Name:

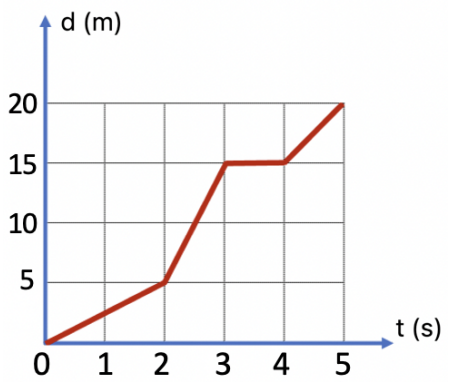
Motion Graphs (Distance Time Graphs) - Worksheet

Q.1. Positions of an object at different times are given in the table below.

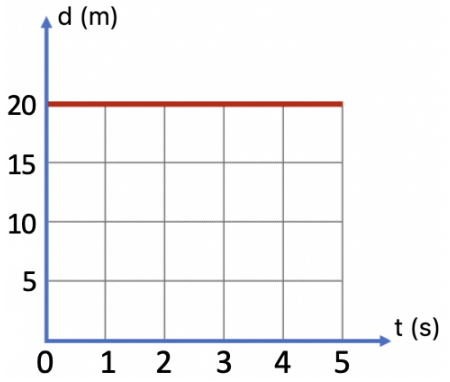
Distance (m)	0	5	10	10	15	20
Time (s)	0	1	2	3	4	5

Which of the following could be the **distance - time graph** for this object?

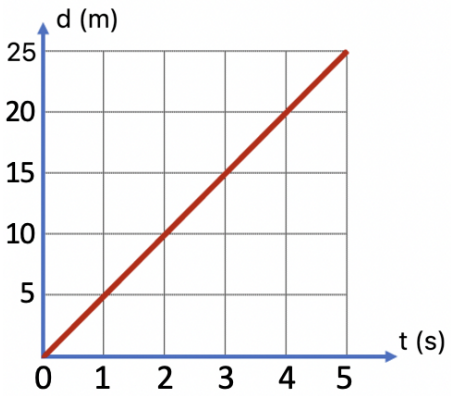
a)



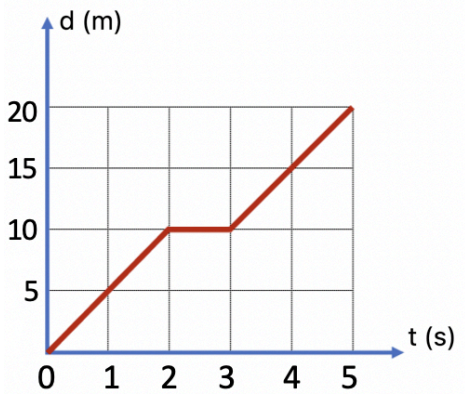
b)



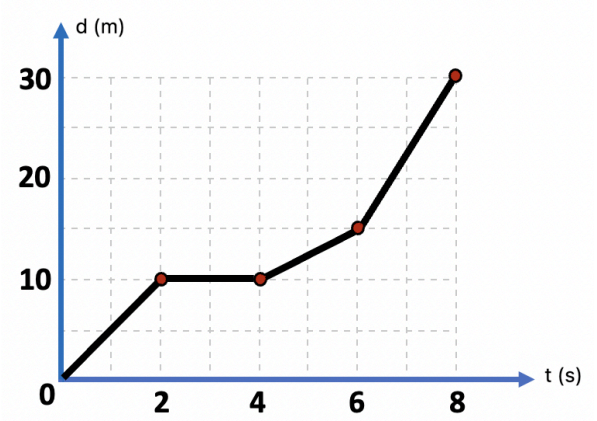
c)



d)



Use the distance - time graph below to answer the next two questions. ***(Q.2*** - ***Q.3)***



Q.2. What is the speed of the object **between 0** and **2 seconds**?

a) 0 m/s b) 2.5 m/s c) 5 m/s d) 7.5 m/s

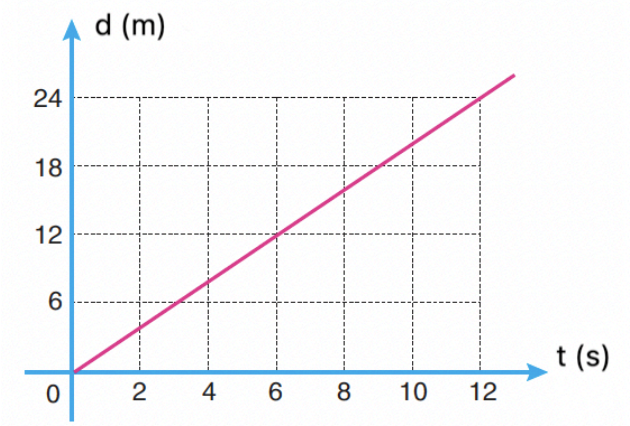
Q.3. What is the speed of the object **between 2** and **4 seconds**?

