

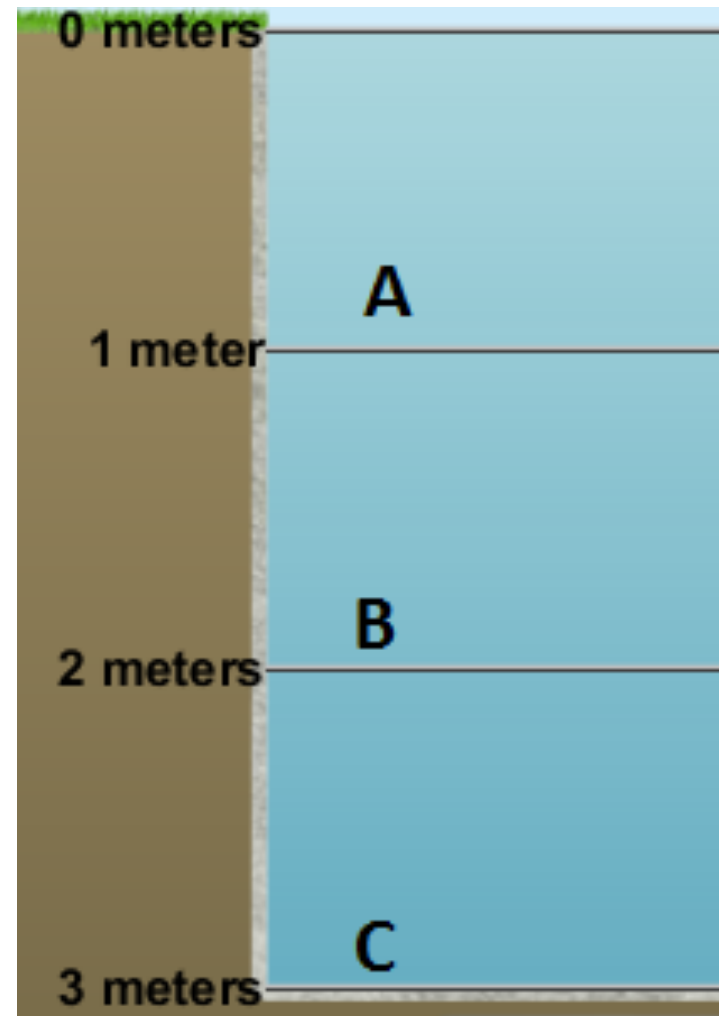
Under Pressure

modified from Trish Loeblein's clicker question June 2012

- a. Play around with the simulation for a few minutes and learn how it works.
- b. What happens to pressure as you go deeper in water?
- c. In order to accurately measure pressure at various depths in water why do we have to take into consideration air pressure?
- d. What happens to air pressure as you go up in the atmosphere?

1. Order from lowest to highest pressure.

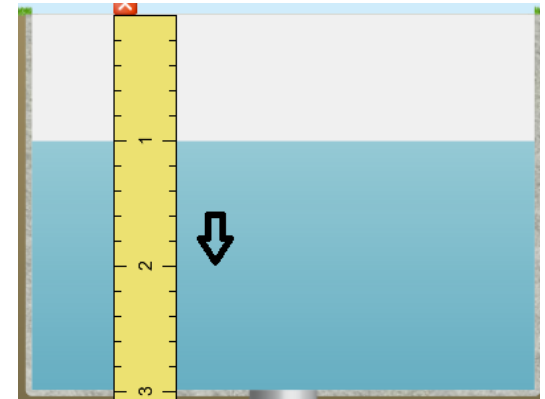
Explain?



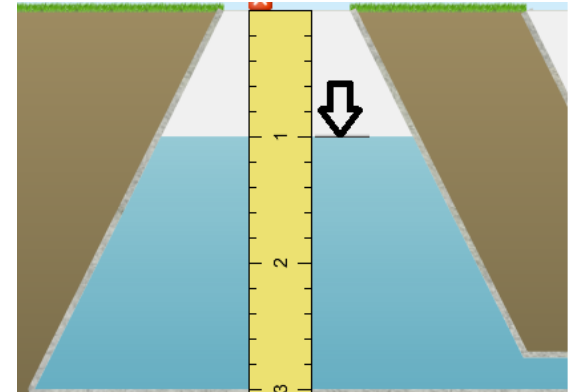
2. Look at the markers.
Order from lowest to
highest pressure.

