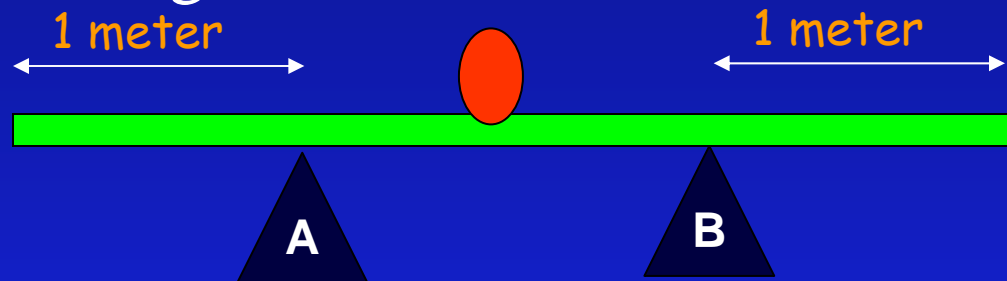


Homework 8 Hints

A 75 kg painter stands at the center of a 50 kg, 3 meter plank. The supports are 1 meter in from each edge. Calculate the force on support A.



1) Draw FBD

2) $\Sigma F = 0$ $F_A + F_B - mg - Mg = 0$

3) Choose pivot

4) $\Sigma \tau = 0$

$$-F_A * 1 + F_B * 0 + mg * 0.5 + Mg * 0.5 = 0$$

$$F_A = 0.5 mg + 0.5 Mg = 612.5 \text{ Newtons}$$

