

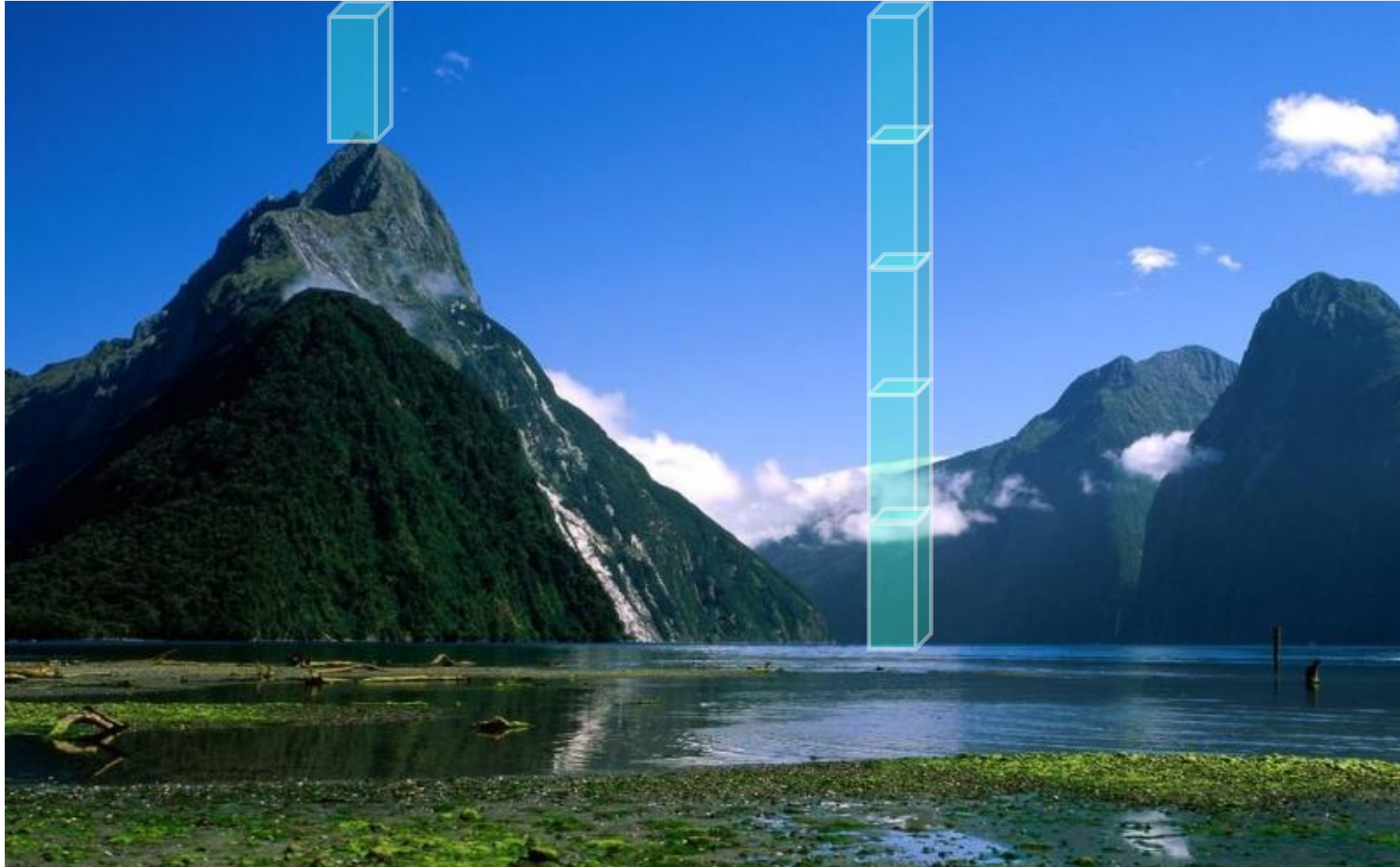
Lei de Stevin e pressão atmosférica

Prof. Jadoski
Física