Explain Why?

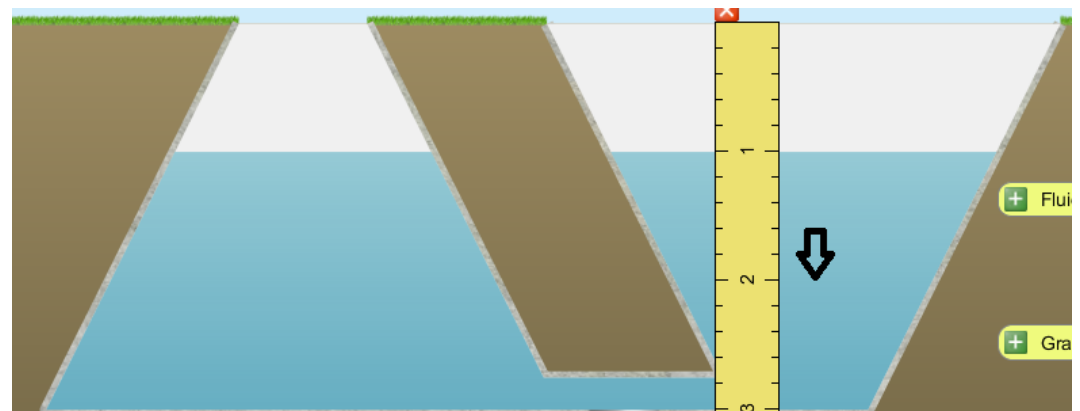
X



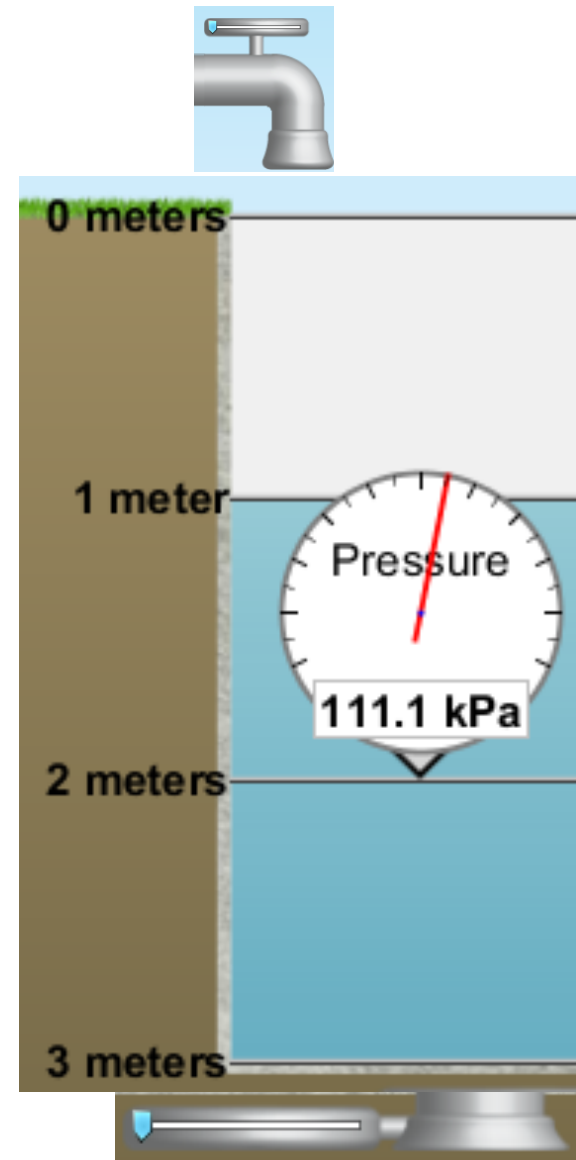
Y

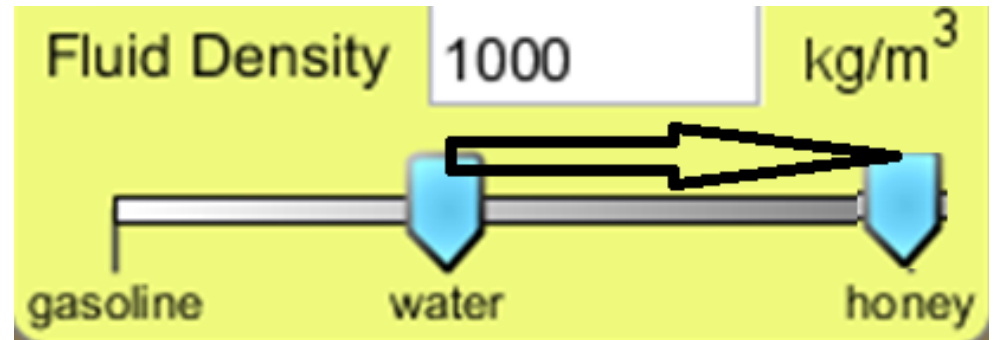


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