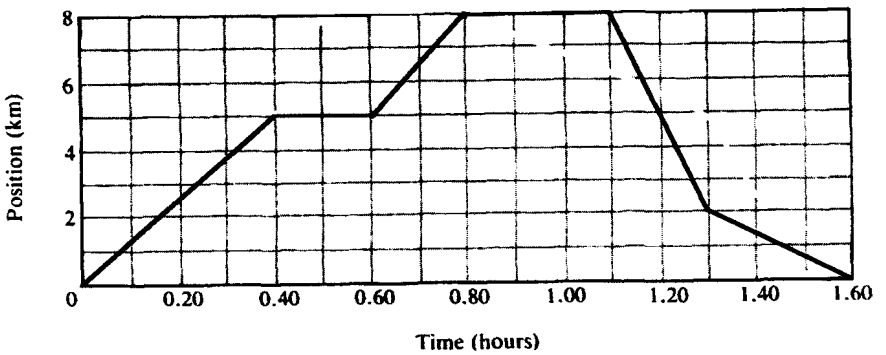
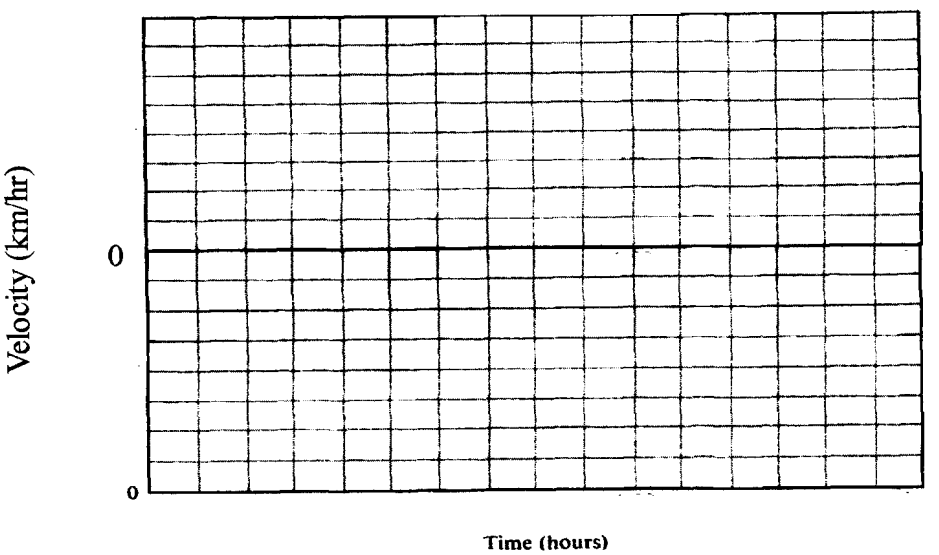
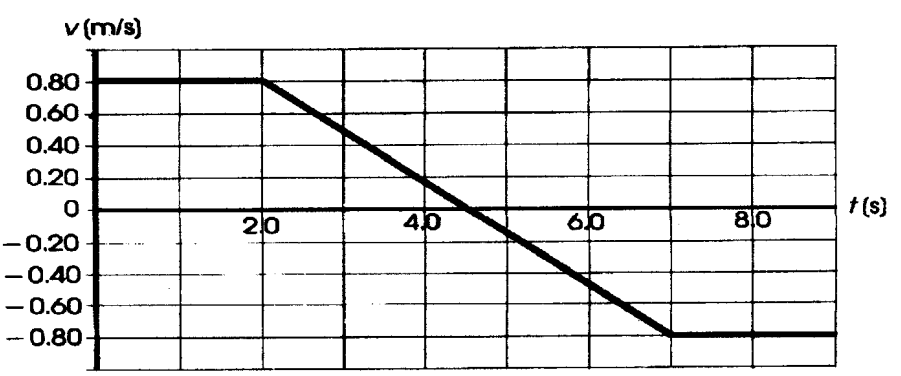
Honors Graphing Quiz Name _____

1. Bekki rode her bicycle as fast as she could from her house to Alyssa's house. After a short time she rode back as fast as she could. Below shows a position-time graph of her trip. Plot the velocity-time graph of Bekki's trip. From the information given and your graph, what would you give as a plausible description of the road between Bekki's house and Anne's house?





2. A balls rolls along the floor, up a sloping ramp, and then back down the board and across the floor again. The graph below represents this motion.
   a. At what time is the ball at its highest point? _____
   b. What is the acceleration when the ball is rolling up the ramp? _____
   c. What is the acceleration when the ball is rolling down the ramp? _____
   d. What is the acceleration when the ball is at its highest point? (at rest) _____
   e. How far up the board did the ball roll? _____
   f. What was the total displacement of the ball over the 9.0 second trip? _____



3. Bonus: A position time graph of a car is shown.

a. At what time is the car going at the greatest speed? _____

b. How fast is it traveling at that time? _____

c. How fast was the car going at 0.70 hours? _____

d. What is the average velocity for the first 0.70 hours? _____

e. How far did the car go during the first two hours? _____

f. What was the total displacement during the first two hours? _____