Type I Projectiles

1. A ball rolls off of a 1.2m high table. It lands 0.50m from the base of the table.
   1. How long was the ball in the air?
   2. What was the ball’s velocity the instant it left the table?
   3. The same ball is rolled at the same speed off of a shelf that is 2.4m high. What is the ball’s range?
2. A bow fires an arrow horizontally at 100m/s from a height of 1.4m. What is the range of the arrow? (assume level ground)
3. Now a stronger bow fires another arrow from the same height, in the same direction, but starting out going 200m/s. Compute this arrow’s range.