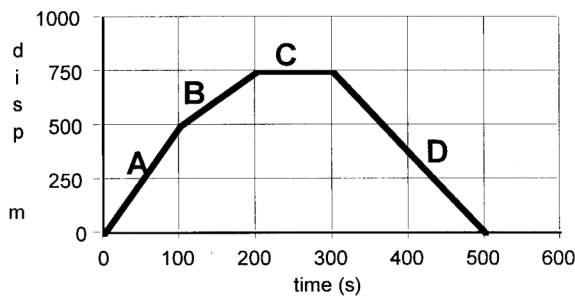


ANALYZING GRAPHS (H)

1. The diagram below shows a CHS Cross Country runner.



RUNNER GRAPH

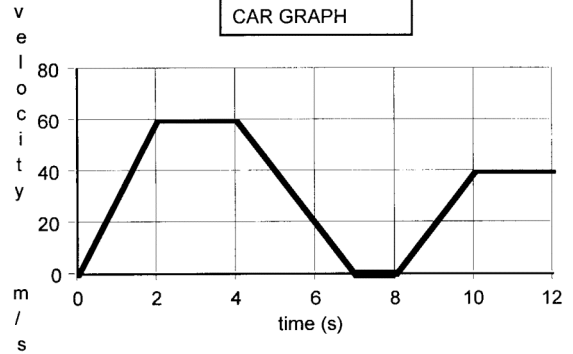


- During which segment was he running the fastest?
- What was the farthest he got from his starting point?
- During what time segment did he rest?
- What was his displacement between 100 and 300 seconds?
- What was his velocity during each of the labeled segments?
A:
B:
C:
D:
- What was the total distance that he traveled?
- What is the total displacement?

2. A velocity-time graph for a car is shown below. Use it to answer the following:

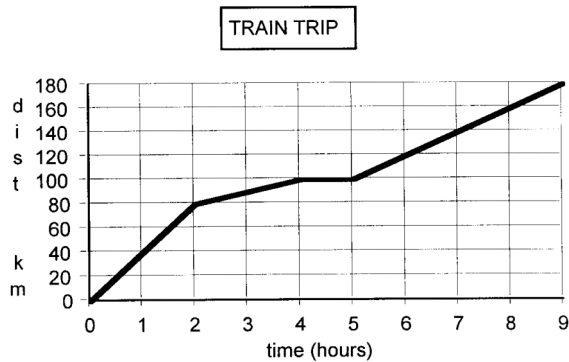


CAR GRAPH



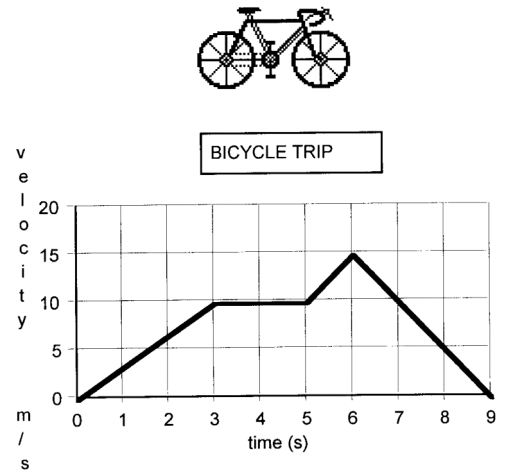
- At what time(s) is the car stopped?
- At what time(s) did the car have the greatest velocity?
- What was the greatest velocity of the car?
- At what time(s) was the car gaining speed?
- How far did the car travel between 2 seconds and 4 seconds?
- How far did the car travel between 0 and 2 seconds?
- At what time is the car the farthest from its original position?
- At what time(s) is the car slowing down?
- At what time(s) is the car accelerating?

3. Use the graph below to answer the following questions:
(Express all answers in km and hours.)



- How far did the train travel during the first two hours?
- What was the average speed during the first two hours?
- When is the train stopped?
- Besides when it is stopped, when is the train moving at the slowest speed?
- What was the average speed of the train between the second and the fourth hour?
- What was the average speed of the train between hour 4 and hour 5?
- What was the average speed of the train at hour 7?
- What was the average speed of the train between the second and the fifth hour?
- What is the average speed of the train for the entire trip?

4. Use the graph below to answer the following questions:



- Is the acceleration greater between 2 and 3 seconds or between 5 and 6 seconds?
- During what time interval(s) is the acceleration zero?
- What is the displacement between 3 and 5 seconds?
- What is the displacement between 6 and 8 seconds?
- At what time is the velocity the greatest?
- When is the velocity equal to zero?
- When is the velocity constant?
- When is the bicycle slowing down?
- When is the bicycle farthest from its original position?