

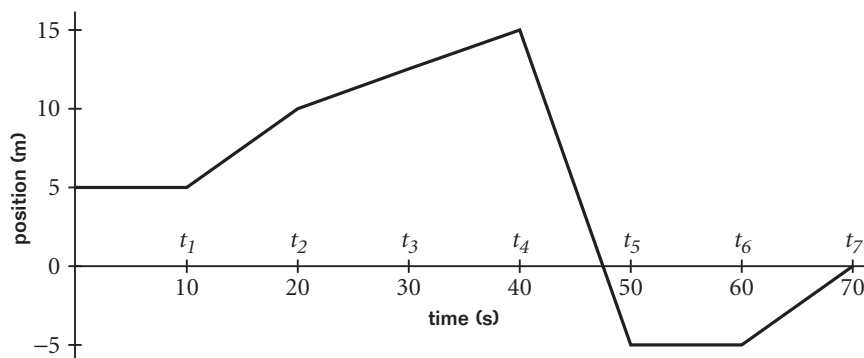
Motion in One Dimension

Forestville Central School • Regents Physics

Graph Skills

Displacement and Velocity

A minivan travels along a straight road. It initially starts moving toward the east. Below is the position-time graph of the minivan. Use the information in the graph to answer the questions.



1. Does the minivan move to the east? If so, during which time interval(s)?

2. Does the minivan move to the west? If so, during which time interval(s)?

3. Is the minivan's speed between t_1 and t_2 greater than, less than, or equal to its speed between t_2 and t_3 ?

4. Is the minivan's speed between t_4 and t_5 greater than, less than, or equal to its speed between t_6 and t_7 ?

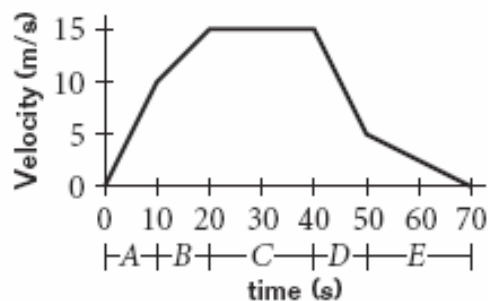
5. Does the minivan ever stop completely? If so, at which time(s)?

6. Does the minivan ever move with a constant velocity? If so, at which time(s)?

7. What is the total displacement of the minivan during the trip?

Velocity vs. Time Graphs

Below is the velocity-time graph of an object moving along a straight path. Use the information in the graph to fill in the table below.



For each of the lettered intervals below, indicate the motion of the object (whether it is speeding up, slowing down, or at rest), the direction of the velocity (+, −, or 0), and the direction of the acceleration (+, −, or 0).

Time interval	Motion	v	a
A			
B			
C			
D			
E			