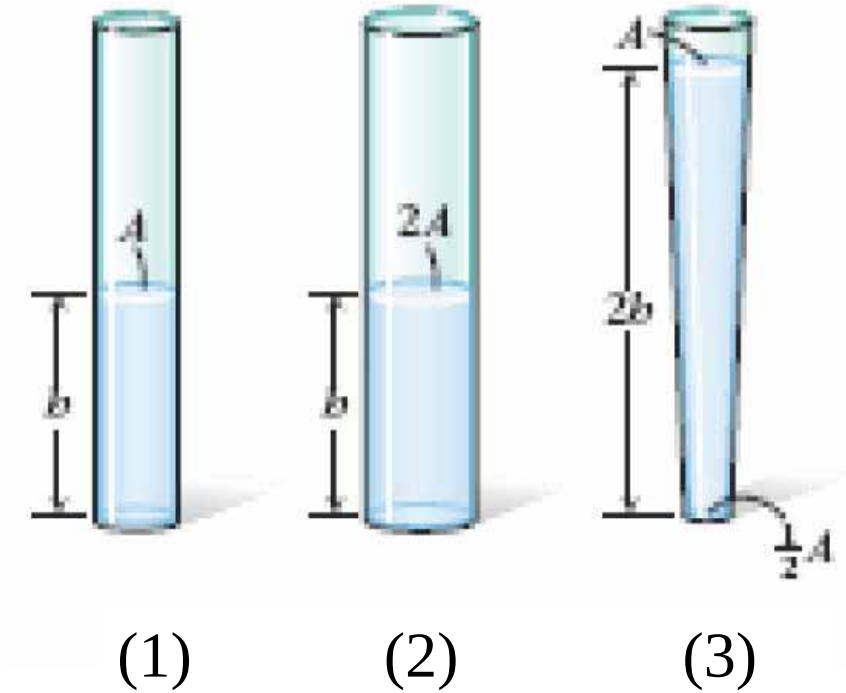
Consider the containers at right. Which of the following correctly compares the *pressure* (P) of the water at the bottoms of the containers?

1. $P_1 = P_2 = P_3$
2. $P_3 > P_1 > P_2$
3. $P_3 > P_1 = P_2$
4. $P_2 > P_1 > P_3$
5. $P_1 = P_2 > P_3$

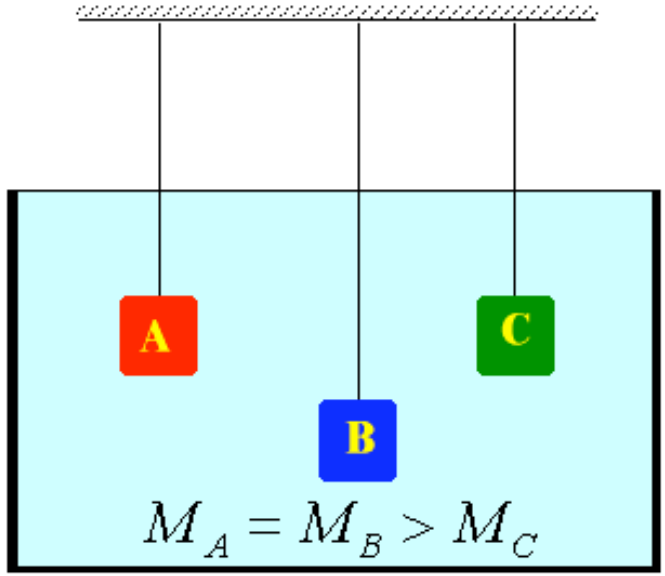


(1) (2) (3)

Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

How does the force exerted by the water on the top surface of cube A compare to the force exerted by the water on the top surface of cube B?

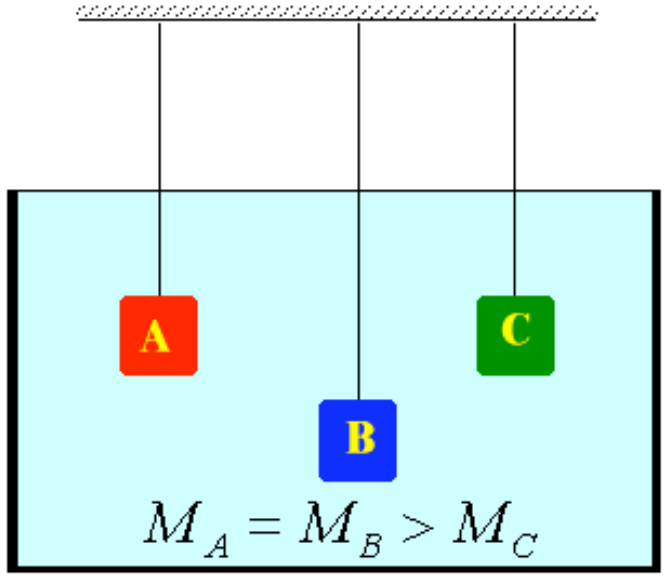
- 1. The force on A is bigger
- 2. The force on B is bigger
- 3. They are the same.



Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

How does the force exerted by the water on the top surface of cube A compare to the force exerted by the water on the top surface of cube C?

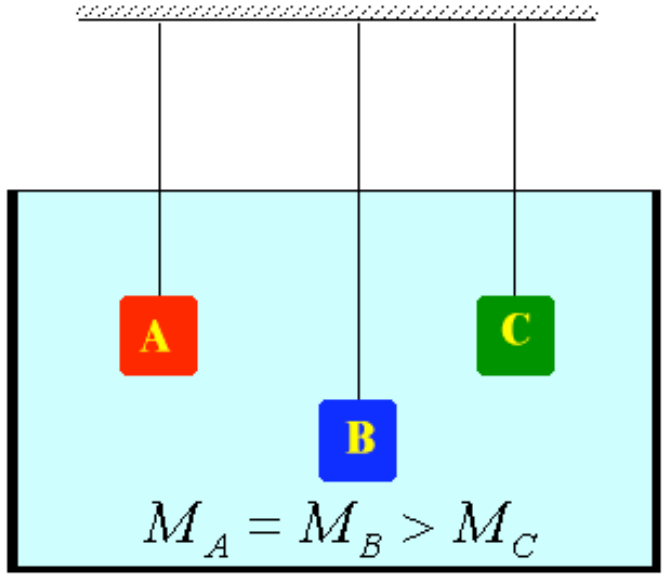
- 1. The force on A is bigger
- 2. The force on C is bigger
- 3. They are the same.



Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

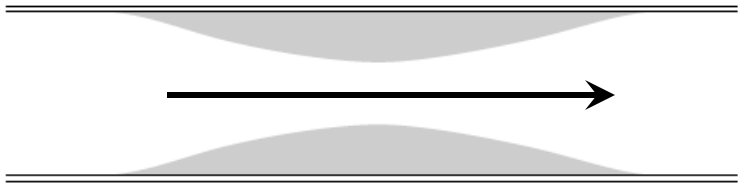
How do the buoyant forces exerted by the water on the three cubes rank?

- 1. $BF_B > BF_A = BF_C$
- 2. $BF_B = BF_A > BF_C$
- 3. $BF_B > BF_A > BF_C$
- 4. $BF_A = BF_B = BF_C$
- 5. Some other ranking



Blood flows through a coronary artery that is partially blocked by deposits along the artery wall. Through which part of the artery is the flux (volume of blood per unit time) largest?

1. The narrow part
2. The wide part
3. Same in both



Blood flows through a coronary artery that is partially blocked by deposits along the artery wall. Through which part of the artery is the speed of the blood the largest?

1. The narrow part
2. The wide part
3. Same in both