Honors Physics | Kinematics – Acceleration | Mr. McMullen

Names _____ Date _____ Period _____

Analyzing Motion Graphs

1. A velocity-time graph of a moving car is shown below. Answer the following questions using the graph.

   _____ **a.** At what time was the car stopped?

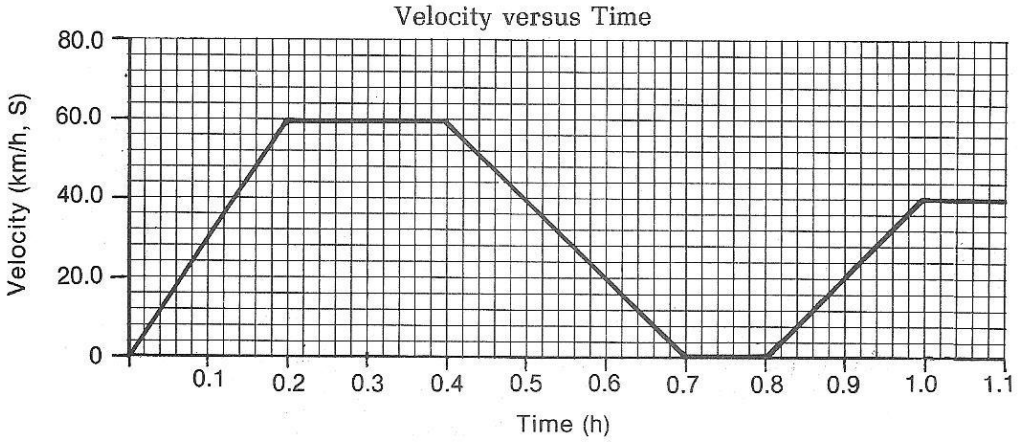
   _____ **b.** At what time did the car have the greatest velocity?

   _____ **c.** What was the greatest velocity?

   _____ **d.** At what time(s) was the car accelerating?

   _____ **e.** How fast was the car going at 1.0 h?

   _____ **f.** What is the acceleration at 0.9 hr.



2. Car A starts from a corner just as car B goes by at 90.0 km/h. The velocity-time graphs of the cars are shown below. Answer the following questions using the graphs.

   _____ **a.** At what time are the cars going at the same velocity?

   _____ **b.** How far has car A traveled when they reach the same velocity?

   _____ **c.** At what time does car A reach car B?

   _____ **d.** How far have each of the cars traveled when they are side by side?

   _____ **e.** Which car is ahead at 0.008 h?