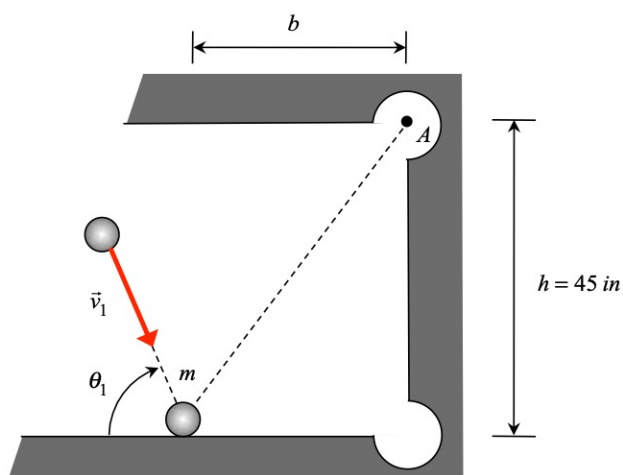


Homework H.4.O

Given: A pool ball is given a velocity of \vec{v}_1 at an angle of θ_1 measured from the bumper cushion, as shown in the figure. The coefficient of restitution for the ball impacting the bumper cushion is known to be e . It is desired to drop the ball into the corner pocket at A.

Find: Determine the angle θ_1 .



Use the following parameters in your analysis: $e = 0.6$ and $b = 40 \text{ in}$.