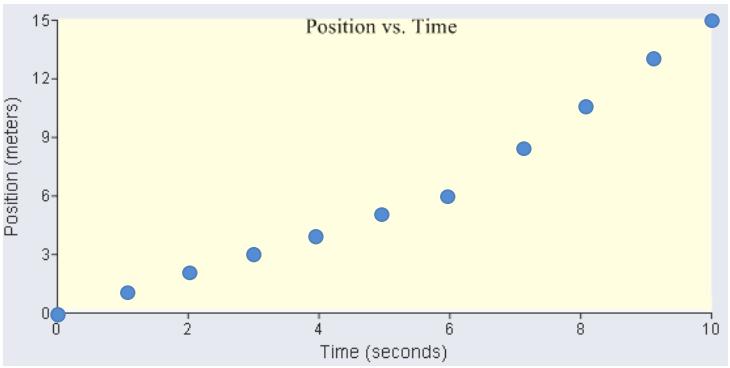
***Describing Velocity* Check-In** **Name:** _____ **Date:** _____

Below is a graph showing a bicyclist's **position versus time** while it traveled down a straight road. Assume that the start line is at 0 meters, and that motion away from the Start line and toward the Finish line is considered the positive direction.



Answer the following questions about the bicyclist's journey:

1. What is the bicyclist's velocity from 6 to 10 seconds?

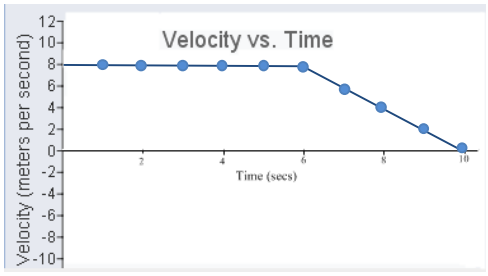
    a) 0.44 m/s

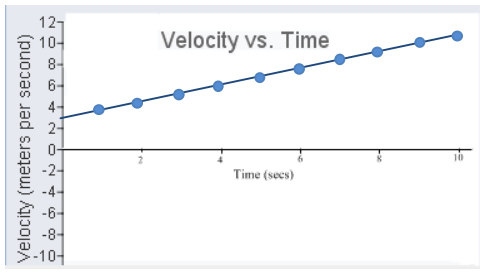
    b) 2.25 m/s

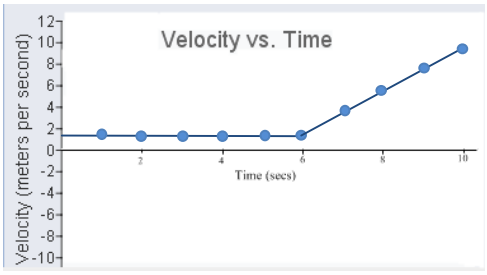
    c) 1.0 m/s

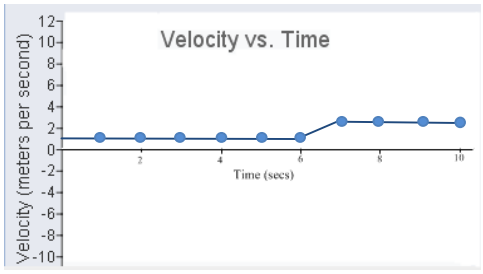
    d) 0 m/s

2. Which of the following velocity-time graphs best matches the motion in the position-time graph above?

a) 

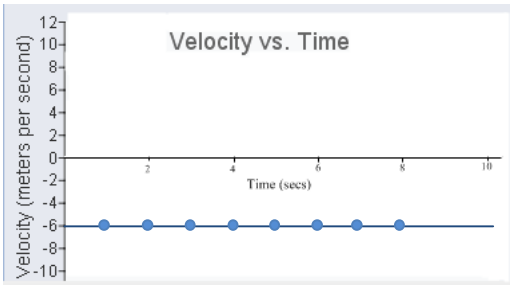
b) 

c) 

d) 

(over)

Below is a graph showing a car's **velocity versus time** while traveling down a straight road. Assume that the start line is at 0 meters, and that motion away from the Start line and toward the Finish line is considered the positive direction.



3. What is the car's velocity? _____

4. How is constant velocity away from the Start line represented on a velocity-time graph?

   a) By a straight line tilting up and to the right

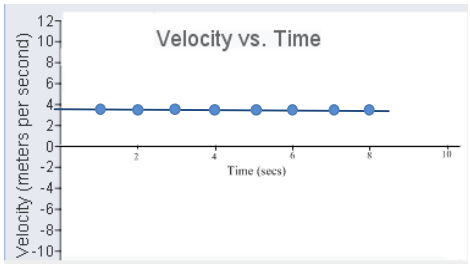
   b) By a straight line tilting down and to the left

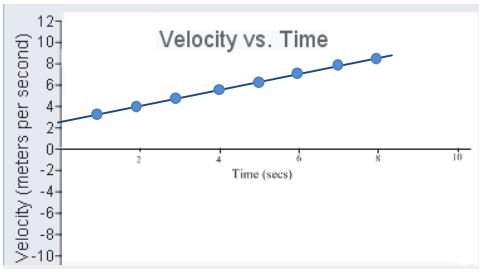
   c) By a straight horizontal line

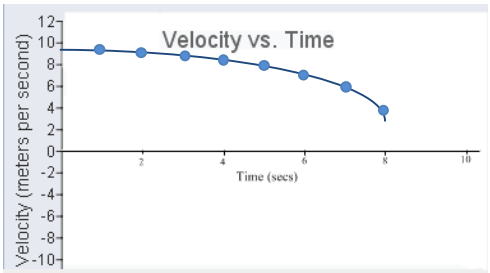
   d) By a straight vertical line

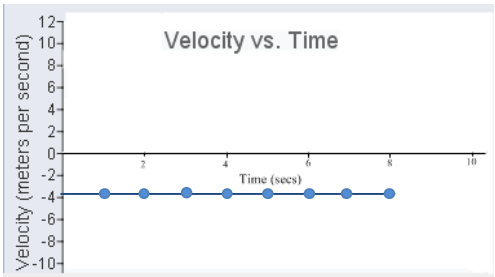
   e) By a curve

5. Which of the following velocity-time graphs shows that an object's velocity is changing? **Circle all that apply.**

a) 

b) 

c) 

d) 

Describing Velocity **Check-In Answers:**

1. b 2. d 3. -6 m/s 4. c 5. b and c