

Year 12 Physics
Quick Quiz: Projectile Motion

1. Explain why, for a projectile launched horizontally, having only the time flight is sufficient to calculate the height from which a projectile was launched.
2. Consider two projectiles launched at the same speed and angle. One is a tennis ball, one is a shotput.
State two differences between the balls and explain the effect each has on the force of air resistance of the ball.
3. Calculate the time of flight for an object launched at a speed of 10 ms^{-1} and an angle of 30° above the horizontal, if it lands at a speed of 18 ms^{-1} at an angle of 61° below the horizontal.