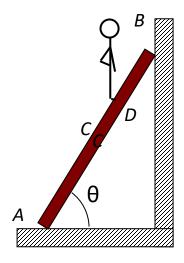
Example 1: ladder: (Homework 5, Bonus mark)

A uniform ladder of length L leans against a smooth (= frictionless) wall at angle θ to the ground. Someone is also standing on the ladder at point D, midpoint between Point C (the center of mass of the ladder) and point B (top of the ladder). What is the smallest coefficient of friction μ_s between ladder and ground which will prevent the ladder from slipping?



Example 2: ladder (Homework 5, bonus mark)

Weightless ladder, no friction at B, static friction coefficient μ_A at A. Given the length L of the ladder, for what values of d will the ladder slip?

Will the answer depend on the weight of the person?

(Homework 5, Bonus mark)