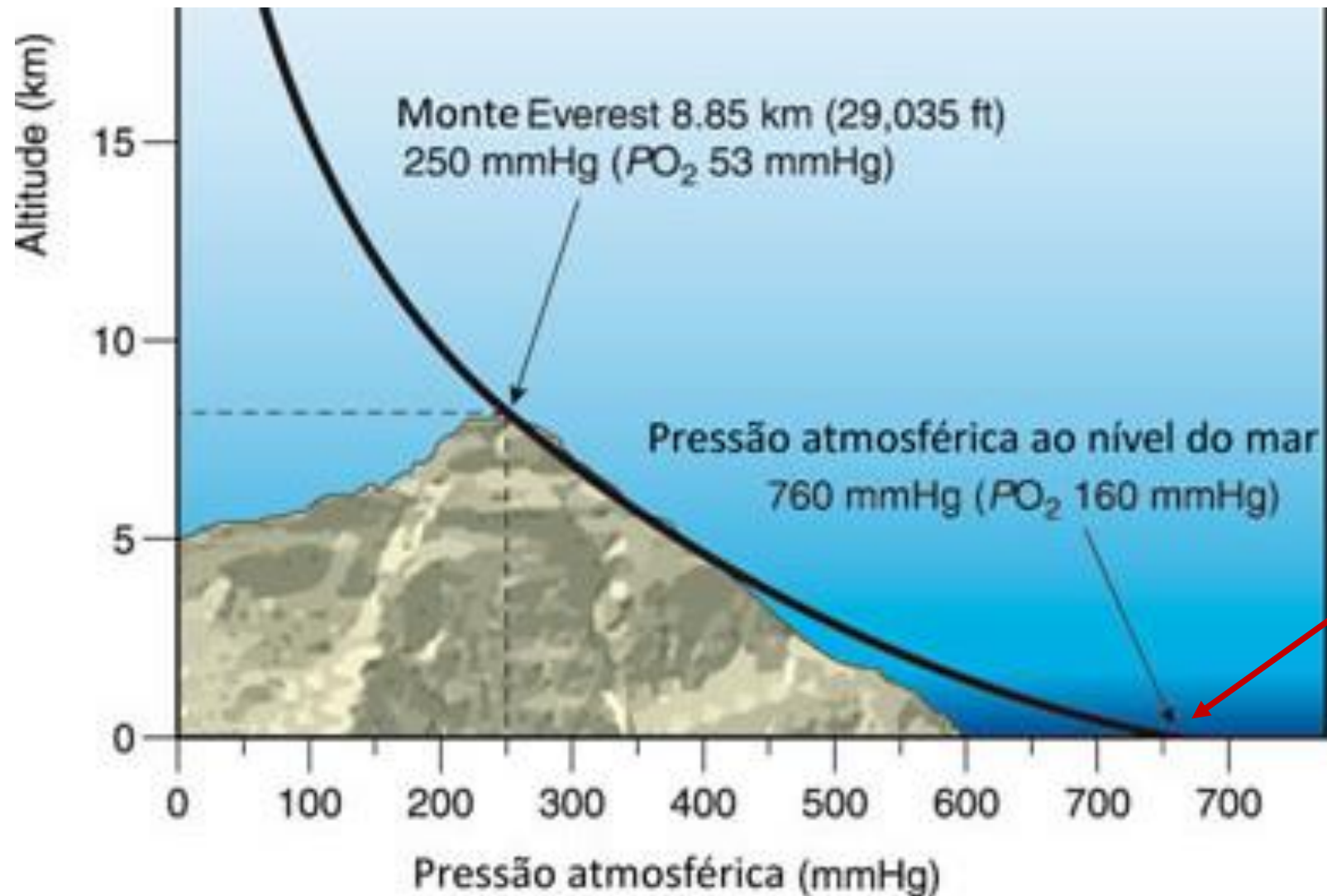
pressão



Pressão atmosférica



Densidade x massa específica



