AP Physics Projectiles Mr. McMullen

Name _____ Date _____ Period _____

A. Completing Concepts

In the space to the left, write the answer that best completes each statement

_____ 1. Any object that is thrown or otherwise projected into the air is called a(n) _____ .

_____ 2. A(n) _____ is the path taken by an object thrown in the air.

_____ 3. The vertical and horizontal motions of a projectile shot into the air are _____ of one another.

_____ 4. Because of inertia, the _____ velocity of a projectile is constant.

_____ 5. The time required of a projectile to strike the ground depends on the original height, the initial _____ velocity and the acceleration due to gravity.

_____ 6. Two golf balls are released at the same time from the same height. One ball is dropped vertically while the other is projected horizontally. The _____ of the two ball is always the same.

B. Understanding Concepts

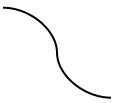
In the space to the left, write the letter of the answer to each question

_____ 1. Which path below most accurately describes the motion of an object projected horizontally from a height?

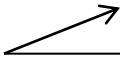
a. 

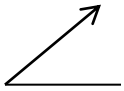
b. 

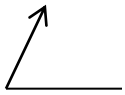
c. 

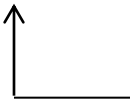
d. 

_____ 2. At which angle would the projectile travel the farthest horizontally?

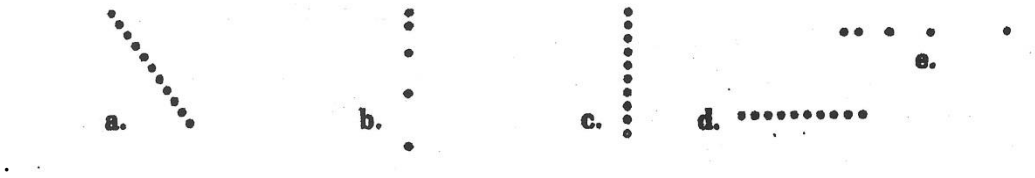
a. 

b. 

c. 

d. 

Questions 3 and 4 refer to the figure below which represents a strobe photo taken of a ball projected horizontally from a height



_____ 3. Which diagram best describes the vertical component of the ball's displacement?

_____ 4. Which diagram best describes the horizontal component of the ball's displacement?