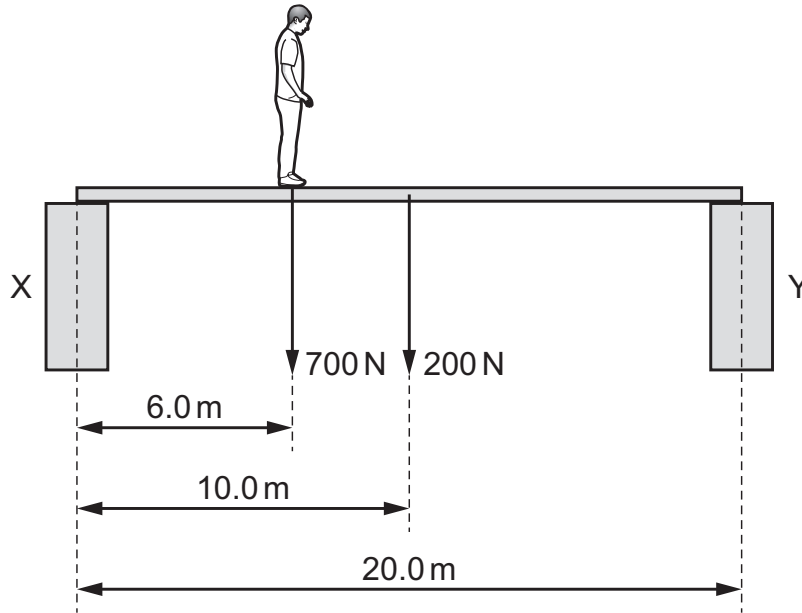


15 A uniform beam rests on two supports, X and Y, as shown.



not to scale

The beam has length 20.0 m and weight 200 N.

A man of weight 700 N stands on the beam at a distance of 6.0 m from support X.

The beam is in equilibrium.

What is the contact force of support X on the beam?

A 310 N

B 450 N

C 590 N

D 900 N