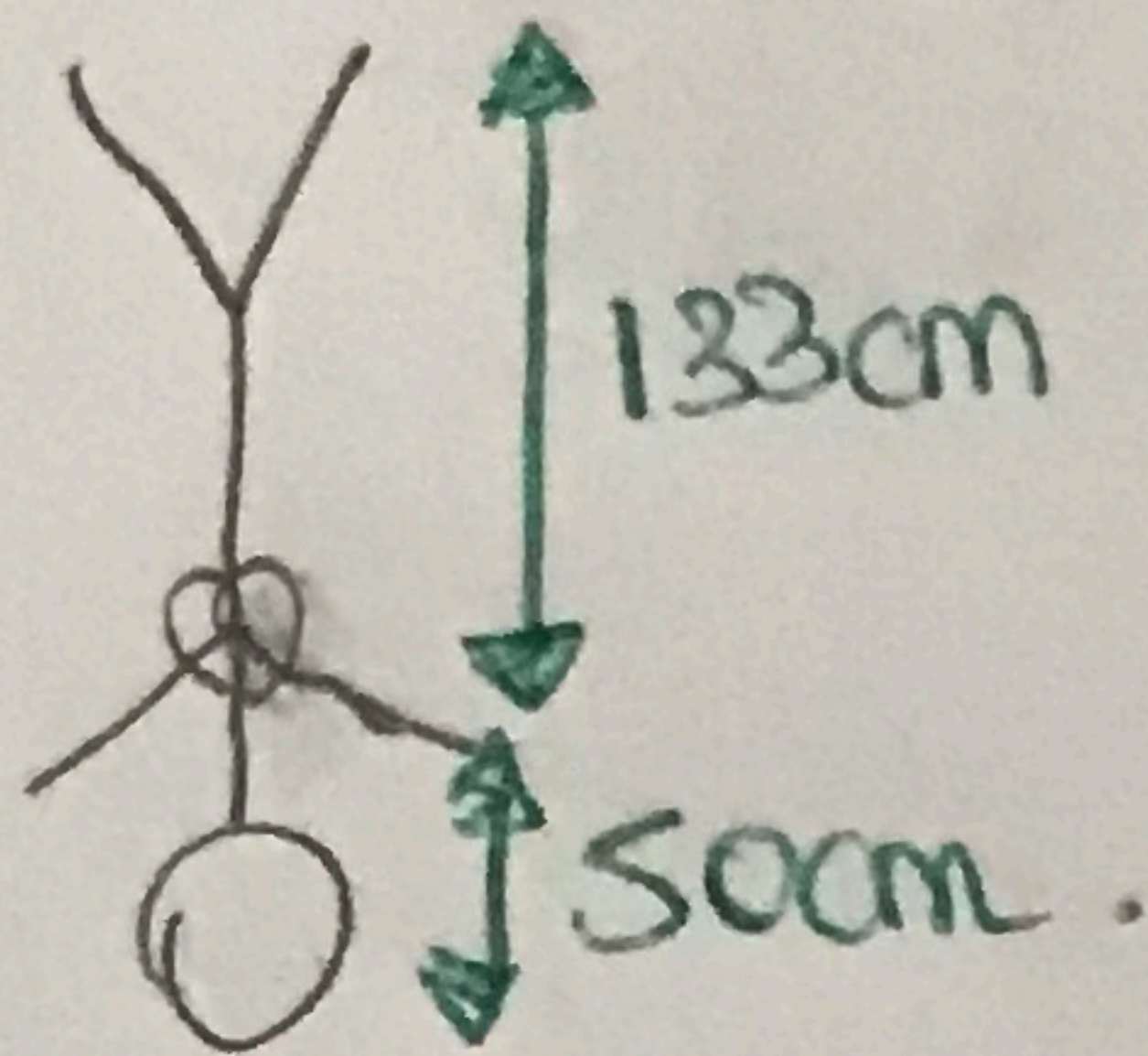


Annatut 2019.

Biophy. Circu. Qc7.27.

Tête en bas :



1) Calcul de PA_{moy} (cœur) :

$$PA_{\text{moy}} = \frac{PA_{\text{syst}} + 2PA_{\text{diast}}}{3}$$

$$PA_{\text{moy}} = \frac{120 + 2 \times 90}{3}$$

$$PA_{\text{moy}} = 100 \text{ mmHg}$$

Convertir en Pascal

$$1 \text{ mmHg} = 133 \text{ Pa}$$

$$\rightarrow 100 \text{ mmHg} = 13300 \text{ Pa}$$

$$\begin{aligned} \boxed{A} \quad PA(\text{tête}) &= PA(\text{cœur}) + \rho gh \\ &= 13300 + (10^3 \times 10 \times 5 \cdot 10^{-1}) \\ &= 13300 + 5000 \\ &= 18300 \text{ Pa} \end{aligned}$$

Convertir en mmHg

$$18,3 \times 7,5 = 137,25 \text{ mmHg}$$

$$\begin{aligned} \boxed{B} \quad PA(\text{pieds}) &= PA(\text{cœur}) - \rho gh \\ &= 13300 - (10^3 \times 10 \times 1,33) \\ &= 13300 - 13300 \\ &= 0 \text{ Pa} \end{aligned}$$