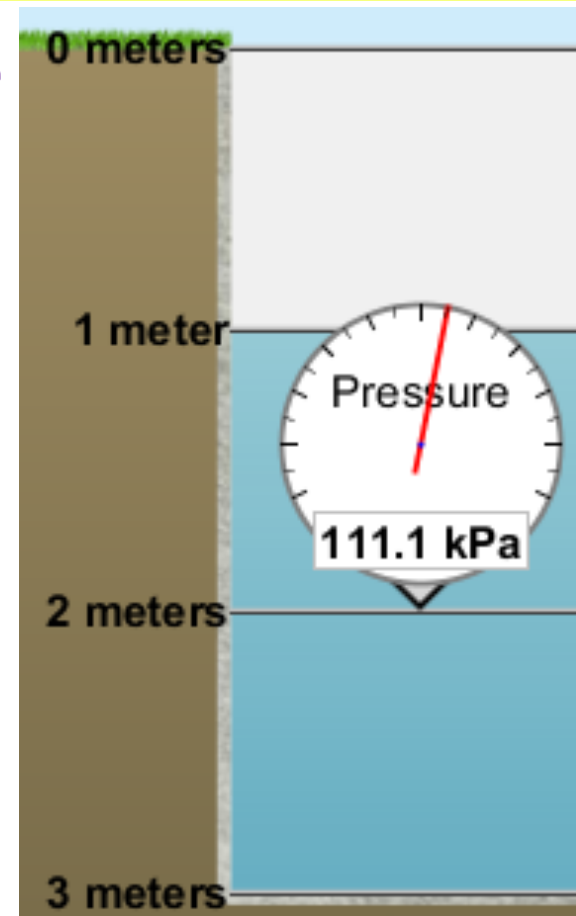


3. What will happen to the pressure if more water is added?

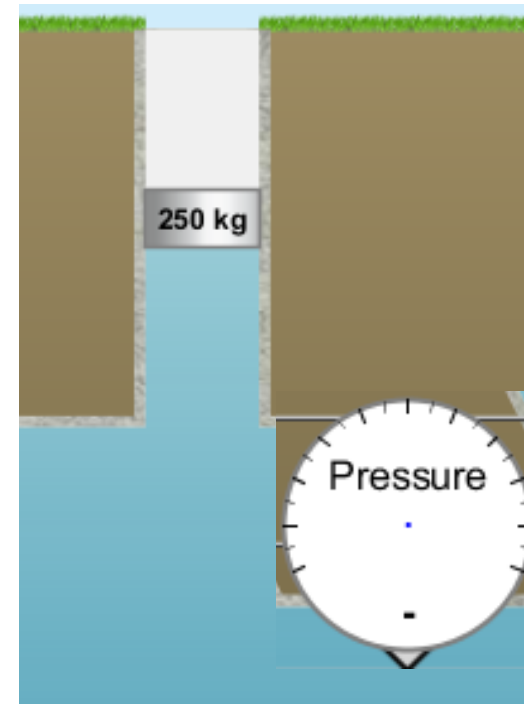
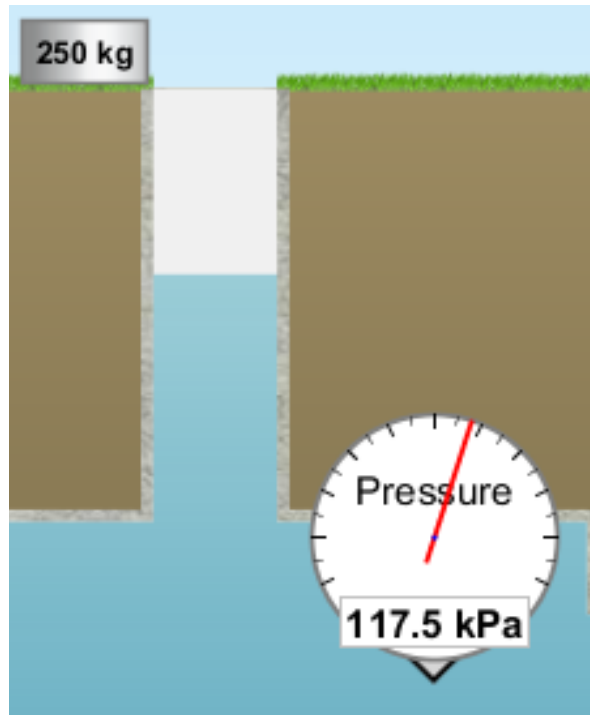




