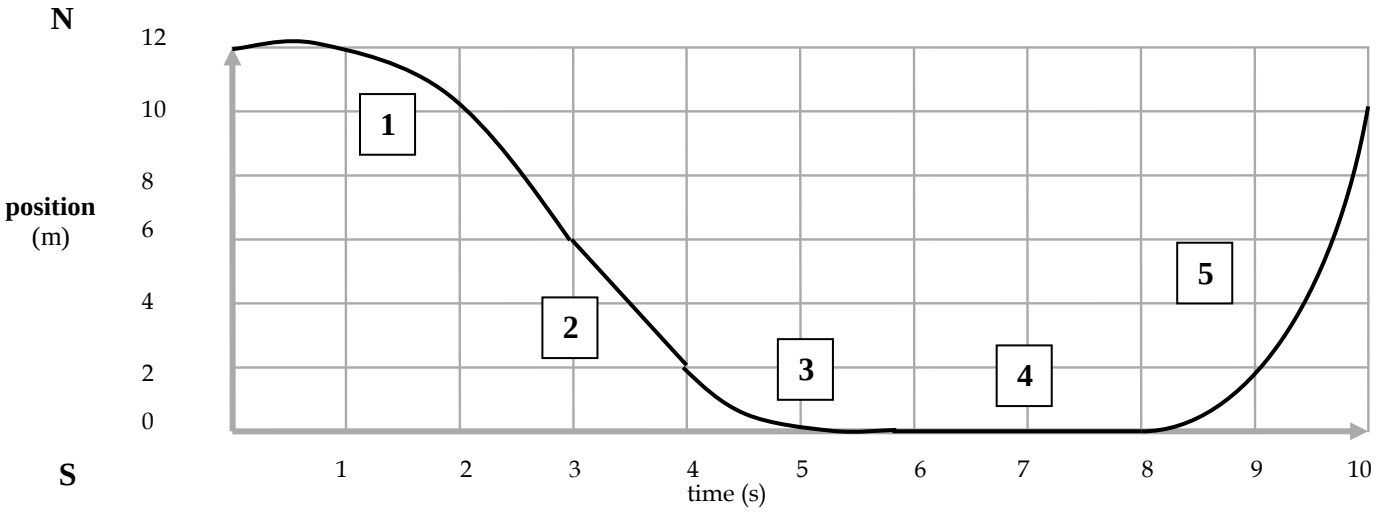
Physics **Name**_____
Practice with Graphs III – x-t, v-t and a-t **Date** _____

Use the **position vs. time** graph below to answer the questions that follow.



1. Describe the motion of the object during each interval.

2. What is the position at 3 seconds?

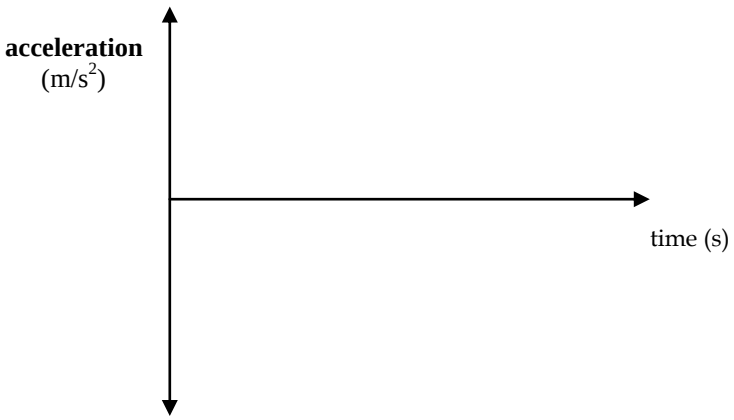
3. What is the average velocity of the object from 3 s to 4 s?

4. What is the average velocity of the object from 6 s to 8 s?

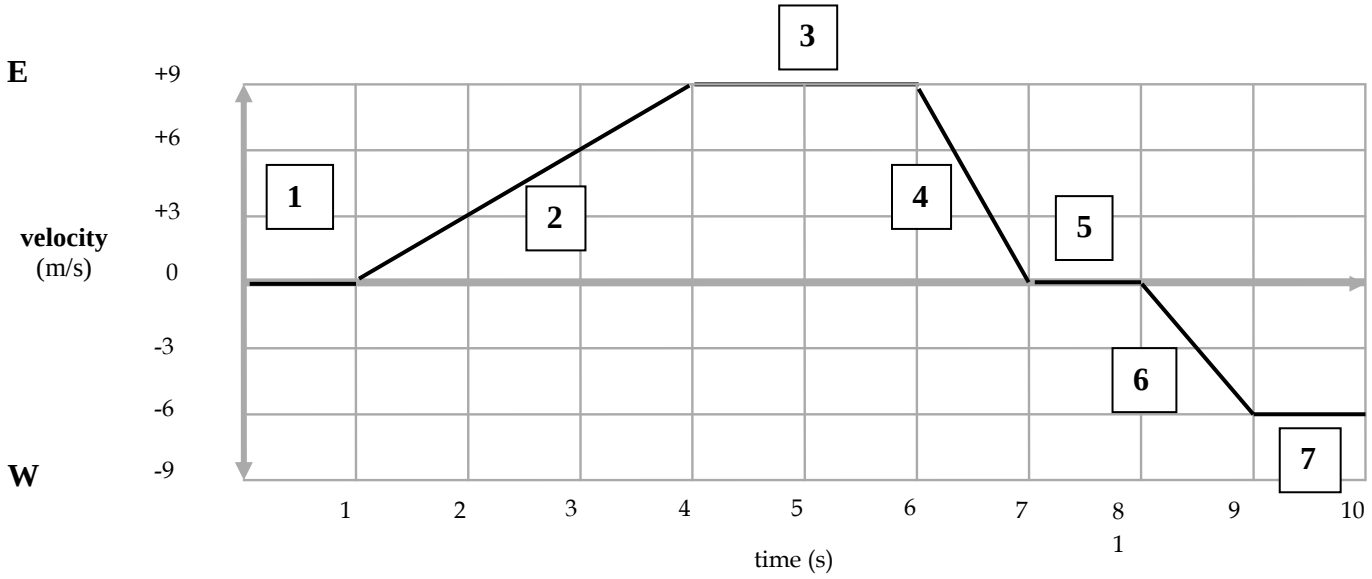
5. What is the average velocity for the entire 10 second interval of the graph?

6. What is the average speed for the entire 10 second interval of the graph?

7. Draw the v vs. t and a vs. t graphs that correspond to the above position vs. time graph.



Use **the velocity vs. time** graph below to answer the questions that follow.



1. Describe the motion of the object during each interval.

2. What is the instantaneous velocity at 2 seconds?

3. How far did the object travel during 1 s to 7 s?

4. How far did the object travel during 8 s to 10 s?

5. During what interval(s) did it move with a constant velocity?

6. What was/were the velocity/velocities while it moved at a constant velocity?

7. Determine the magnitude and direction (sign) of the acceleration for all periods when the object accelerated.

8. Draw the x vs. t and a vs. t graphs that correspond to the above velocity vs. time graph.