Horizontally Launched Projectiles: Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.) A pool ball leaves a 0.60 meter high table with an initial horizontal velocity of 2.4 m/s.

a. Find the horizontal distance in which the ball landed from the base of the table.

b. What is the final vertical velocity?

2. A soccer ball is kicked horizontally off a hill and lands a distance of 35 m from the edge of the hill at an initial velocity of 11 m/s.

a. How tall is the hill?

b. What is the final vertical velocity?

3. Willie Robertson shoots horizontally at a duck from a height of 6m. If the initial velocity of the bullet is 95 m/s.

a. Find the horizontal distance of the bullet traveled during that time…. assuming he missed the duck.

b. What is the final vertical velocity of the bullet?

4. A rock is fired horizontally from a slingshot and lands a horizontal distance of 15m. If the slingshot is 1.2 m high.

a. How fast was the rock going when released from the slingshot?

b. What is the final vertical velocity of the rock before it hit the ground?