4. What will happen to the pressure if the fluid were changed to honey?



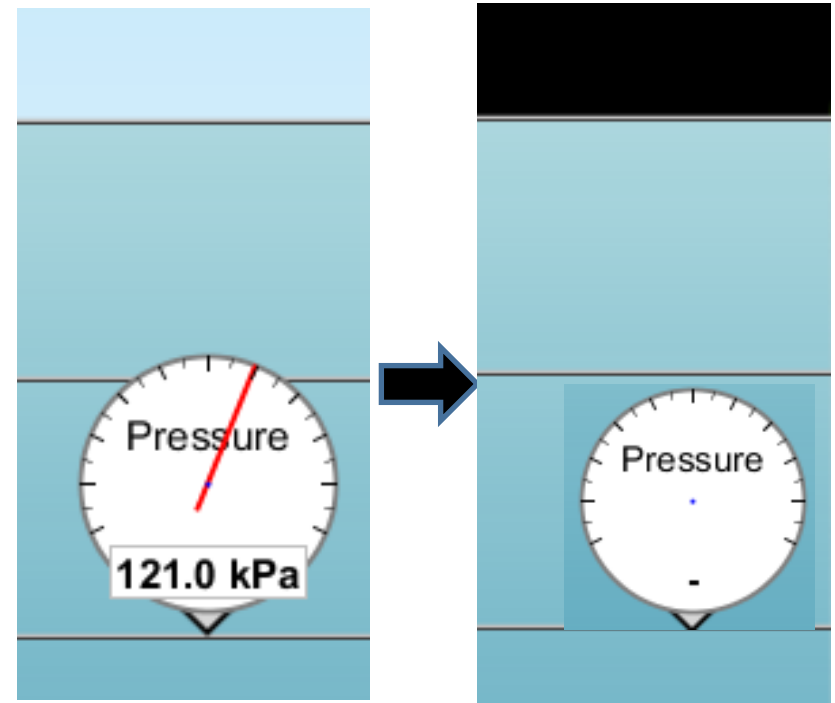
Why?



5. If the 250 kg mass was put on the water column, what will happen to the pressure?

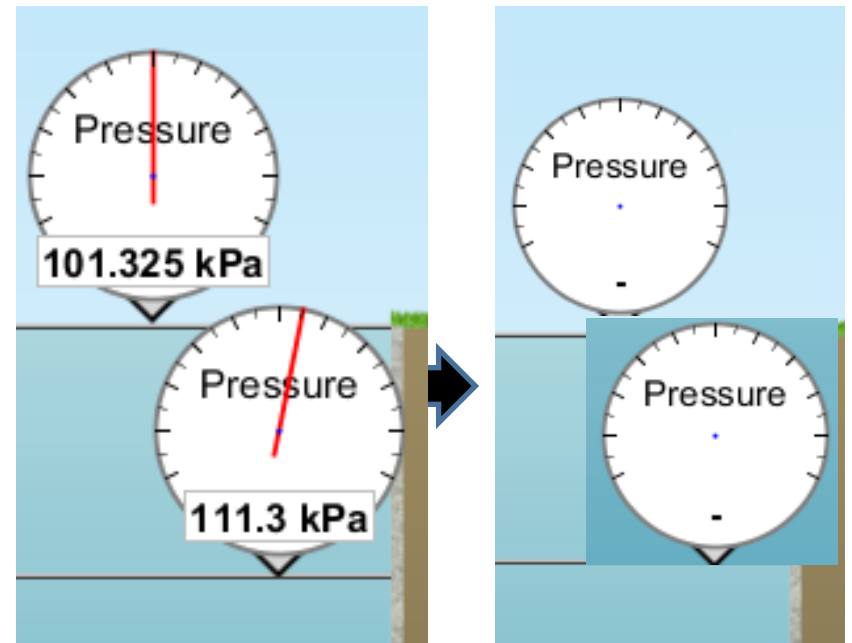
Why?

