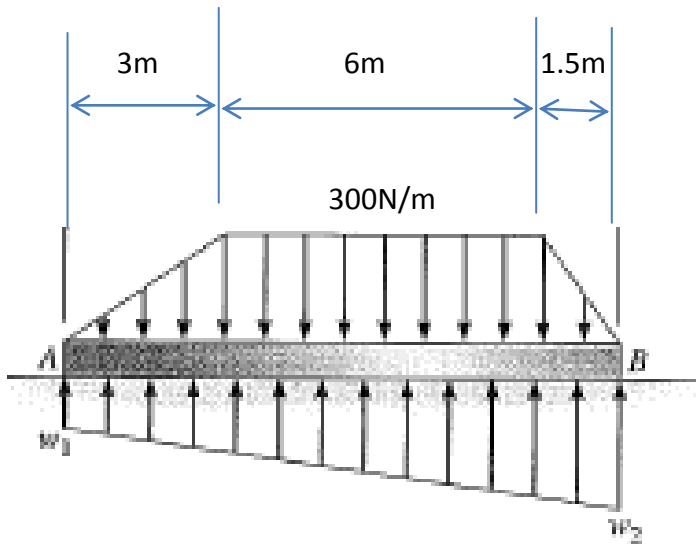
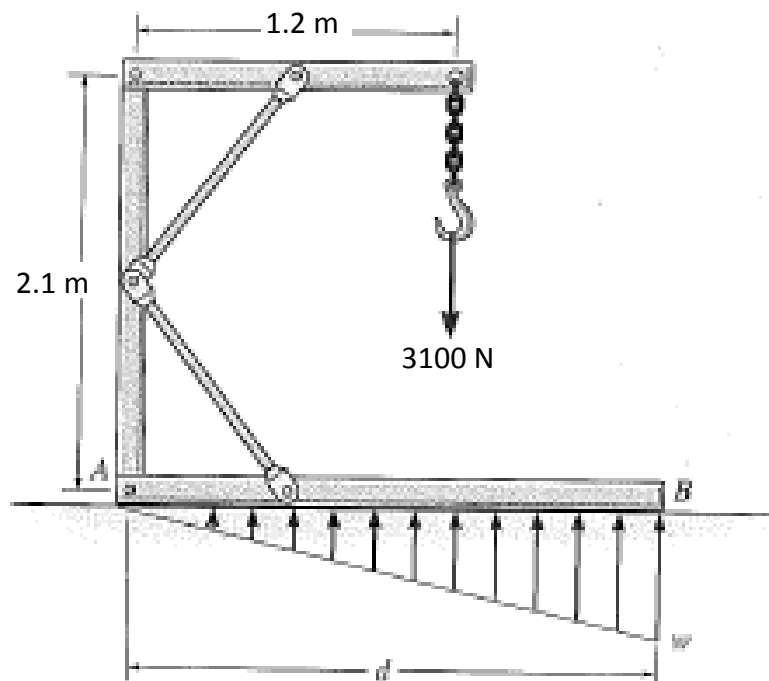


1) Determine the loads  $w_1$  and  $w_2$  of the distributed loading acting on the bottom of the beam so that this loading has a resultant equal and opposite to the resultant of the distributed load on the top of the beam and the moment of all the forces acting on the beam about A is zero.



2) What is the load  $w$  so that the total distributed load along AB is the same as the applied load on the hook knowing that the frame will not tip over about point B



3) For the load applied to the bracket shown below compute

- The Resultant of all the forces, and
- The sum of all the moments about point O

Note: the radius of the pulleys is 1 m.