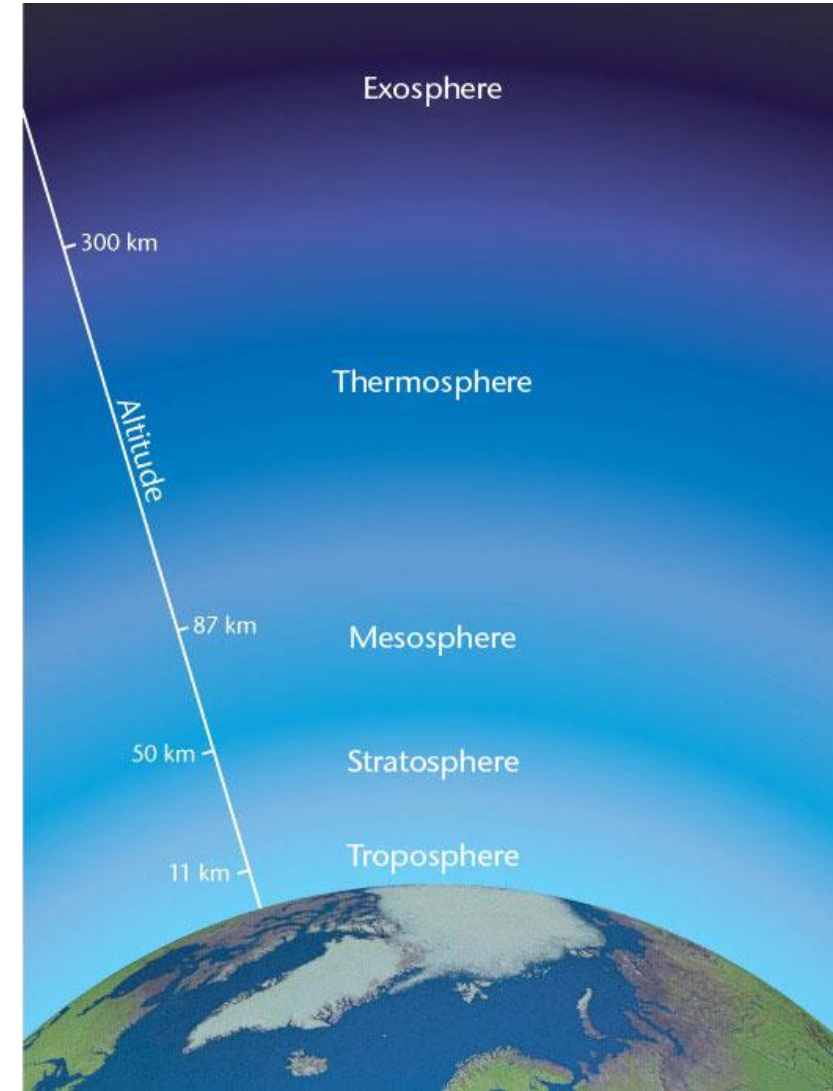
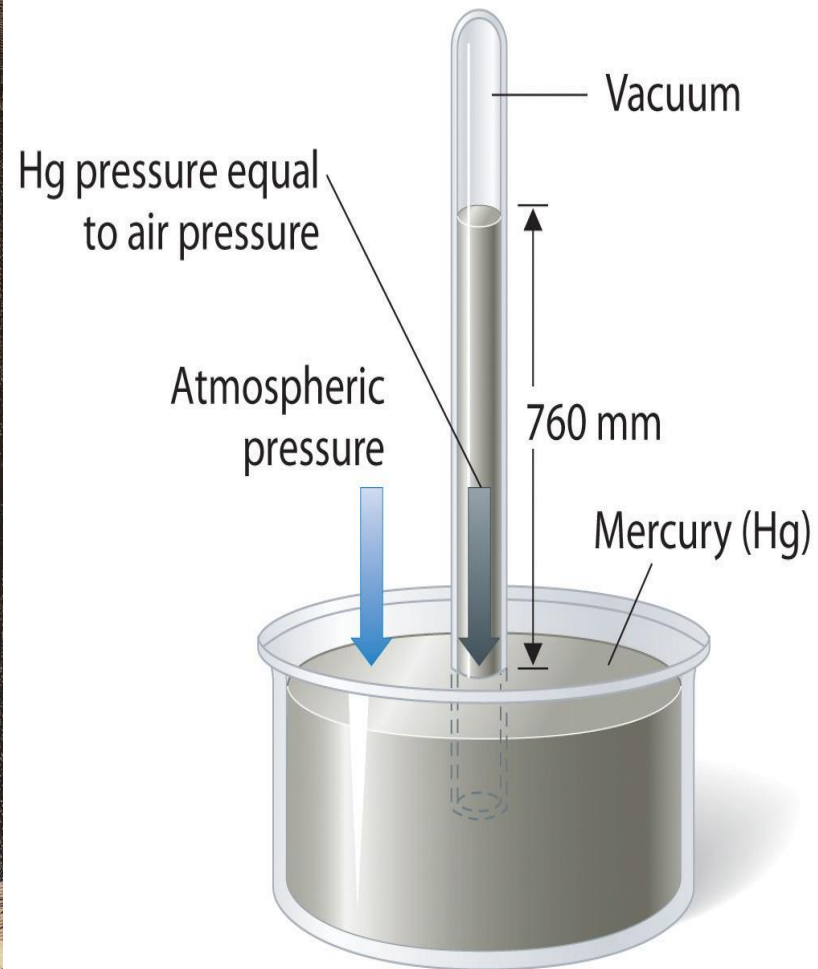
1 atm