6. If the only change was to remove the air pressure, what will happen to the pressure?

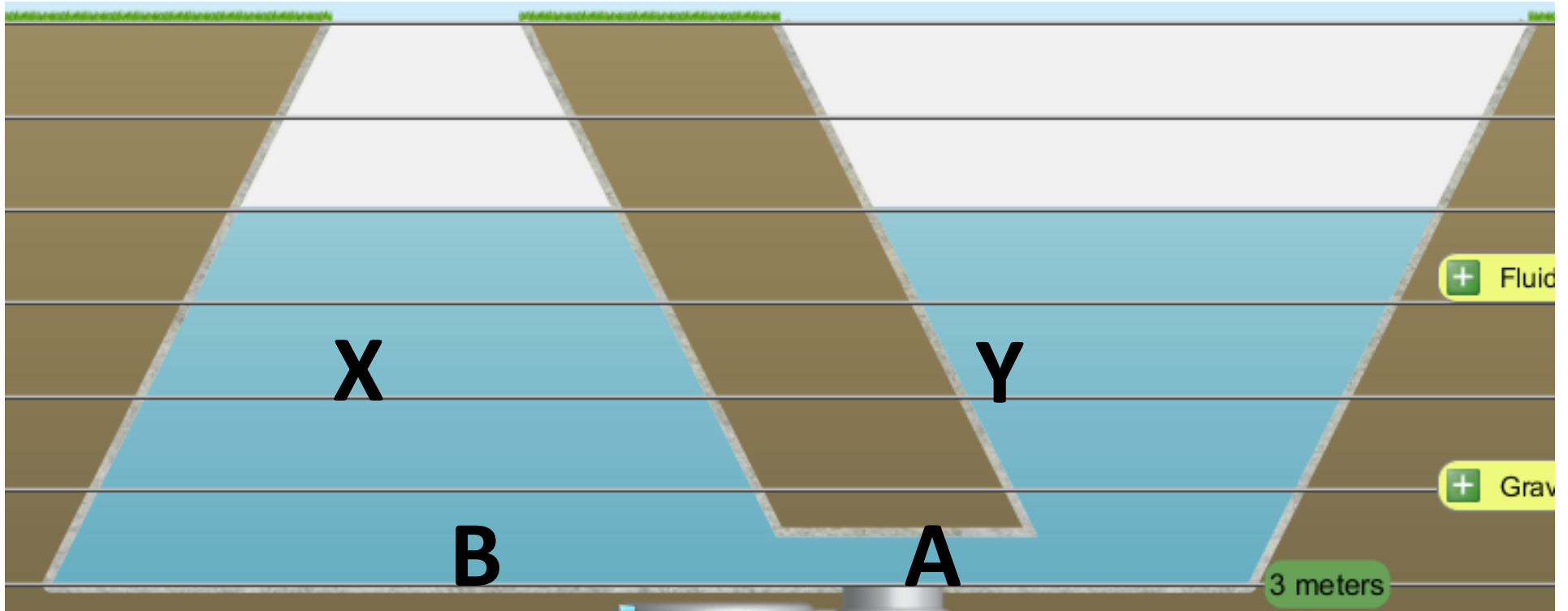


- A. increase by 101.3 kPa
- B. decrease by 101.3 kPa
- C. stay the same
- D. Something else

7. If the only change was to go to a place where the gravity was doubled, what will happen to the pressure?



- A. Both pressures would double
- B. Only the air pressure would double
- C. The air pressure would double, and the water pressure would increase some
- D. Something else



9. How do the pressures at the four locations compare?