

A small ball is projected from a point O on horizontal ground. At time t s after projection the horizontal and vertically upwards displacements of the ball from O are x m and y m respectively, where $x = 4t$ and $y = 6t - 5t^2$.

(i) Find the equation of the trajectory of the ball. [2]

(ii) Hence or otherwise calculate the angle of projection of the ball and its initial speed. [4]