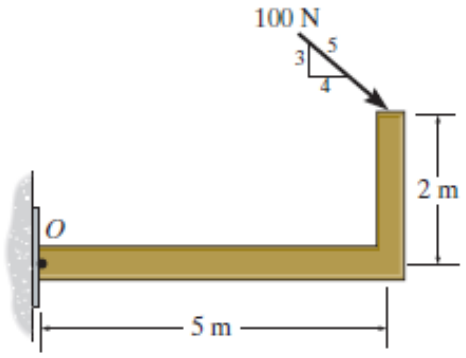
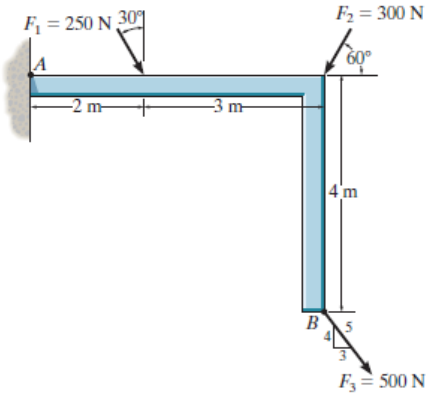
PS #2	K.T.Ü. MINING ENGINEERING ENGINEERING MECHANIS PROBLEM SET #2

1



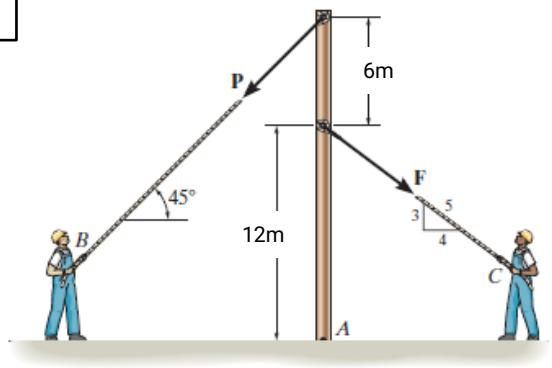
Find the moment of the force shown in the figure about point O.

2



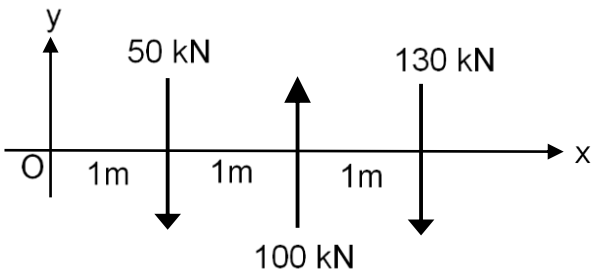
Find the total moments of the forces shown in the figure about point O.

3



If the person at point B applies a force of P = 300 N to the rope, determine the magnitude of the force F that the person at point C must apply to the rope in order for the total moment about point A to be zero.

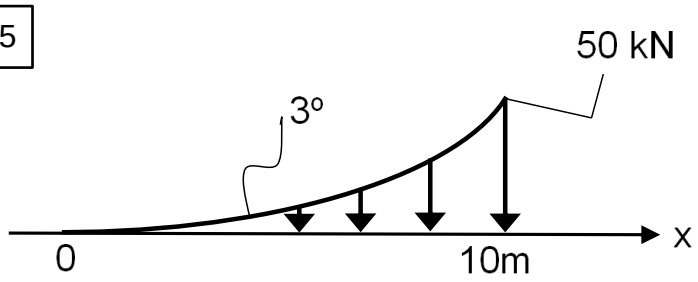
4



a) Move the force system given in the figure to point O.

