Worksheet: Motion Graphs

Name___________________

Questions 1-4 refer to the velocity-time graph of a car’s motion:

1. In which section is the car accelerating from rest? ___

2. In which section is the car’s acceleration negative? ____

3. How far does the car travel during section “b”? _______

4. What is the acceleration of the car in each section?
   a ________  b ________  c ________  d ________

Questions 5-10 refer to displacement-time graph of a cart’s motion:

5. In which section(s) is the cart accelerating? ________

6. In which section(s) is the cart not moving? ________

7. In which section(s) is the cart moving backwards? ________

8. In which section(s) is the cart’s instantaneous velocity at any time equal to its average velocity? ________

9. What is the velocity of the cart in these sections?
   a-b ________  c-d ________  e-f ________  f-g ________