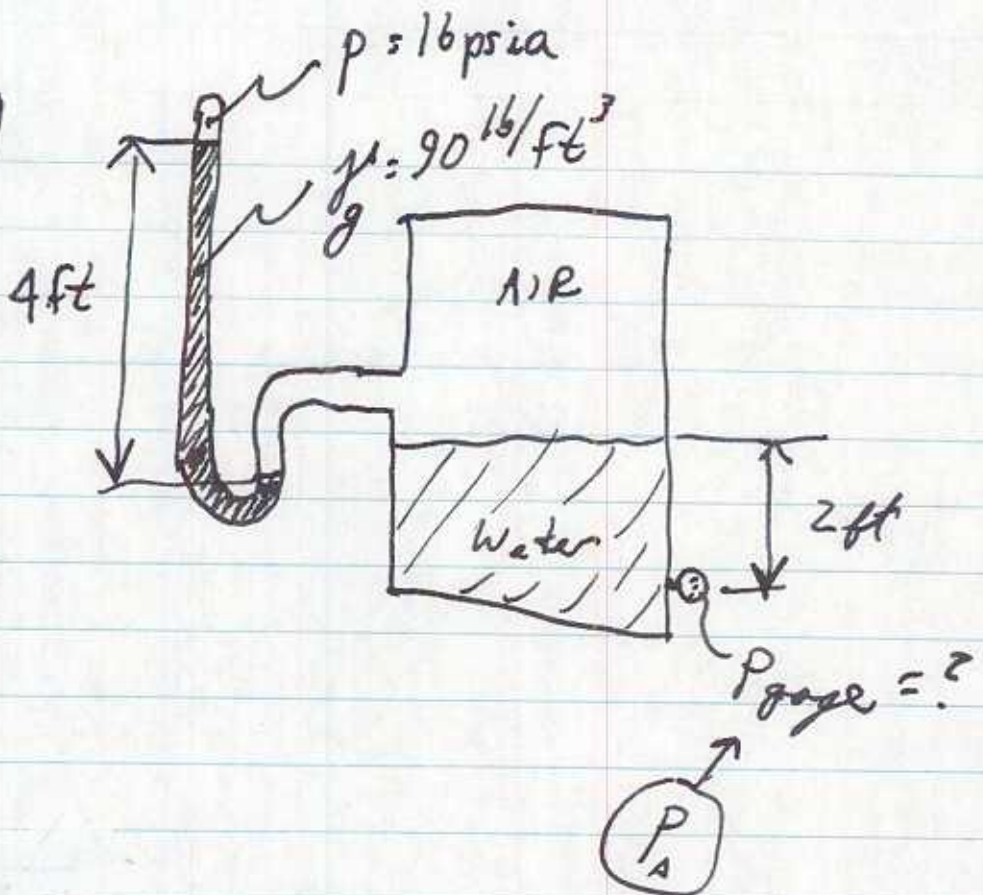


MYO 2.24



$$\Delta p = -\gamma \Delta z$$

$$P_A = (16 \text{ psia}) \left( \frac{144 \text{ in}^2}{\text{ft}^2} \right) + \gamma_g (4 \text{ ft}) + \gamma_{\text{H}_2\text{O}} (2 \text{ ft})$$

$$\gamma_g = 90 \text{ lb/ft}^3$$

$$\gamma_{\text{H}_2\text{O}} = \rho g = \left( 1.94 \frac{\text{slugs}}{\text{ft}^3} \right) (32.2 \text{ ft/s}^2) = 62.5 \text{ lb/ft}^3$$

$$P_A = (16)(144) + (90)(4) + (62.5)(2)$$

$$P_A = 2789 \text{ psfa} = 19.36 \text{ psia}$$

$$P_{A, \text{gage}} = 4.7 \text{ psi (gage)}$$