

Physics "Motion" Summary

Thursday, January 5, 2023 5:49 PM

1. Motion:

Change in the position of a body over time with respect to the surrounding.

2. Distance:

How far an object is moved.

3. Reference point: Place or object used for comparison to determine if something is in motion

They are stationary

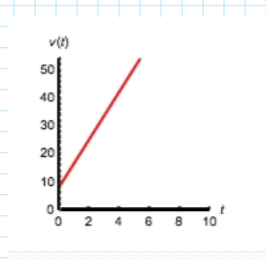
Don't move

4. Relating of motion:

A motion is said to be relative because an object is in motion w.r.t a given reference and at the same time w.r.t another reference.

5. Trajectory:

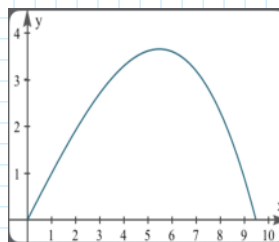
→ **Definition:** The set of position occupied by a moving object during its motion is called "Trajectory".



→ Straight



→ Circle



→ Curve

6. Types of motion of a trajectory according to the trajectory

→ Rectilinear motion :

If the trajectory of a moving object is a straight line → the motion is then a rectilinear motion.

→ Curvilinear motion :

If the trajectory of a moving object is a curve → the motion is then a curvilinear motion.

→ **Circular motion :**

If the trajectory of a moving object is a circle → the motion is then a circular motion.

Remark!!!!!!:

The body where the motion is studied according to a given reference.

7. To determine the position of a moving object (point)

We have to choose a reference point along the trajectory.