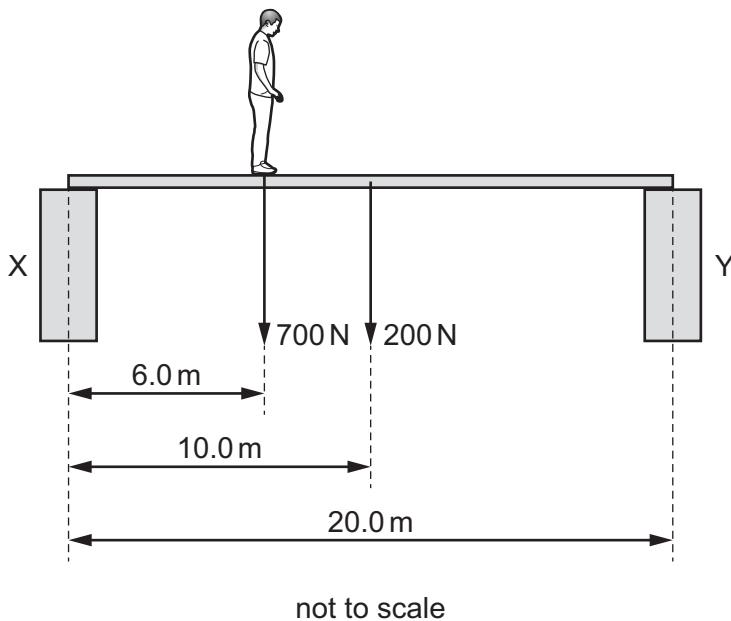15 A uniform beam rests on two supports, X and Y, as shown.

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