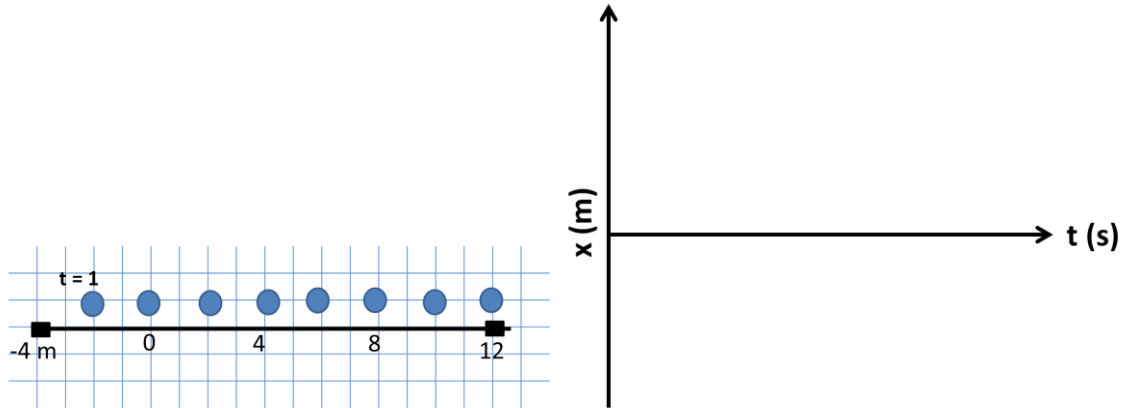


Worksheet 1.2

For each track diagram, draw the corresponding x vs. t graph and determine the sign of the displacement, velocity, and acceleration.

1.

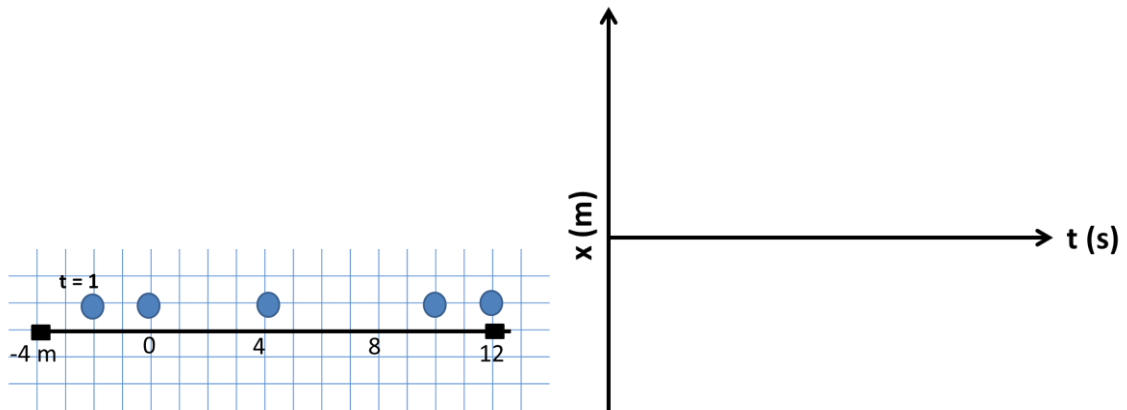


The displacement, Δx , is: positive zero negative (circle one)

The velocity is: positive zero negative (circle one)

The acceleration is: positive zero negative (circle one)

2.

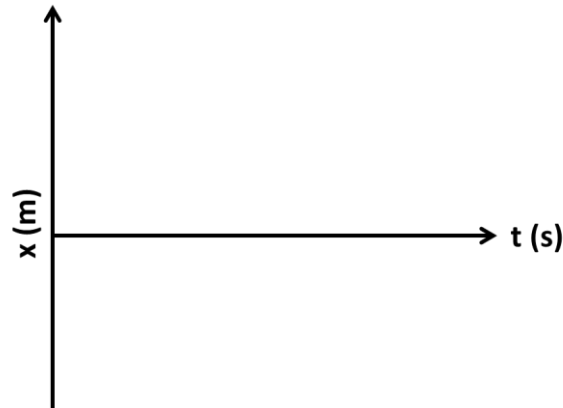
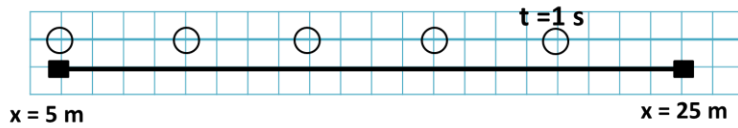


The displacement, Δx , is: positive zero negative (circle one)

The velocity is: positive zero negative (circle one)

The acceleration is: positive zero negative (circle one)

3.

