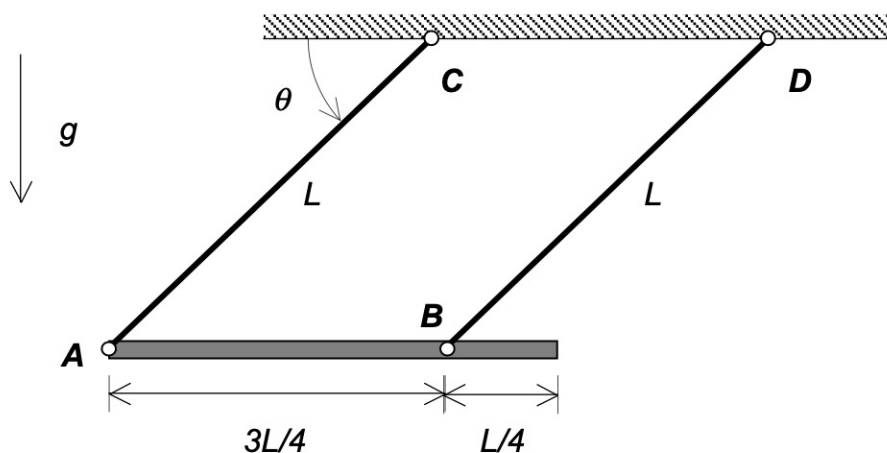


Homework H5.A

Given: A thin, homogeneous bar of mass M is supported by parallel cables AC and BD, as shown below in the figure. The bar is released from rest with the cables at an angle of θ measured from the horizontal.

Find: Determine the tension in cables AC and BD on release.



Use the following parameters in your analysis: $M = 300$ kg, $L = 2.5$ m and $\theta = 30^\circ$.