

$$\begin{aligned} \cos 24^\circ &= \frac{1-p^2}{2} \\ \cos^2 24^\circ &= 1-p^2 \\ \sin^2 24^\circ + \cos^2 24^\circ &= 1 \end{aligned}$$

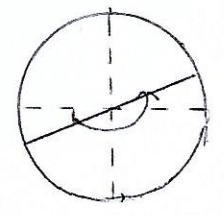
①  $\sin 24^\circ = p$

$$\begin{aligned} \sin 66^\circ &= \sin (90^\circ - 24^\circ) = \cos 24^\circ = \sqrt{1-p^2} \\ \sin 56^\circ &= \sin (180^\circ - 24^\circ) = \sin 24^\circ = p \\ \sin 204^\circ &= \sin (180^\circ + 24^\circ) = -\sin 24^\circ = -p \\ \sin 246^\circ &= \sin (270^\circ - 24^\circ) = -\sin 66^\circ = -\cos 24^\circ = -\sqrt{1-p^2} \\ \sin 336^\circ &= \sin (360^\circ - 24^\circ) = -\sin 24^\circ = -p \end{aligned}$$

$$\boxed{\sin \alpha = \frac{2\sqrt{5}}{5}}$$

$$\cos \alpha = \sqrt{1 - \left(\frac{2\sqrt{5}}{5}\right)^2} = \frac{1}{5}$$

(Calculator key) (radians)



$$\begin{aligned} \sin^2 \alpha + \cos^2 \alpha &= 1 \\ 4\cos^2 \alpha + \cos^2 \alpha &= 1 \quad 5\cos^2 \alpha = 1 \\ \cos \alpha &= \frac{1}{5} \\ \sin \alpha &= \frac{2\sqrt{5}}{5} \end{aligned}$$

⑥  $\alpha$  porteur de 1<sup>er</sup> quadrante. May an error. la hauteur en fonction de  $\sin$  et  $\cos$   $\alpha$  ou  $\cos$   $\alpha$ .

$$\text{Area} = \frac{10,83 \cdot 28,75}{2} = 155,69 \text{ cm}^2$$

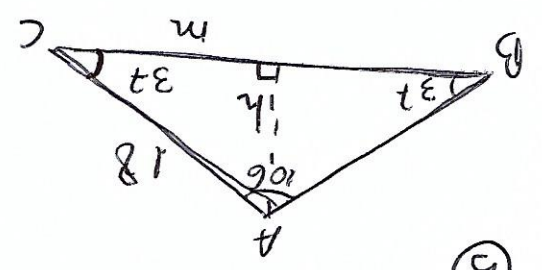
$$\text{Area} = b \cdot h \cdot \frac{1}{2}$$

$$\boxed{\text{Base} = 28,75 \text{ cm}}$$

$$\begin{aligned} \cos 37^\circ &= 0,8 = \frac{m}{18} \\ m &= 14,37 \text{ cm} \\ \text{Base} &= 2 \cdot 14,37 \end{aligned}$$

$$\boxed{h = 10,83 \text{ cm}}$$

$$\sin 37^\circ = 0,6 = \frac{h}{18}$$



⑤