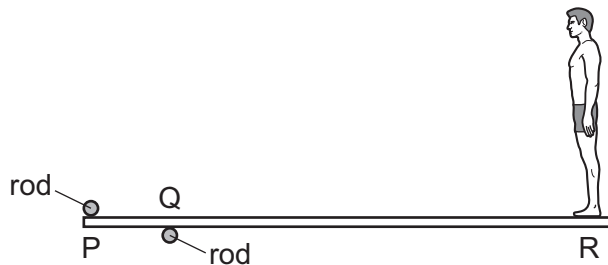


- 13** A uniform diving board is held by two fixed rods at points P and Q. A person stands at end R of the diving board, as shown.



The forces exerted by the rods on the board are vertical. The board remains in equilibrium as the person slowly moves towards point Q from end R.

Which row describes the changes to the magnitudes of the forces exerted by the rods on the board?

	force at P	force at Q
A	decreases	decreases
B	decreases	increases
C	increases	decreases
D	increases	increases

- 14** A uniform beam is supported by a pivot at its midpoint. A 20 N weight is placed 1 m to the left of the pivot and a 40 N weight is placed 1 m to the right of the pivot. The beam is released from rest in a horizontal position. It will