

2-1 The acceleration down the plane, $a = g \sin \theta$. Since the initial velocity, $v_0 = 0$, the distance covered $\Delta x = 1/2 at^2 = (1/2) \times 9.8 \text{ [m/s}^2] \times (0.5) \times (3 \text{ [s]})^2 = 22.1 \text{ [m]}$. The correct answer is (E).