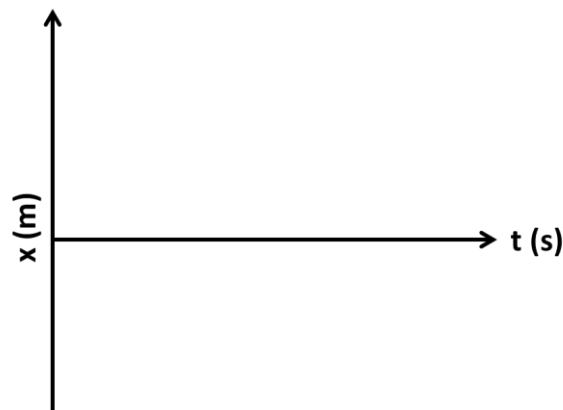
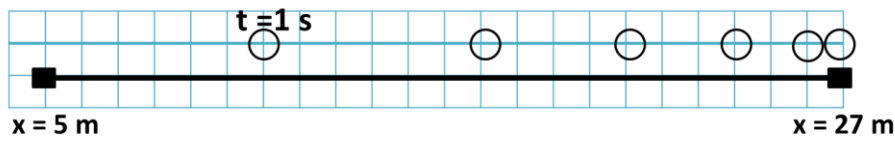


The displacement, Δx , is: positive zero negative (circle one)

The velocity is: positive zero negative (circle one)

The acceleration is: positive zero negative (circle one)

4.

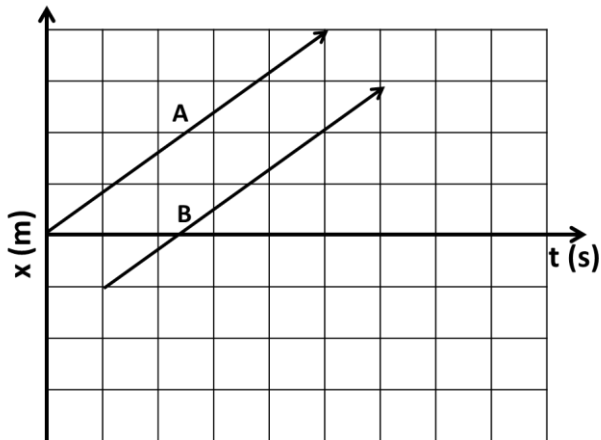


The displacement, Δx , is: positive zero negative (circle one)

The velocity is: positive zero negative (circle one)

The acceleration is: positive zero negative (circle one)

5.



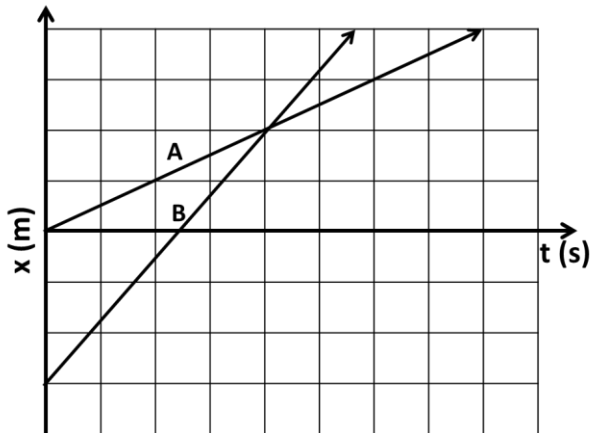
In the diagram above, two men are racing Segways though Golden Gate Park. The graph above represents their positions across a range of times.

How many seconds behind Man A is Man B?

How do their velocities compare?

Will Man B ever catch Man A?

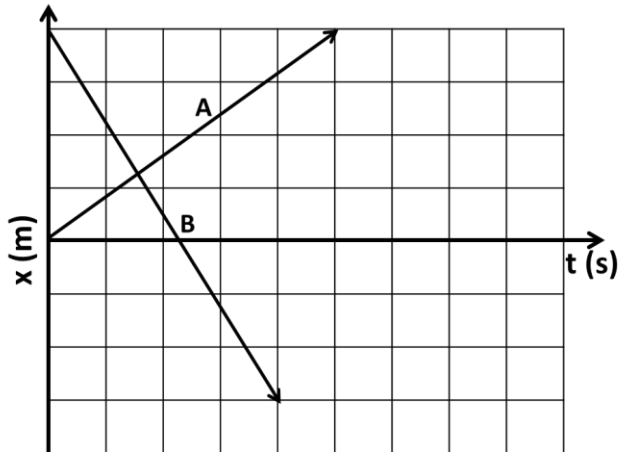
6.



The graph above represents a snapshot of two marathon runners competing in a race. At what time point does runner B pass runner A?

What are the two runners' approximate velocities?

7.



The graph above represents two cars going in opposite directions on a freeway. At what point in space and time do the two cars pass each other? Which car is traveling at a higher speed?