34. Fig. 2.1 shows a uniform plank AB of length 2.0 m suspended from two ropes X and Y.

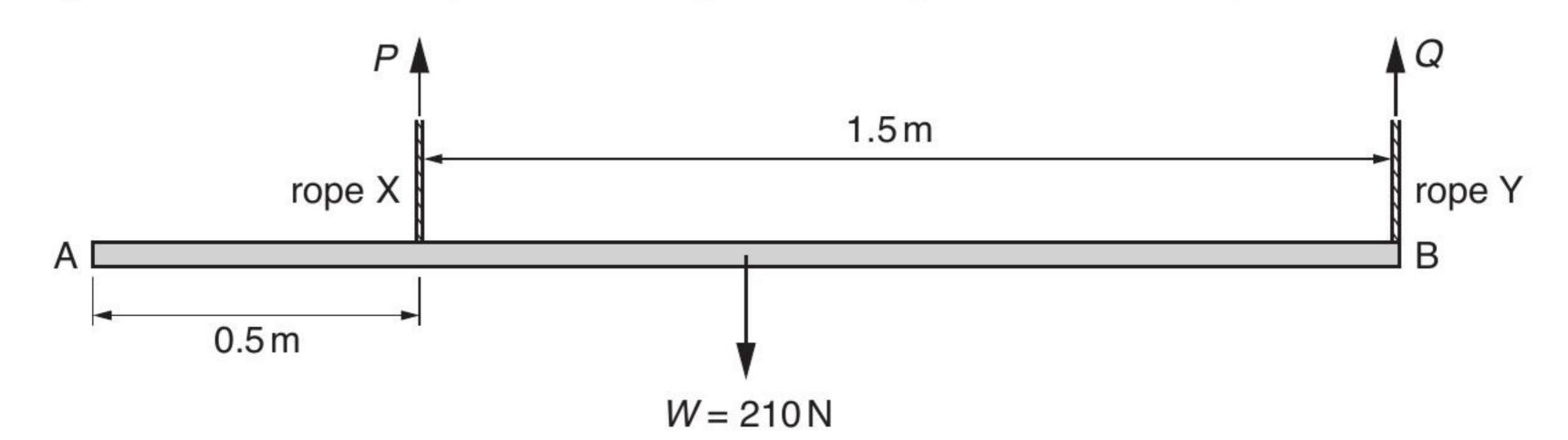


Fig. 2.1

The weight W of the plank is 210 N. The force in rope X is P. The force in rope Y is Q.

(a) State, in terms of P, the moment of force P about B.

.....[1]

(b) Calculate:

(i) the moment of Wabout B

moment =[1]

(ii) the force P

(iii) the force Q.

force $Q = \dots [2]$

[Total: 6]

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