One dimensional kinematics:

- 1. Can a body change the direction of its velocity at constant acceleration?
- 2. When could a body have a constant speed but changing velocity?
- 3. Can the speed of a body be zero and its acceleration nonzero at the same time?
- 4. How can you accelerate with constant speed?
- 5. Can an object be moving with zero acceleration?
- 6. Can a body be accelerating when its speed is zero?
- 7. What is an example of a body moving where its velocity is opposite its acceleration?

8. In free fall, if a ball is dropped, its acceleration is *g* down. If instead the ball is thrown down, what is its acceleration then?

9. In which hill is the body speeding up but with a decreasing acceleration?

