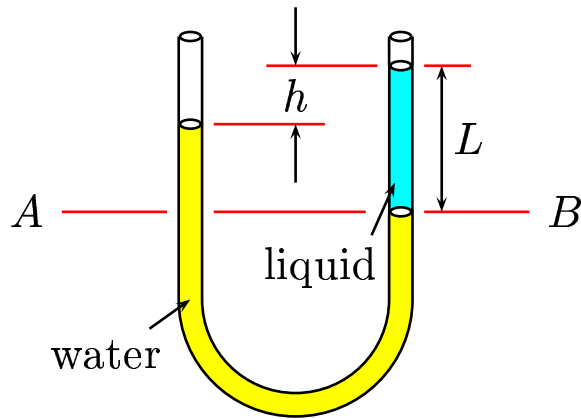


A U tube is filled with water and a liquid. Here the water is denser than the liquid, with the ratio of their densities  $\frac{\rho_{liquid}}{\rho_{water}} = \frac{2}{3}$ .



Find the ratio  $\frac{h}{L}$ .

- A)  $\frac{h}{L} = \frac{1}{3}$ .
- B)  $\frac{h}{L} = \frac{2}{3}$ .
- C)  $\frac{h}{L} = 1$ .

By inspection the ratio of the height of liquid column above the horizontal line  $\overline{AB}$  to the height of the water column above the same line should be 3 to 2.

This implies that  $\frac{h}{L} = \frac{2}{3}$ .

Answer **A**