$\qquad$ PD: $\qquad$

## MORE ONE-DIMENSIONAL MOTION QUESTIONS.....

Show all work in the spaces provided to get credit for your answers, including all equations used and number with proper units.

1. Use the graph to answer the following questions.

a. What is the acceleration at 10.0 seconds? $\qquad$
b. What is the acceleration at 50.0 seconds? $\qquad$
c. Find the distance traveled during the first 20.0 seconds. $\qquad$
d. Find the displacement during the first 100.0 seconds. $\qquad$
e. Find the displacement from 30.0 seconds to 40.0 seconds. $\qquad$
2. A car is traveling $10.0 \mathrm{~m} / \mathrm{s}$ at a time of 0.00 seconds. The car accelerates at a uniform rate to a speed of $50.0 \mathrm{~m} / \mathrm{s}$ in a time of 5.00 seconds.
a. Sketch a velocity-time graph for this motion. Clearly label the axes.

b. What is the acceleration of the car? $\qquad$
c. What is the average velocity of the car? $\qquad$
d. What distance is traveled during the first 5.00 second interval? $\qquad$
e. What distance is traveled during the first second? $\qquad$
