1. Suppose you are standing at the top of a 100-foot tall cliff. You throw a rock downward at a speed of 30 feet per second. How long until the rock hits the ground at the bottom of the cliff? And how fast was it moving when it hit?

2. Suppose you are standing at the top of a 40-foot tall cliff. You throw a rock upward at a speed of 30 feet per second. How long until the rock hits the ground at the bottom of the cliff? How fast was it moving when it hit? What was the maximum height the rock attained, and when?

3. Suppose you are standing at the top of a 75-foot tall cliff. You drop a rock (i.e. you don’t throw it upward or downward; just drop it). How long until the rock hits the ground at the bottom of the cliff? And how fast was it moving when it hit?