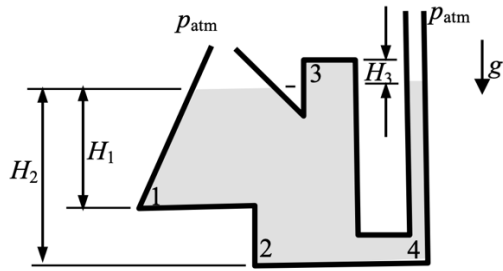


Determine the pressure at points 1, 2, 3, and 4.



SOLUTION:

Recall that the shape of the container doesn't matter when calculating hydrostatic pressure. It's only the depth of the fluid that matters.

$$p_1 = p_{atm} + \rho g H_1, \quad (1)$$

$$p_2 = p_{atm} + \rho g H_2, \quad (2)$$

$$p_3 = p_{atm} - \rho g H_3, \quad (3)$$

$$p_4 = p_{atm} + \rho g H_2 \quad (\text{Point 4 is at the same depth as point 2.}) \quad (4)$$