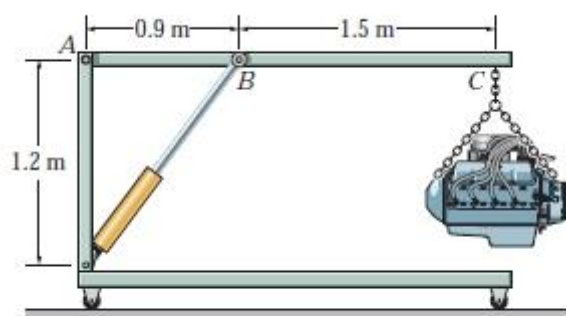


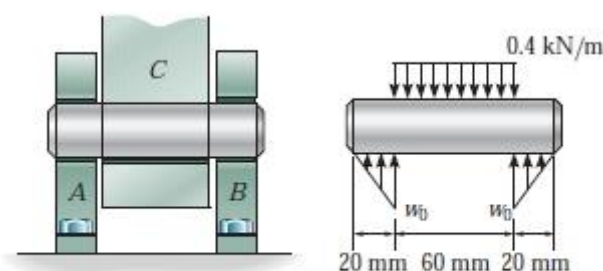
## Exercise

The engine crane is used to support the engine, which has a weight of 1200 kg. Draw the shear and moment diagrams of the boom  $ABC$  when it is in the horizontal position.



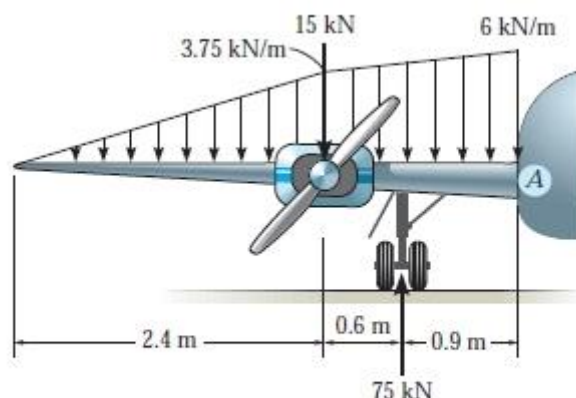
Prob. 6-3

The smooth pin is supported by two leaves  $A$  and  $B$  and subjected to a compressive load of  $0.4 \text{ kN/m}$  caused by bar  $C$ . Determine the intensity of the distributed load  $w_0$  of the leaves on the pin and draw the shear and moment diagram for the pin.



Prob. 6-32

The dead-weight loading along the centerline of the airplane wing is shown. If the wing is fixed to the fuselage at  $A$ , determine the reactions at  $A$ , and then draw the shear and moment diagram for the wing.



Prob. 6-38

Exercise from Hibbeler, R.C, 2011, *Mechanics of Materials (SI Units)*, 8<sup>th</sup> Edition, Singapore: Prentice Hall.