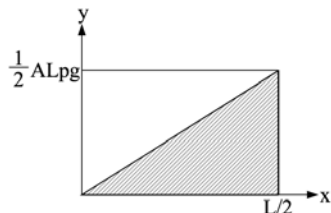


1. (B)

【詳解】



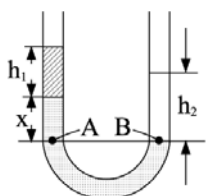
將木棒再下壓 $x = \frac{L}{2}$ 時，需施力 f

$$\therefore f = Apg \cdot \frac{1}{2}L$$

$$W = \text{斜線部分面積} = \frac{1}{2} \times \frac{L}{2} \times \frac{1}{2} ALpg = \frac{1}{8} A\rho L^2g$$

8. $\frac{h_2\rho_2 - h_1\rho_1}{\rho}$

【詳解】



如上圖，由平衡時 $P_A = P_B$ 時

$$h_1\rho_1g + x\rho g = h_2\rho_2g$$

$$x = \frac{h_2\rho_2 - h_1\rho_1}{\rho}$$

3. 答案：0.75

解析：浮力 = 排開液重

$$\Rightarrow \frac{60}{100} \times V \times 1 = \frac{80}{100} \times v \times d \Rightarrow d = \frac{3}{4} = 0.75 \text{ (g/cm}^3\text{)}$$