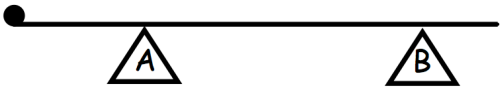
Corbettmaths

Moments - Point of Tilting

Mechanics

Video Tutorial

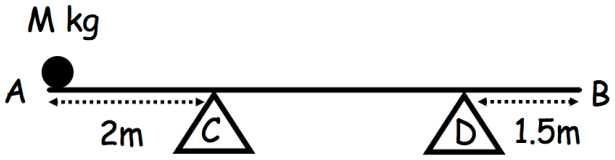




If the rod is on the point of tilting about A, the normal reaction at B is 0

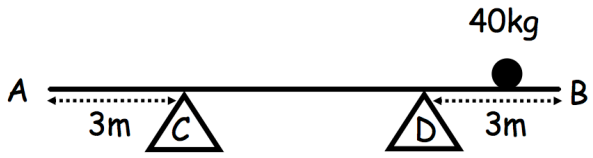
A uniform plank AB of length 6m and mass 20kg, rests on supports at C and D, such that AC = 2m and BD = 1.5m.
A mass of M kg is placed on A and the plank is on the point of tilting about C.

Work out M



A uniform plank AB of length 10m and mass M kg rests on supports at C and D,
such that AC = 3m and BD = 3m.
A mass of 40kg is placed 0.5m from B and the plank is on the point of tilting about D.

Work out M



A uniform plank AB of length 15m and mass 8kg rests on supports at C and D,
such that AC = 5m and BD = 4m.
A mass of 30kg is placed on the plank at E.
The plank is on the point of tilting about C.

Work out the distance AE