100 000 N/m²

100 000 Pa

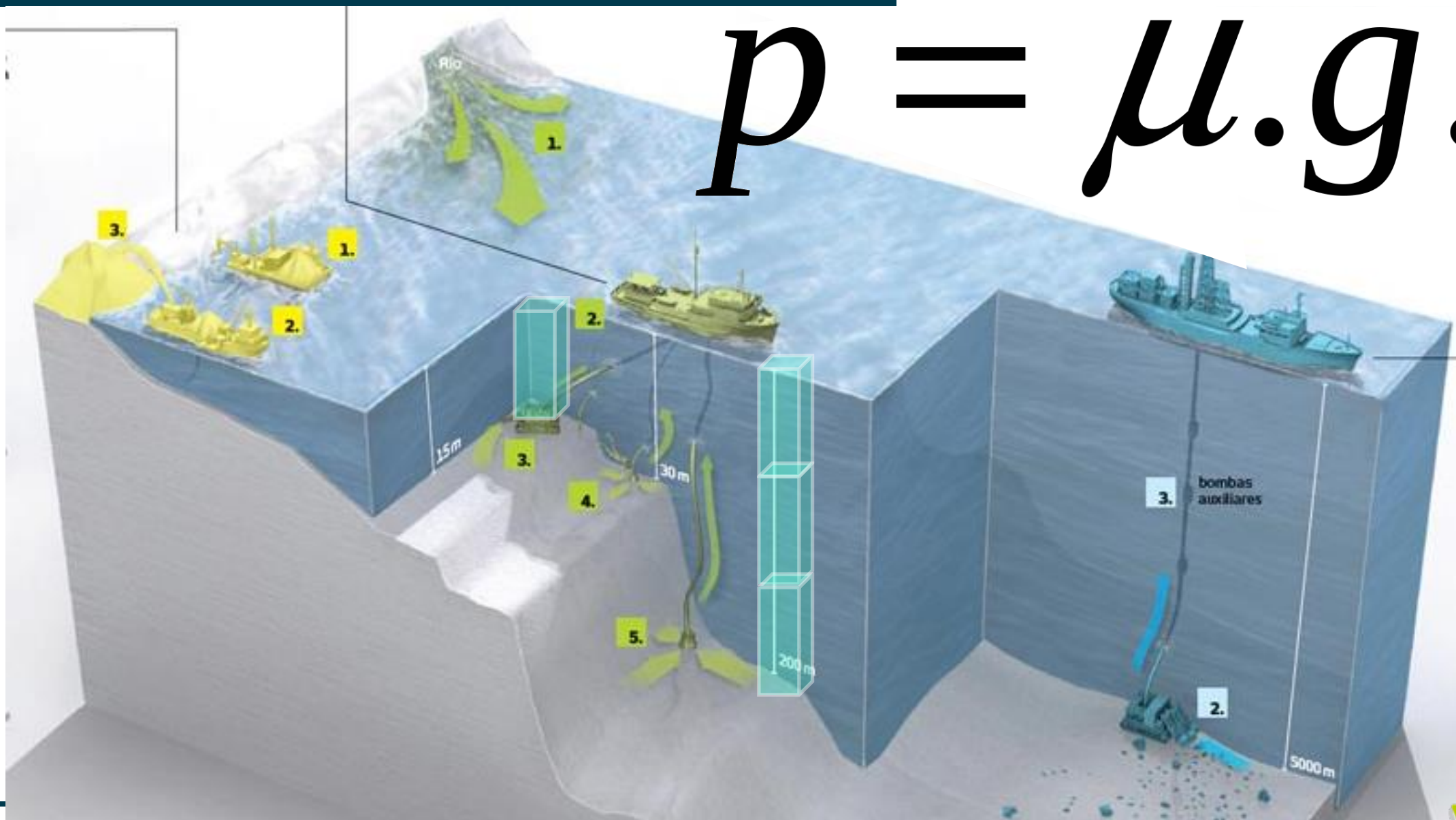
760mmHg

Torricelli

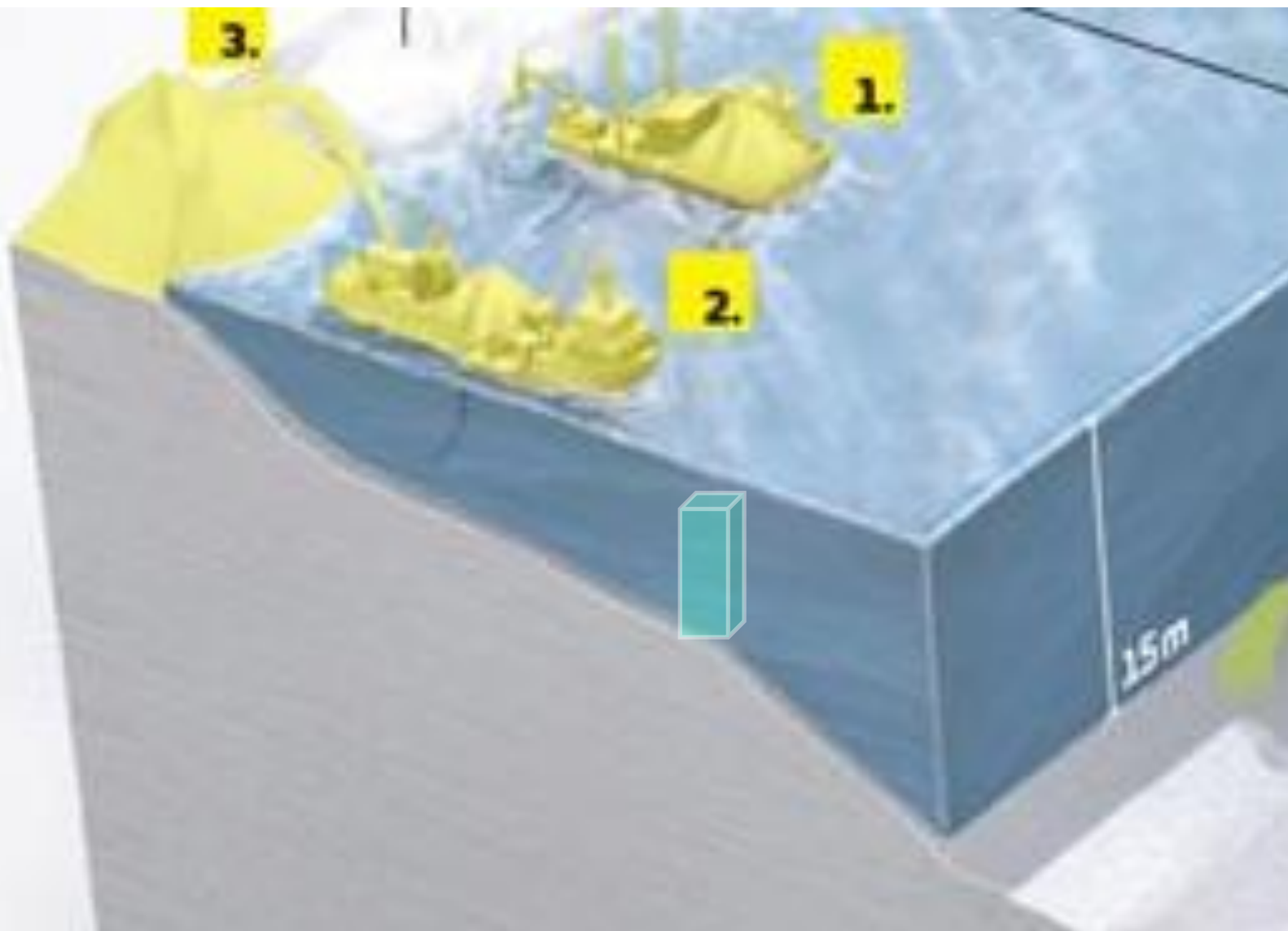


