**Part III: Projectile Problems**

#3Version 2. You shoot a projectile horizontally from a 3m high table top. The projectile flies 4 m horizontally before it hits the floor.

a. How long was the projectile in the air?

b. What was the projectile’s initial speed as it left the table top?

#3Version 3. You shoot a projectile horizontally from a table top. The projectile flies 10 m horizontally before it hits the floor. The projectile is in the air for 2 seconds.

a. How high was the table top?

b. What was the projectile’s initial speed as it left the table top?

# 5 Version 2. A ball was launched from ground level. The ball traveled in an arc, reaching its highest position at t = 1.8s, at a position 3m to the right of its starting point.

a. What was the ball’s initial **y** velocity?

b. What was the ball’s initial x velocity?

c. What maximum height did the ball reach?

d. At what angle was the ball launched?

#5 Version 3. A ball was launched from the origin (0m,0m). At its highest point, it’s position was (-5m, 10m).

a. What was the ball’s initial y velocity?

b. How long did it take the ball to reach its highest point?

c. What was the ball’s initial x velocity?

d. What was the ball’s initial speed?

e. What was the ball’s launch angle?