**Noteguide for Arc Problems - Videos 3H Name**

Red Elk hits a golf ball at a speed of 41.3 m/s at an angle of 78.2o above the horizontal. Assume that the ground is level, and ignore air friction.

a) What time is the ball in the air?

b) What is the horizontal distance that the ball goes before striking the ground?

c) What is the speed at the highest point on the ball's trajectory, and what is the greatest height?

d) What is the velocity and position of the ball at exactly 5.00 seconds from its launch?

e) What is the velocity and position of the ball at an elevation of 60.0 m from the ground on the way down?