Princípio de Stevin

$$p = \mu \cdot g \cdot h$$



Princípio de Stevin



10m = 1 atm

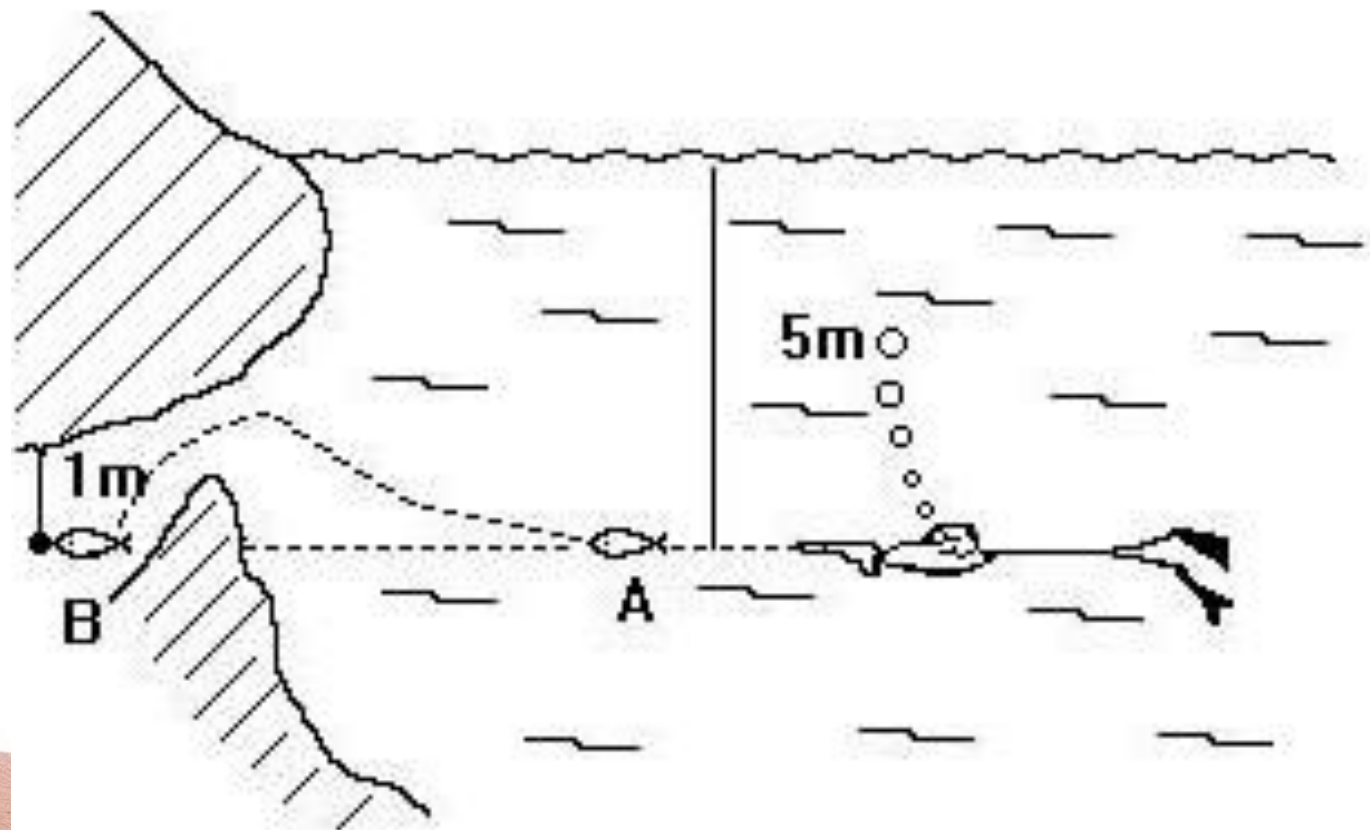
???

