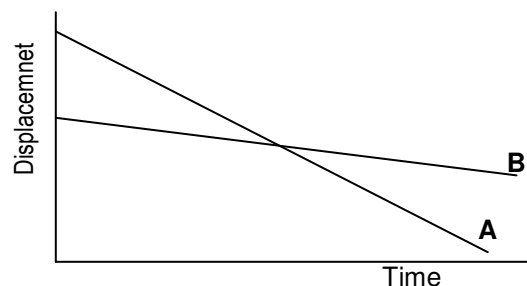
That is the point where object B passed object A



7. a) Which object is moving faster, A or B? A
 b) Which object has a negative velocity according to the convention we have established? B

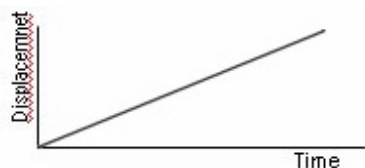


8. a) Which object is moving faster? A
 b) Which starts ahead? B
 c) What does the term "ahead" mean? In terms of the direction of the displacement, which is farther down that "path"



Sketch the displacement-time graph corresponding to each of the following descriptions of the motion of an object.

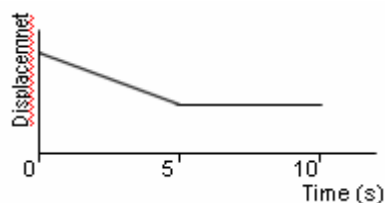
9. The object moves with a steady (constant) velocity away from the origin.



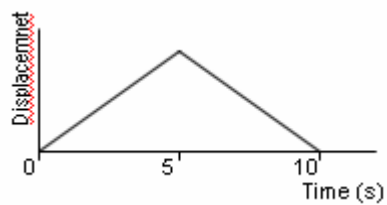
10. The object is standing still.



11. The object moves with a steady (constant) velocity toward the origin for 5 seconds and then stands still for 5 seconds.



12. The object moves with a steady velocity away from the origin for 5 seconds, then reverses direction and moves at the same speed toward the origin for 5 seconds.



13. The object moves away from the origin, starting slowly and speeding up.

