



An object hung from a spring scale is lowered into water. When the object is immersed, the scale will read

1. a larger value
2. a smaller value
3. the same value
4. can't tell – not enough info

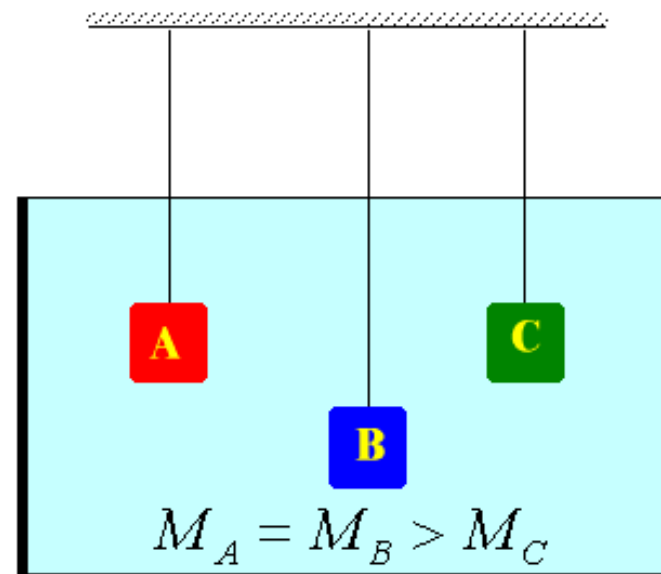




Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

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?

- A. The force on A is bigger
- B. The force on B is bigger
- C. They are the same.

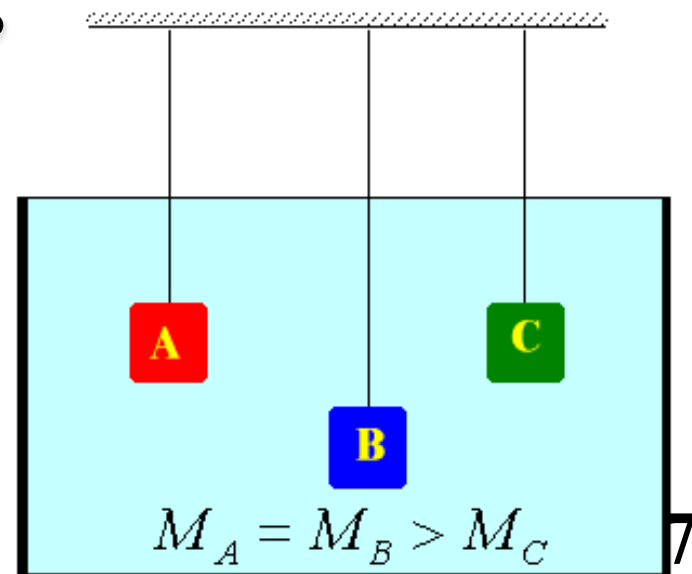




Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

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

- A. The force on A is bigger
- B. The force on B is bigger
- C. They are the same.

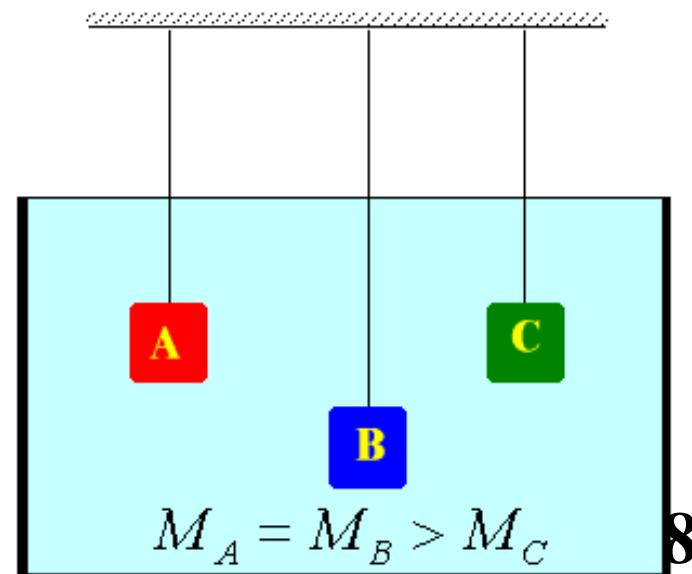




Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

How does the force exerted by the water on the top surface of each cube compare to the force exerted by the water on the bottom surface of that same cube?

- A. The force on top is bigger
- B. The force on bottom is bigger
- C. They are the same.

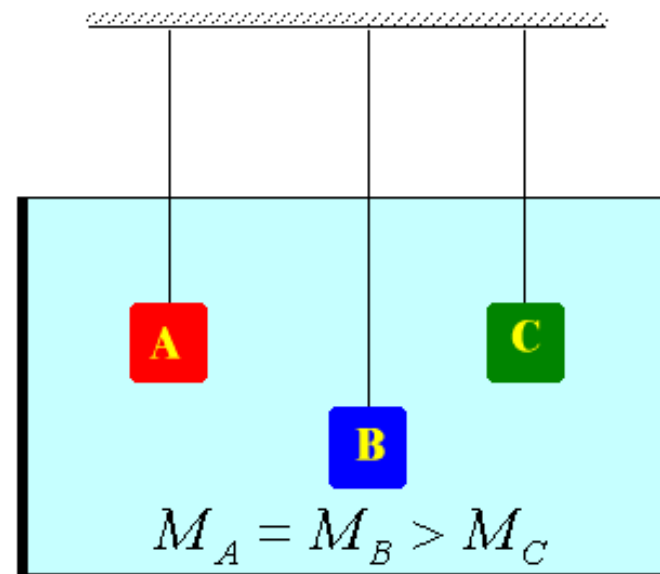




Three cubes of equal volume are hung on strings. A and B have the same mass and block C has less. The blocks are lowered into a fish tank and they hang at rest as shown.

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

- A. $BF_B > BF_A = BF_C$
- B. $BF_B = BF_A > BF_C$
- C. $BF_B > BF_A > BF_C$
- D. $BF_A = BF_B = BF_C$
- E. Some other ranking





Two identical glasses are filled to the same level with water. One of the two glasses has ice cubes floating in it. Which glass weighs more?

- A. The glass without ice cubes.
- B. The glass with ice cubes.
- C. The two weigh the same.
- D. There is not enough information to decide.





Two identical glasses are filled to the same level with water. One of the two glasses has ice cubes floating in it. When the ice cubes melt, in which glass is the level of the water higher ?

- A. The glass without ice cubes.
- B. The glass with ice cubes.
- c. It is the same in both.
- D. There is not enough information to decide.





There is a lot of talk about the north polar ice cap melting. When it melts what will the result be on sea level?

- A. It will rise.
- B. It will fall.
- C. It will stay the same