$$p = \mu \cdot g \cdot h$$

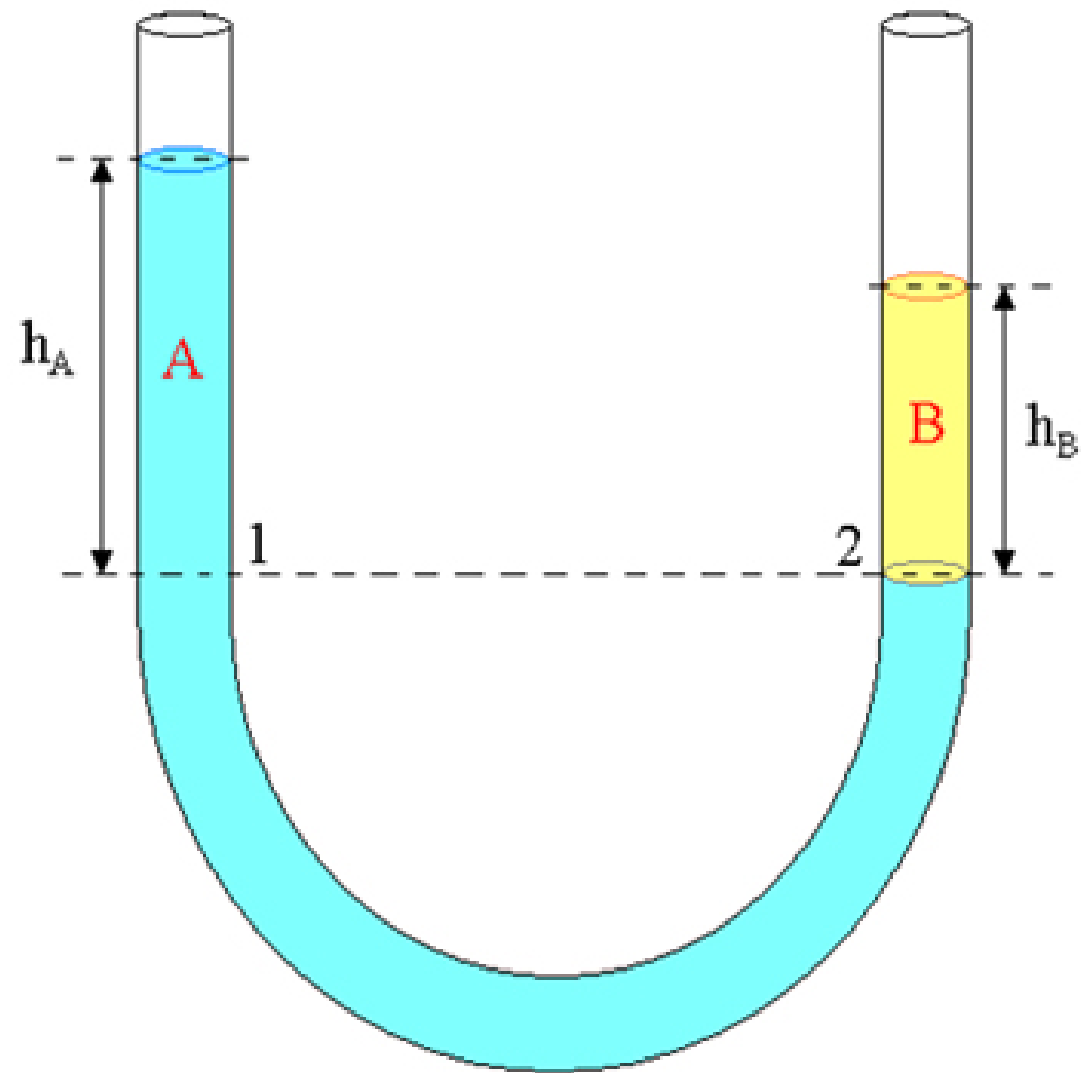
$$P = 1000 \cdot 10 \cdot 10$$

$$P = 100000 \text{ Pa}$$

Vasos comunicantes



Pressão

