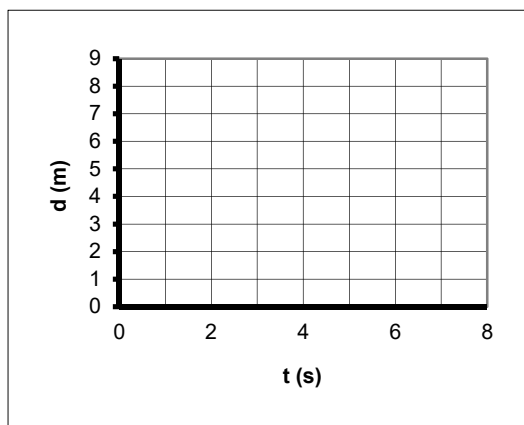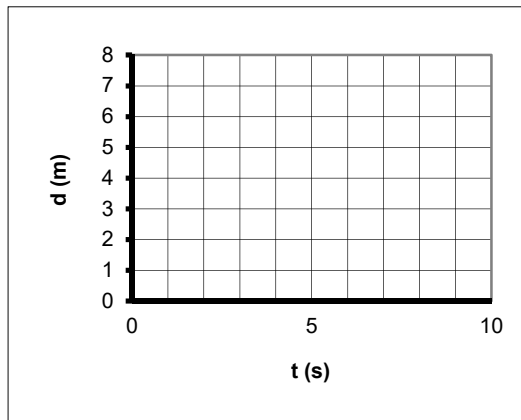# Distance-Time Graphs

Describe the motion of the object in the following distance-time graphs.
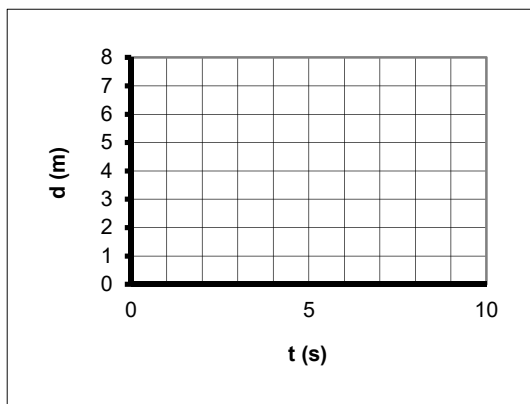
1 The object starts at 2 m from the wall. It moves away from the wall at a speed of 3 m/s for 2 s until it is 8 m from the wall. It turns around and moves towards the wall at a speed of 2.67 m/s for 3 s until it is at the wall. It turns around and moves away from the wall at a speed of 3.5 m/s for 2 s until it is 7 m from the wall.

2 The object starts at 1 m from the wall. It moves away from the wall at a speed of 1.33 m/s for 3 s until it is 5 m from the wall. It turns around and moves towards the wall at a speed of 4 m/s for 1 s until it is 1 m from the wall. It turns around and moves away from the wall at a speed of 1.5 m/s for 4 s until it is 7 m from the wall.

3 The object starts at 3 m from the wall. It moves away from the wall at a speed of 2 m/s for 2 s until it is 7 m from the wall. It turns around and moves towards the wall at a speed of 2.33 m/s for 3 s until it is at the wall. It turns around and moves away from the wall at a speed of 5 m/s for 1 s until it is 5 m from the wall.

4 The object starts at 5 m from the wall. It stays where it is for 1 s . It then moves away from the wall at a speed of 1 m/s for 1 s until it is 6 m from the wall. It turns around and moves towards the wall at a speed of 5 m/s for 1 s until it is 1 m from the wall.

Answers