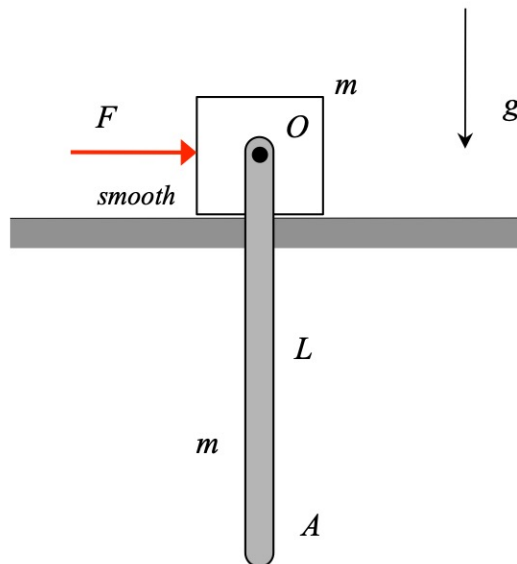


Homework H.5.C

Given: A thin homogeneous bar OA (of mass m and length L) is pinned to a block of mass m . The block is able to slide on a smooth horizontal surface. A horizontal force F acts on the block. The system is released from rest with the bar hanging vertically.

Find: Determine the angular acceleration of bar OA on release.



Use the following parameters in your analysis: $m = 30$ kg, $L = 1.5$ m and $F = 200$ N.