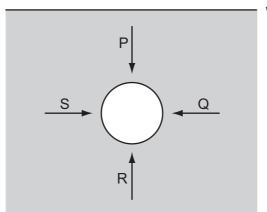
**15** The diagram represents a sphere under water. P, Q, R and S are forces acting on the sphere, due to the pressure of the water.



water surface

Each force acts perpendicularly to the sphere's surface. P and R act in opposite directions vertically. Q and S act in opposite directions horizontally.

Which information about the magnitudes of the forces is correct?

- A P < R and S = Q
- **B** P > R and S = Q
- **C** P = R and S = Q and  $P \neq S$
- **D** P = R and S = Q and P = S

## Space for working