Assignment of Motion (CLASS IX)

Q-1 A particle is moving in a circular path of radius 'R'. The displacement after half a circle would be-:

Q-2 Give an example of motion in which the acceleration is against the direction of motion.

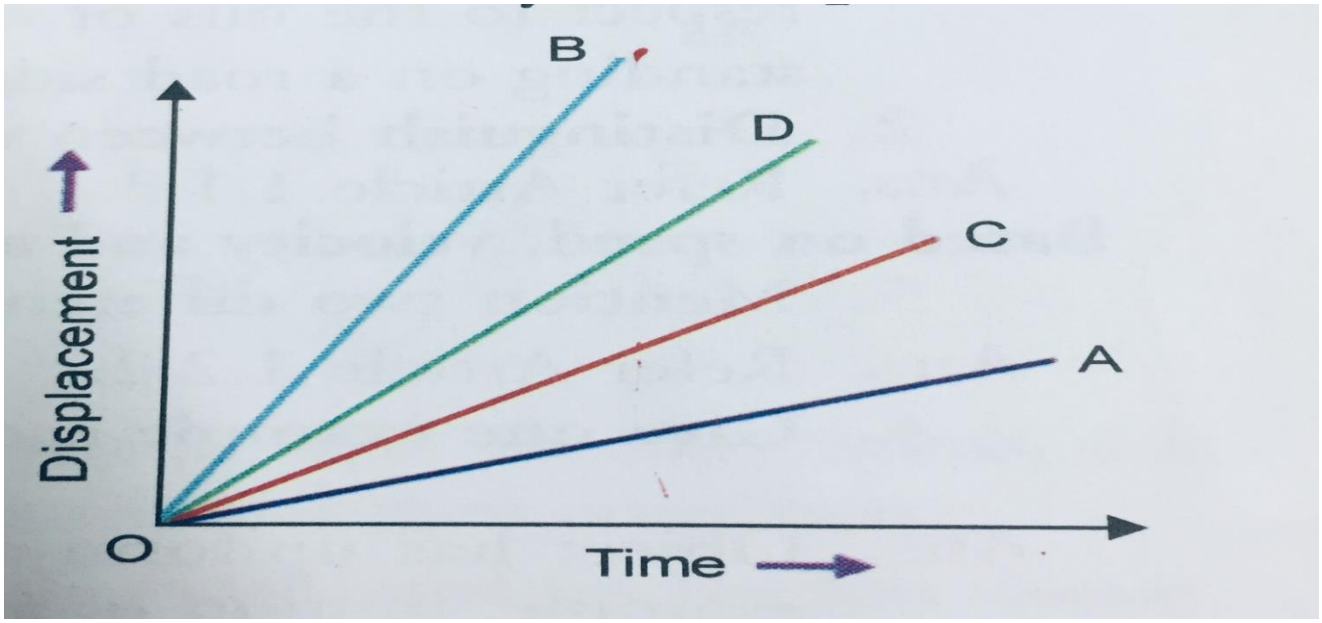
Q-3 What is the acceleration of a body moving with uniform velocity in a straight line?

Q-4 Is uniform circular motion is accelerated motion. Explain

Q-5 What will be the numerical ratio of displacement to distance for a moving object in a straight line?

Q-6 Which of the two bodies A and B in the following graph is moving with higher speed and why?

Q-7-Figure shows the displacement time graph of four children A,B,C and D which child has highest velocity



Q-8 Change the speed of 60 m/s into km/h and 25 km/h into m/s

Q-9 What type of motion, is exhibited by a freely falling body? Give reason for you answer.

Q-10 Fill up

(a) Displacement is a _____ quantity, whereas distance is a _____ quantity.

