

20080130_1546

Name _____

A projectile is launched from the ground with an initial velocity of 98.00 m/s on an angle of 89.00 degrees above the horizontal surface of a huge field. This event takes place on Earth where the acceleration due to gravity is 9.800 m/s/s.

A) Draw and label a useful diagram of the problem.

B) Determine the initial horizontal velocity in m/s.

C) Determine the initial vertical velocity in m/s.

D) Determine the maximum height, in m, that the projectile will reach.

E) Determine the time, in s, for the projectile to reach its apex.

F). Determine the total time, in s, that the projectile is in the air.

G) Determine the horizontal distance it will travel in m.

H) Determine the projectile's vertical velocity at time = 20.00 seconds.