

Unknown 'g'

1.) An object is launched and returns to the ground on a planet where 'g' is unknown. One second after launch the vertical velocity is 19 m/s and horizontal velocity is 18 m/s . Two seconds after launch vertical velocity is 14 m/s . What is 'g'?

2.) What is V_x at 4 seconds?

3.) What are V_x and V_y at $t = 0$ seconds?

4.) What is the initial launch angle θ ?