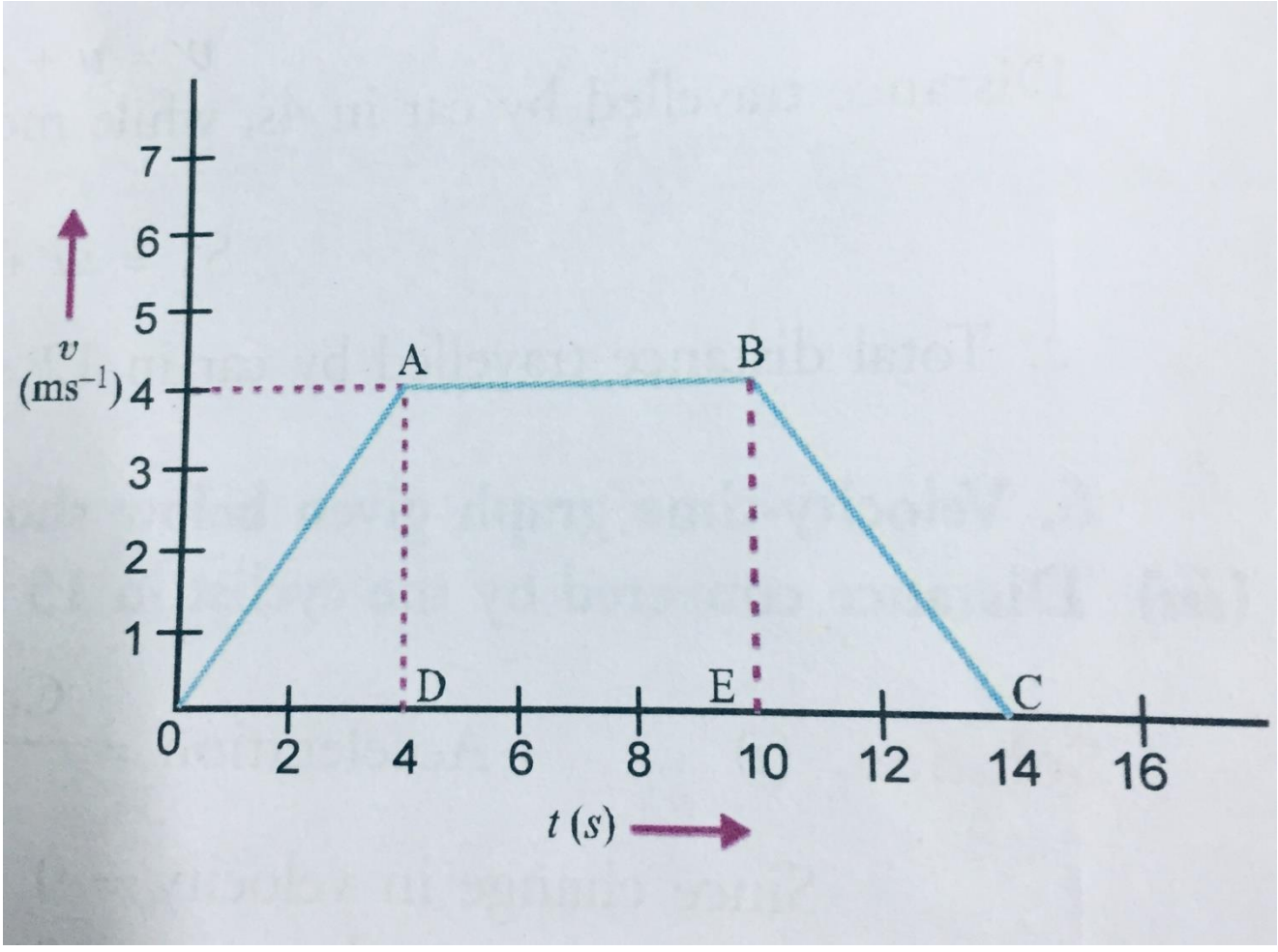
(b) The physical quantity that includes both the speed and direction of the motion of a body is called its _____.

(c) A motorcycle has a steady _____ of 3 m/s^2. This means that each _____ its _____ increases by _____.

(d) Velocity is the rate of change of _____. It is measured in _____.

(e) Acceleration is the rate of change of _____. It is measured in _____

Q-11 Velocity time graph for the motion of a body is shown below:



Answer the following question.

(a)Which part of the graph show accelerated motion also calculate the acceleration.

(b) Which part of the graph shows retarded motion also calculate the retardation.

(c) Calculate the distance travelled by a body in first 4 second of the journey.