



Question 10

A particle of mass m is projected from a point O with an initial speed of u at an angle α to the horizontal.

The particle moves in a parabolic path and reaches a maximum height h above O . The particle is moving horizontally at the instant it reaches the maximum height.

Find the value of α in terms of h and u .

Give your answer in the form $\alpha = \sin^{-1}(\dots)$.

Give your answer in terms of h and u .

Give your answer in the form $\alpha = \sin^{-1}(\dots)$.

Give your answer in terms of h and u .

Give your answer in the form $\alpha = \sin^{-1}(\dots)$.

