## PHYS 1110 Group Work Sheet 2 Graphing Position, Velocity, and Acceleration

With your group, discuss how to answer these questions and write your group answer in the space provided.

1. Make a position-time graph to describe the tortoise-hare race.



2. Make a velocity-time graph to describe the tortoise-hare race. Use the same horizontal (time axis) scale as the position-time graph.

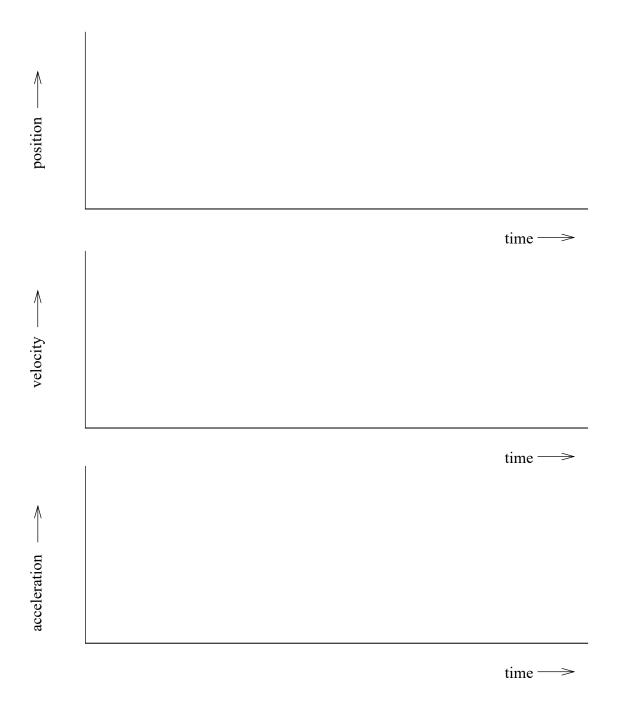


time ->

PHYS 1110 WORKSHEET 2

3. A car waits at a stop light for 5.0 s. The light turns green, so the car then steadily accelerates to 15.0 m/s over the next 5.0 s, then cruises at a constant speed of 15.0 m/s.

- a. Complete a velocity-time graph for the car (middle graph).
- b. Complete an acceleration-time graph for the car (bottom graph).
- c. Complete a position-time graph for the car (top graph).



Be quantitative for velocity and acceleration. Mark numbers and units on the axes.