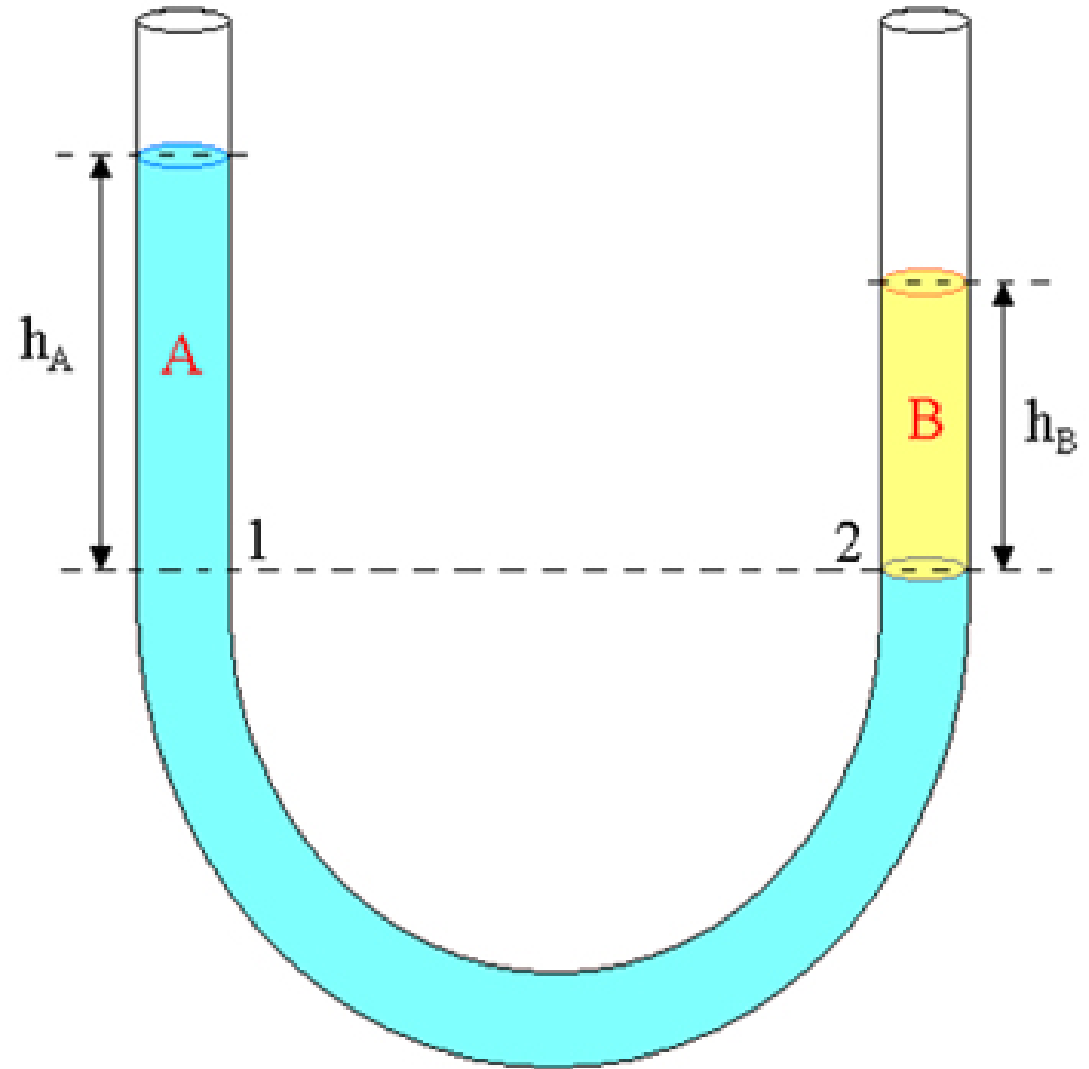


Pressão

$$P_1 = P_2$$

$$P_{\text{atm}} + d_1 \cdot g \cdot h_1 = d_2 \cdot g \cdot h_2 + P_{\text{atm}}$$

