7 A man, carrying a large rock, sits in a boat on a lake. He drops the rock into the lake. Assume the total volume of the water in the lake is constant, the water level of the lake

A increases because the density of the rock is larger than water hence the upthrust acting on it would be larger for equilibrium to occur.

B decreases because the density of the rock is larger than water and hence displaces a smaller volume of water as compared to when it was on the boat.

C remains the same because the total mass of all the objects in the lake remains the same.

D remains the same because the rock will sink to the bottom of the lake and experience a normal contact force.