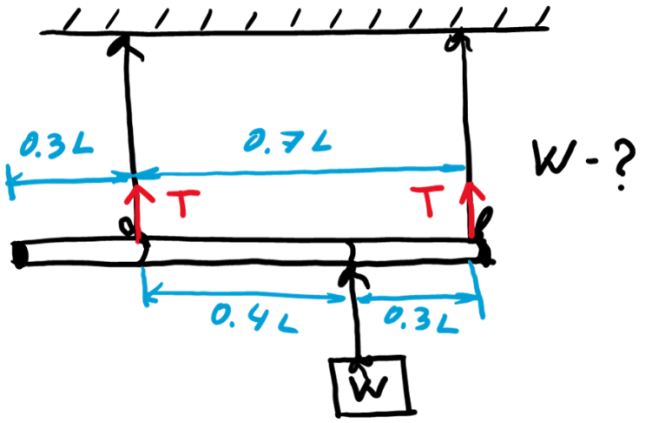
Homework 8

Problem 1.

The plank attached to the ceiling with 2 threads is uniform and weights 500N (see picture below). The tension forces T applied to the plank by the threads are equal. Find weight W.



Problem 2.

A 13m uniform ladder weighing 300N rest against a smooth wall at a height 12m. above the floor (see figure below). "Smooth" wall means that the wall applies no friction force to the upper end of the ladder – just the normal force is applied. The floor is rough. Find the friction force F_f and the normal forces exerted on the ladder by the floor (N_F) and the wall (N_W).

