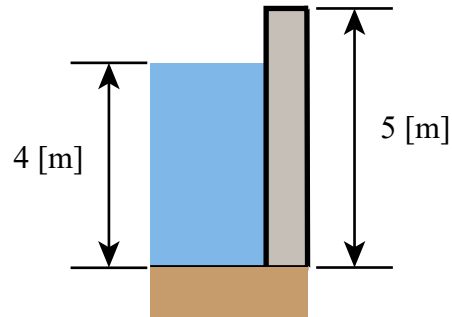


MEMS0071 - Introduction to Fluid Mechanics
Quiz #3

Problem #1

A dam that is 5 [m] tall and 100 [m] long is holding back 4 [m] of water. Determine y' , the location that the resultant force acts on the face of the dam, with respect to the height of the water. Your answer is assumed to have units of [m].



$$y' = \frac{2h_{\text{water}}}{3} = \frac{2(4 \text{ [m]})}{3} = \frac{8}{3} \text{ [m]} = 2.\bar{6} \text{ [m]}$$