These questions are taken from Chapter 2 of text.

1. Use a coordinate system similar to that found in your textbook, sketch the distance vs. time graph for each of the following situations (you need a total of four separate graphs):
   • an object at rest
   • an object moving in the positive direction with a constant speed
   • an object moving in the negative direction with a constant speed
   • an object that is accelerating in the positive direction, starting from rest

2. Sketch the velocity vs. time graph for each of the situations in question one.

3. Sketch the acceleration vs. time graph for each of the situations described in question one.

4. Consider a ball thrown straight upward. It moves up, changes direction, and falls back down. What is the acceleration of a ball on the way up? What is the acceleration when it reaches its top point? What is the acceleration on the way down?

5. Sketch distance vs. time, velocity vs. time and acceleration vs. time for a ball thrown straight upward and its downward path.