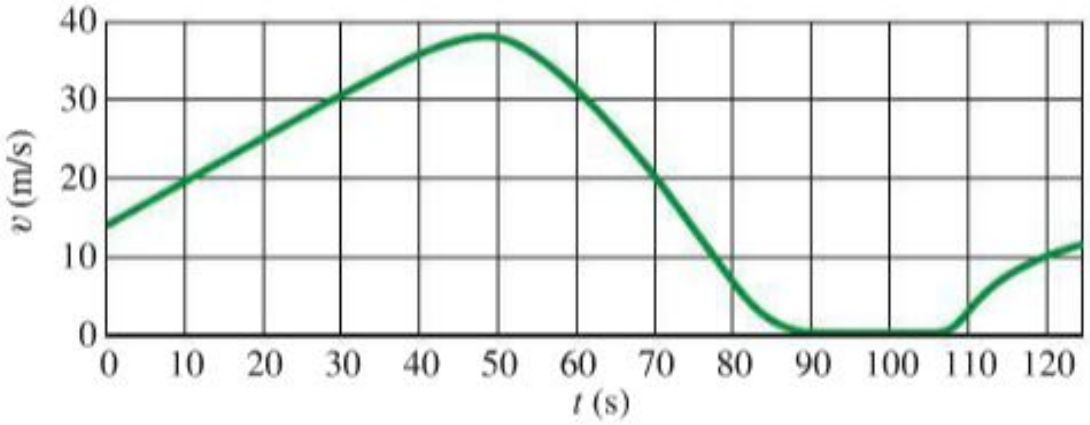
PHYSICS 121 QUIZ 2 9/6/2017

NAME: SECTION:

1. The figure below shows the velocity of an object as a function of time. (a) At what time was its velocity greatest? (b) During what periods, if any, was the velocity constant? (c) During what periods, if any, was the acceleration constant? (d) When was the magnitude of the acceleration greatest?



2. A police car traveling a constant $95km/h$ is passed by a speeder traveling $135km/h$. Exactly $1.00s$ after the speeder passes, the police officer steps on the accelerator; if the police car's acceleration is $2.60m/s^2$, how much time passes before the police car overtakes the speeder (who has been moving at constant speed)?