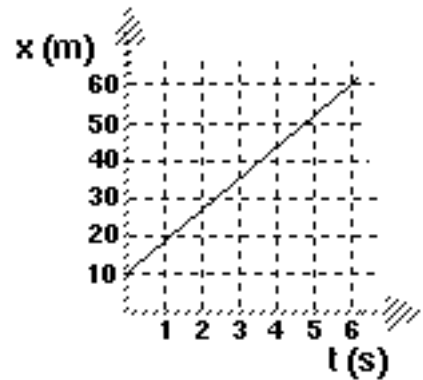


UNIT II: Review

1. Consider the position vs time graph at right.

a. Determine the average velocity of the object.

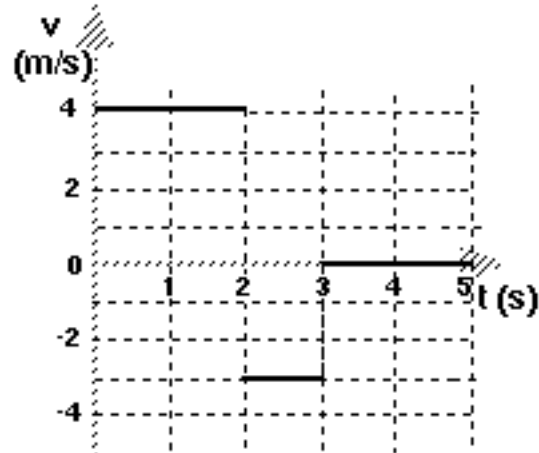
b. Write a mathematical equation to describe the motion of the object.



2. Shown at right is a velocity vs time graph for an object.

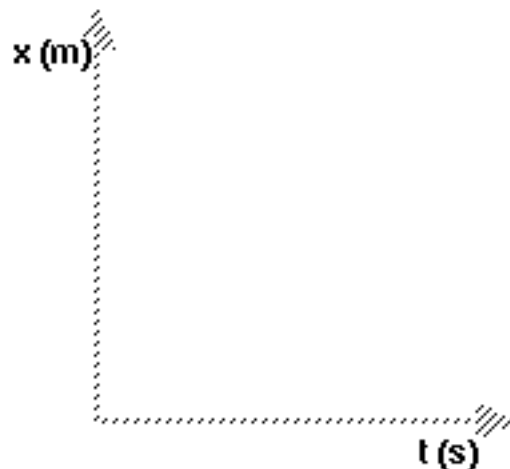
a. Describe the motion of the object.

b. Draw the corresponding position vs time graph. Number the x - axis.



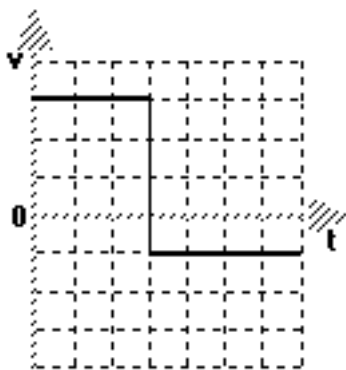
c. How far did the object travel in the interval $t = 1$ s to $t = 2$ s?

d. What is the total displacement? Explain how you got the answer.



3. Johnny drives to Wisconsin (1920 miles) in 32 hours. He returns home by the same route in the same amount of time.
 - a. Determine his average speed.
 - b. Determine his average velocity.
 - c. Compare these two values and explain any differences.

4. Consider the v vs t graph below.



- a. Describe the behavior of the object depicted in the graph.
 - b. Draw a motion map that represents the behavior of the object.
5. A race car travels at a speed of 95 m/s. How far does it travel in 12.5 s? Use the appropriate mathematical expression and show how units cancel. (Keep the proper number of sf's.)