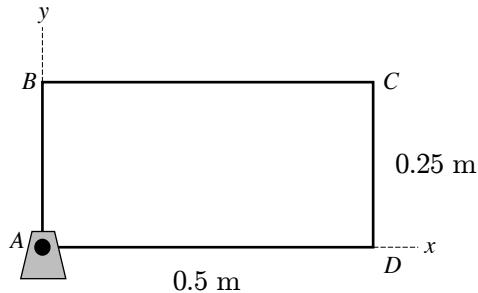


Homework H2.A

Given: The rectangular plate ABCD freely rotates about a pivot at point A. At the instant shown, the acceleration of point C is given by $\vec{a}_C = a_x \hat{i} + a_y \hat{j}$.

Find: Determine the angular velocity $\vec{\omega}$ and angular acceleration $\vec{\alpha}$ of the plate.



Use the following parameters in your analysis: $a_x = 0$ and $a_y = -20 \text{ m/s}^2$.