

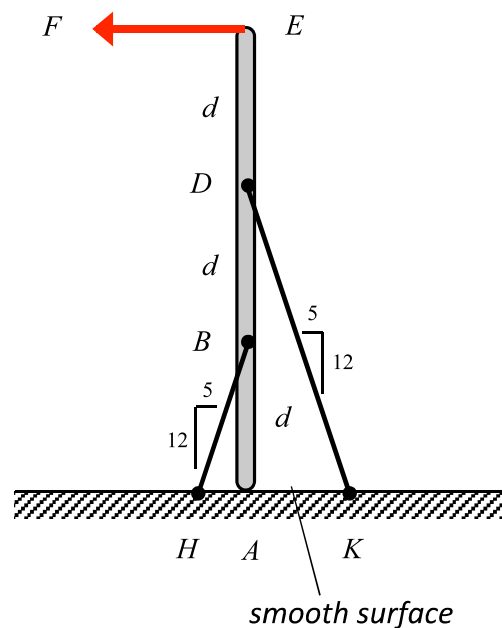
Homework H8.A

Given: A thin, homogeneous bar AE of length $3d$ is supported by a smooth, horizontal floor at end A, in addition to cables BH and DK, as shown in the figure. A horizontal force F is applied to end E. Consider the weight of the bar to be negligible as compared to the applied force F .

Find: With the bar being in static equilibrium:

- Determine the tension in cables BH and DK.
- Determine the contact force on the bar at end A.

Leave your answers in terms of, at most, F and d .



Homework H8.B

Given: A street light is acted upon by a pair of horizontal forces at B and D, and by its weight at the center of mass G. Consider the connection of the light at A to be fixed to the ground.

Find: Determine the reactions on the street light at support A. Express your answers as vectors in terms of, at most, W and d .

