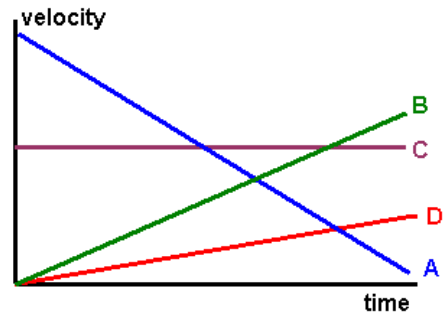


SPH3UI : Physics 11 Velocity – Time Graphs Part II

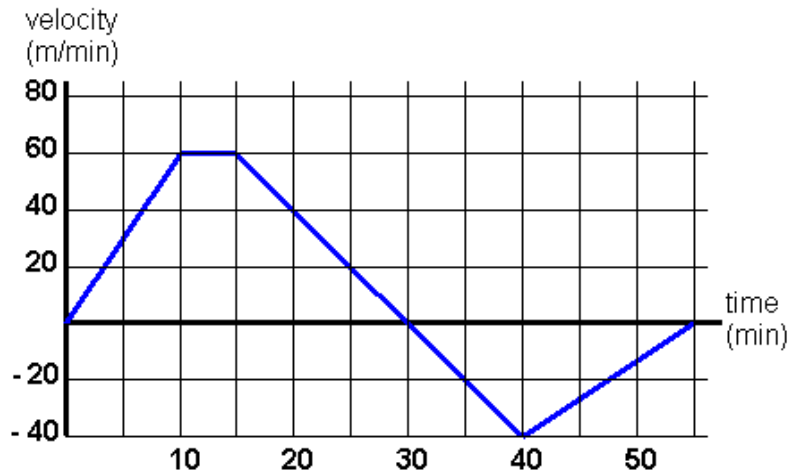
Using the graph at right, identify which (if any) graph is described by each statement:

1. moving in a negative direction and losing speed
2. moving in a positive direction and gaining speed at a slow rate
3. traveling at a steady rate in a positive direction
4. at rest for an extended time
5. moving in a positive direction but losing speed
6. moving in a positive direction and gaining speed at a rapid rate



Refer to the following information for the next two questions.

The graph to the right is a velocity-time graph displaying the behavior of a race cart along a linear track.



1. How far did the cart travel in the first 10 minutes? What was its average acceleration during this time interval?
2. How far did it travel between 10 and 15 minutes? What was its average acceleration during this time interval?
3. How far did it travel between 15 and 30 minutes? What was its average acceleration during this time interval?
4. How far did it travel between 30 and 40 minutes? What was its average acceleration during this time interval?
5. How far did it travel between 40 and 55 minutes? What was its average acceleration during this time interval?
- 6a. What was the total distance the car travelled? What was its displacement after 55 minutes?
- 6b. What was the cart's average speed and velocity for the entire 55 minutes?