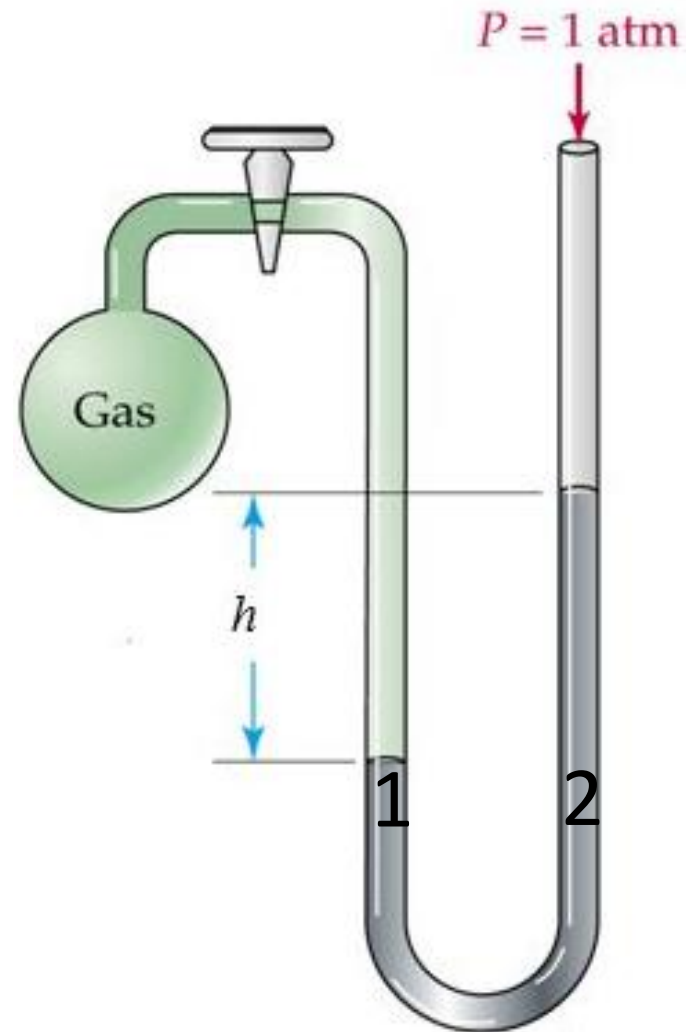
$$d_1 \cdot h_1 = d_2 \cdot h_2$$



Pressão – manômetro (aberto)

$$P_1 = P_2$$

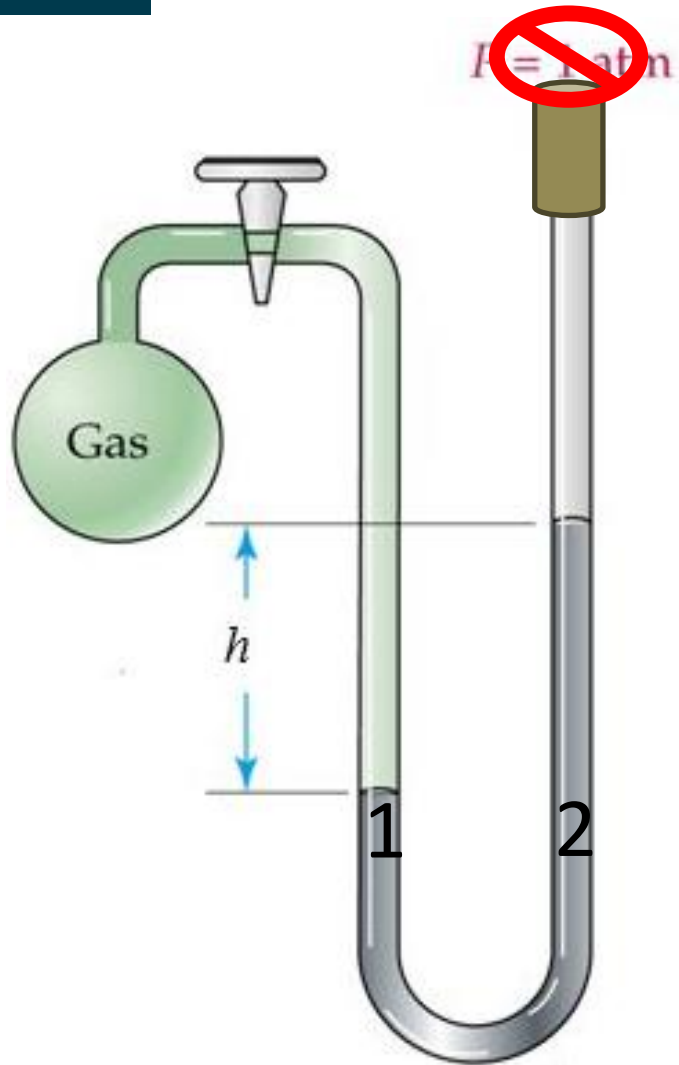
$$P_{\text{gás}} = d_2 \cdot g \cdot h_2 + P_{\text{atm}}$$



Pressão – manômetro (fechado)

$$P_1 = P_2$$

$$P_{\text{gás}} = d_2 \cdot g \cdot h_2$$



Stevin

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