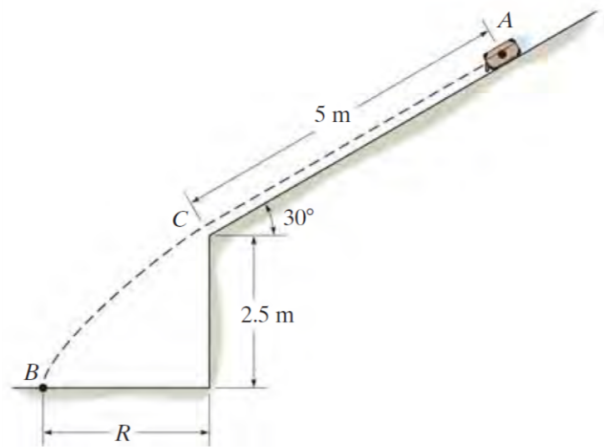1) **ABET SO (a):** A 60 kg suitcase slides 5 m down the ramp that has a coefficient of kinetic friction $\mu_k = 0.2$. If the suitcase has an initial velocity of $v_A = 2$ m/s, determine the distance R where it strikes the ground at B. How long does it take to go from A to B? ($g = 9.81$ m/s^2)

Show necessary free body diagram(s), and clearly label coordinate system(s).

30 marks