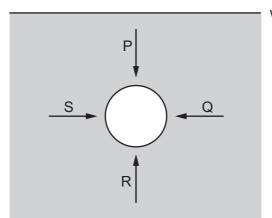
13 The diagram represents a sphere under water. P, Q, R and S are forces acting on the sphere due to the pressure of the water.



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 < S
- **D** P = R and S = Q and P = S
- 14 The first column in the table gives four examples of work being done. The second column gives more detail of the action.

Which row is **not** correct?

	example	detail
A	a girl dives from a diving board into a swimming pool	work is done by the girl against the gravitational field as she falls
В	a man pushes a car along a level road	work is done by the man against friction
С	an electron is accelerated towards a positively charged plate	work is done on the electron by the electric field of the plate
D	a piston is pushed outwards as a gas expands	work is done on the atmosphere by the gas