Name:

a) 0 m/s b) 2.5 m/s c) 5 m/s d) 7.5 m/s

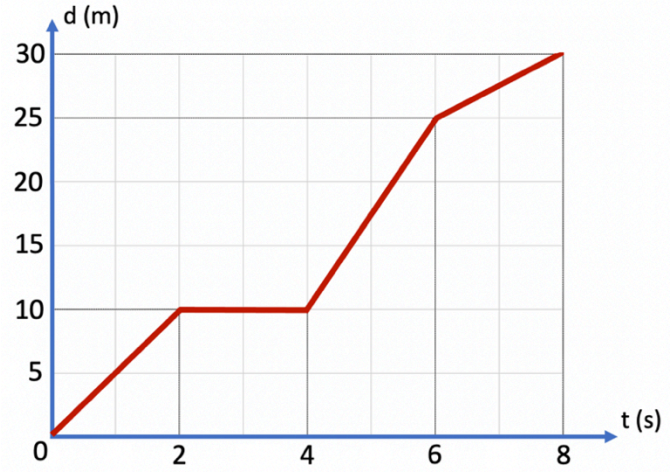
Name:

Q.4. How far did the object travel in the first **10 seconds?**



a) 18 m b) 20 m c) 22 m d) 24 m

Use the distance - time graph below to answer the next two questions. ***(Q.5*** - ***Q.6)***



Q.5. In which time interval is the object traveling **fastest**?

a) Between 0 and 2 seconds b) Between 2 and 4 seconds

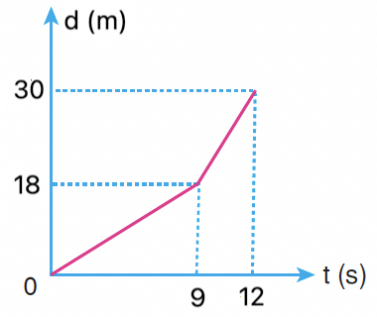
c) Between 4 and 6 seconds d) Between 6 and 8 seconds

Q.6. During which interval is the object **not moving**?

a) Between 0 and 2 seconds b) Between 2 and 4 seconds

c) Between 4 and 6 seconds d) Between 6 and 8 seconds

Q.7. What is the speed of the object between 9 and 12 seconds?

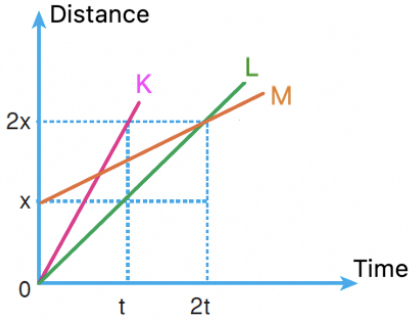


Name:

a) 0 m/s b) 2 m/s c) 4 m/s d) 6 m/s

Name:

Q.8. Which object is moving **faster**?



a) K

b) L

c) M

d) They have the same speed.

Q.9. Which of the following distance-time graphs represents an object moving with a **constant speed**?

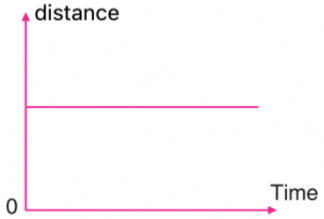
a)



b)



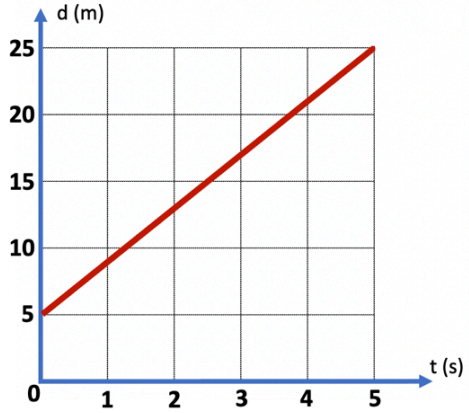
c)



d)



Use the distance - time graph below to answer the next two questions. ***(Q.10 - Q.11)***



Q.10. What is the **initial position** of the object?

a) 0 m b) 5 m c) 10 m d) 15 m

Q.11. What is the **velocity** of the object?

Name:

a) 0 m/s b) 2 m/s c) 4 m/s d) 5 m/s