

1. A stone is thrown straight up into the air and it rises to a height of 110 m.
 - a) With what initial velocity was it thrown?

 - b) How much time did it take to reach its maximum height?

2. An object is thrown down from a building with a velocity of 12 m/s. It takes 0.8 seconds to reach the ground.
 - a) What is the velocity of the object when it hits the ground?

 - b) How high is the building?

3. A ball is thrown directly upwards at 30 m/s. At what time(s) is the ball at a height of 30 m?

4. A rock is thrown straight up with a velocity of 30 m/s from a 100 m cliff.
 - a) How fast is the rock going when it hits the ground at the bottom of the cliff?

 - b) How long does it take the rock to hit the ground?

5. A car rolling downhill accelerates from rest to 22 m/s in 40 seconds.
 - a) What is the average speed of the car?
 - b) How far does the car travel in the 40 seconds?
 - c) How far does the car travel during the 5th second? (ie from time = 4 s to 5 s)