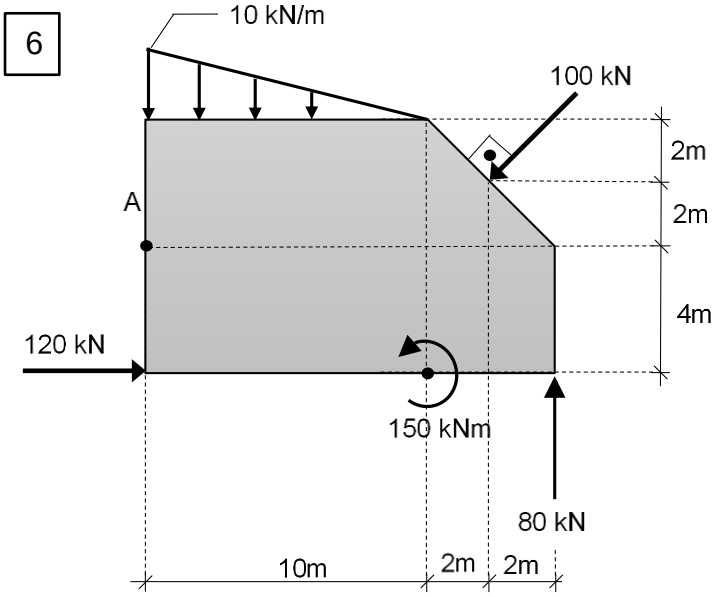
b) Express it as a single force (find the line of action).

5



Find the magnitude and position of the force obtained by reducing the distributed load of 3rd degree given in the figure to a single point load.

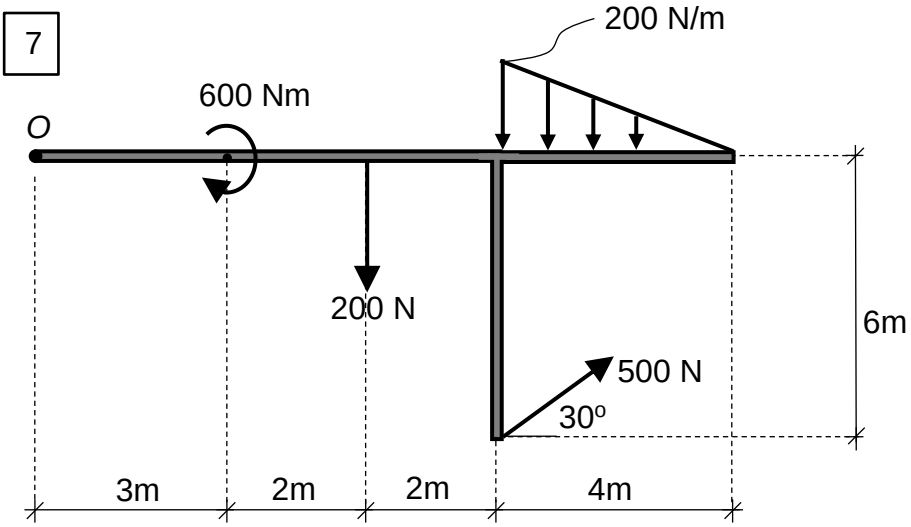
6



a) Move the force system given in the figure to point A.

b) Express it as a single force (find the line of action).

7

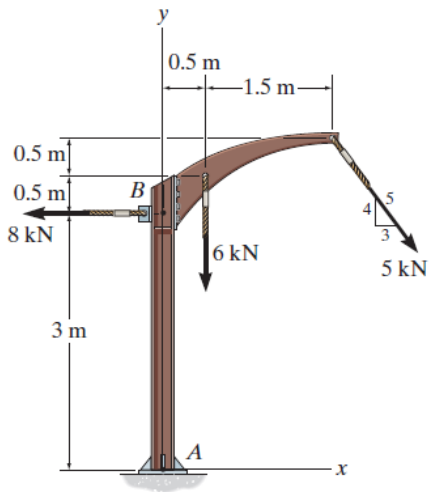


The force system given in the adjacent figure;

a) Move it to point O.

b) Reduce it to a single force (find the line of action).

8



The force system given in the adjacent figure;

a) Move it to point A.

b) Reduce it to a single force (find the line of action).