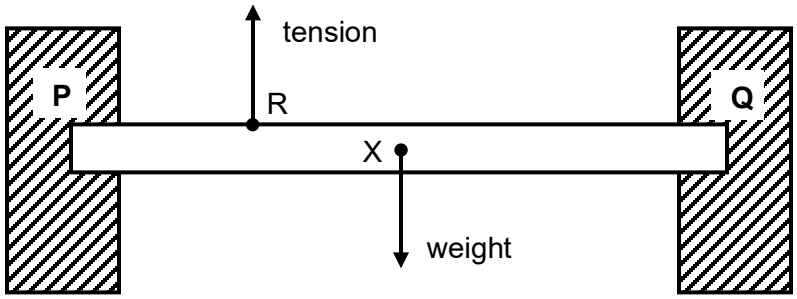
4 A horizontal beam has its centre of gravity at X. It is supported by a vertical wire attached to the beam at point R as indicated on the diagram. The tension in the wire is equal to the weight of the beam.



The ends of the beam fit into the sockets P and Q in two rigid vertical walls which keep the beam in equilibrium.

What are the directions of the forces acting on the beam at sockets P and Q?

	socket P	**socket Q**
A	upwards	upwards
B	upwards	downwards
C	downwards	upwards
D	downwards	downwards