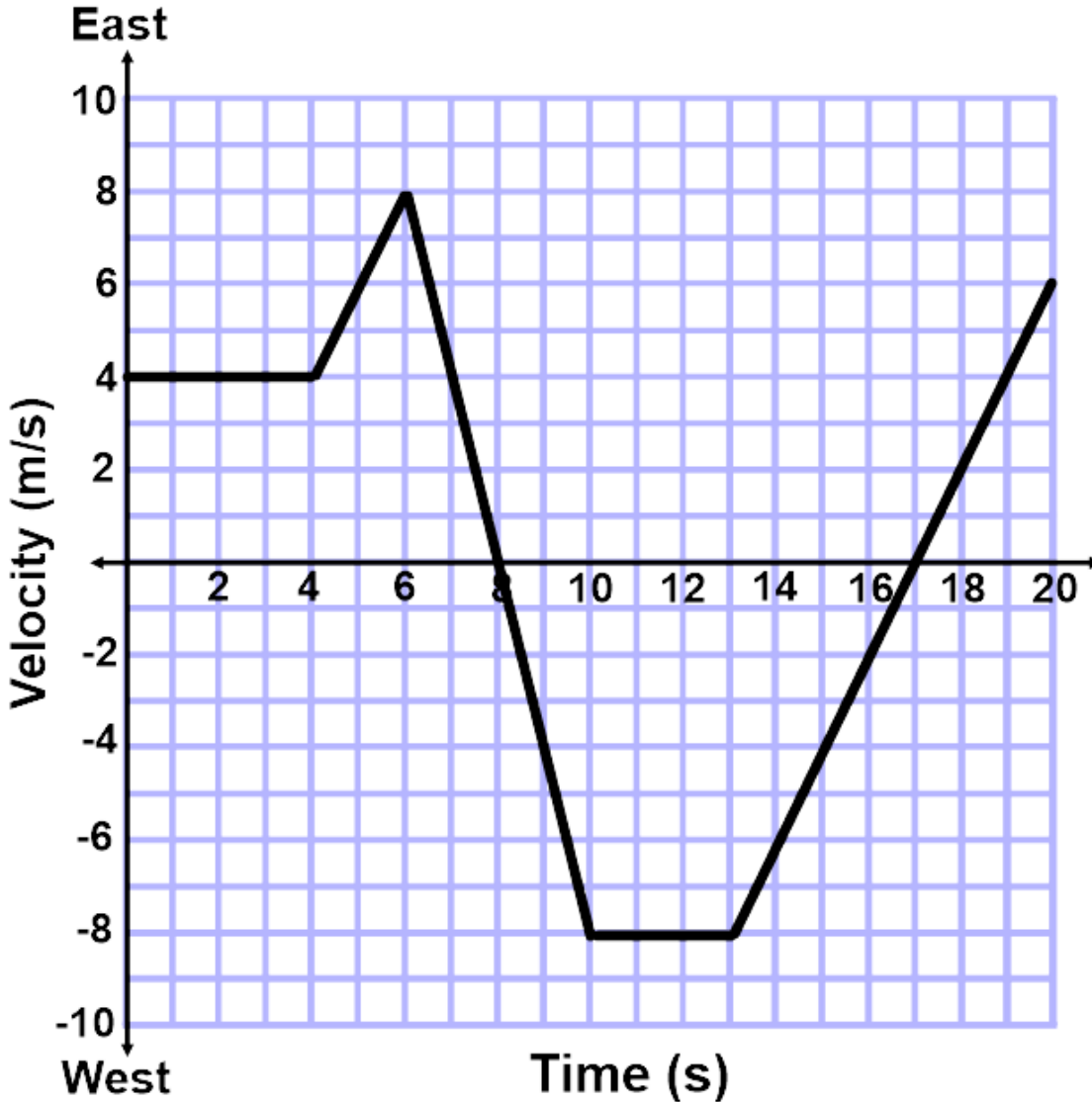# Physics 112: Acceleration Review: Velocity vs Time Graphs



Using the graph above answer each of the following questions:

1. At what time(s) did the object change direction?
2. During which time interval(s) was the acceleration in the opposite direction as the object's motion?
3. Did the object spend more time traveling east or west?
4. How much time did the object spend moving east?
5. How far did the object travel in the last 3 seconds?
6. Calculate the acceleration at the 8.5 second mark.
7. What is the objects velocity at 5s?
8. Calculate the total distance and resulting position of the object at the end of the 20 seconds.
9. What is the objects average speed and average velocity at the end of the 20 seconds?
10. Assuming the object started at position (0,0). Without extensive calculations, estimate at what point in time the object had instantaneously returned to its starting position.