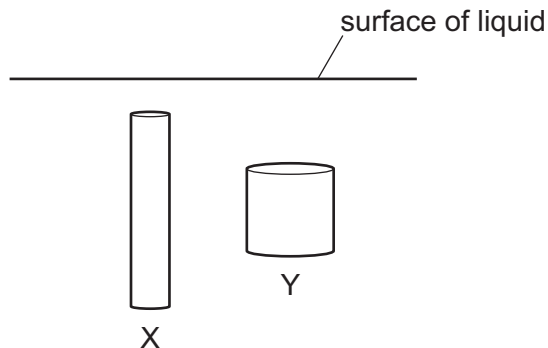


- 14** Two solid cylindrical objects X and Y are held fully submerged in a liquid, as shown.



The objects have the same volume. The density of the material of Y is twice the density of the material of X. Both objects are stationary.

Which statement is correct?

- A** The force due to the liquid acting on the top surface of X is greater than that acting on the top surface of Y.
- B** The pressure difference due to the liquid between the top and bottom surfaces of X is the same as that for Y.
- C** The upthrust acting on X is the same as the upthrust acting on Y.
- D** The weight of X is the same as the weight of Y.