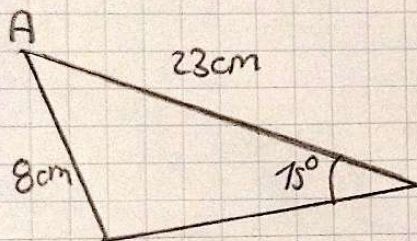


$$1) \frac{x}{\text{sen } 60} = \frac{h}{\text{sen } (30^\circ)} \quad x = \frac{h \cdot 0.866}{0.5} \quad x = 1.73h$$

$$\frac{(200-x)}{\text{sen } (45^\circ)} = \frac{h}{\text{sen } (45^\circ)} \quad \begin{array}{l} 200-x = h \cdot 1 \\ 200-x = h \\ 200-h = x \\ x = 200-h \end{array} \quad \begin{array}{l} 200-h = 1.73h \\ 200 = 1.73h + h \\ 200 = 2.73h \end{array}$$

$$h = 73.26m \quad h = \frac{200}{2.73}$$

2)



$$\frac{8}{\text{sen } 15} = \frac{23}{\text{sen } \theta}$$

$$\frac{8}{0.26} = \frac{23}{\text{sen } \theta} \quad 30.77 = \frac{23}{\text{sen } \theta}$$

$$\text{sen } (\theta) = \frac{23}{30.77} \quad \text{sen}^{-1}(\theta) = 48.37$$

Angulo (A)

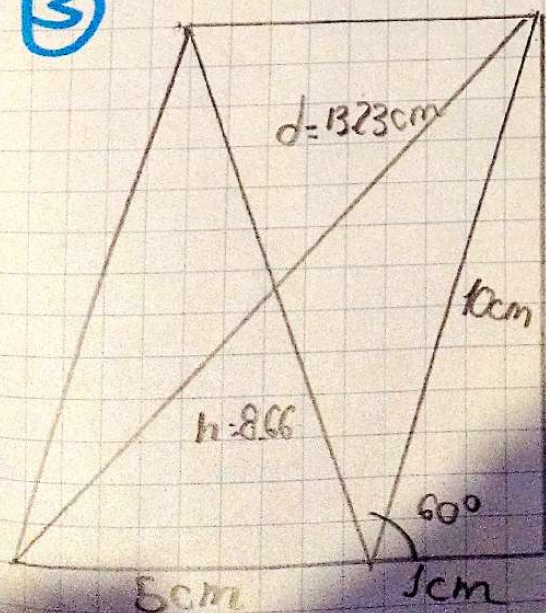
$$180 - 15 - 48.37$$

$$A = 116$$

$$\text{sen}(a) = 0.89$$

$$\frac{8 \cdot 0.89}{0.26} = \frac{7.12}{0.26} = 27.63cm$$

3)



$$d = \sqrt{5^2 + 10^2 - 2(5)(10) \cdot \cos(60)}$$

$$d = 13.23cm$$

$$\text{sen } 60 = \frac{h}{10}$$

$$h = 10 \text{sen } 60$$

$$8.66cm$$

4)

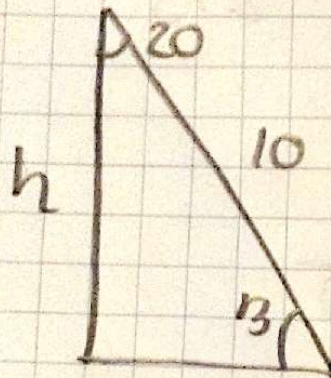
$$AB = 6 \text{ km} \quad AC^2 = (6 \text{ km})^2 + (9 \text{ km})^2 - 2 \times 6 \text{ km} \times 9 \text{ km} \times (0.5)$$

$$BC = 9 \text{ km} \quad AC^2 = \sqrt{36 \text{ km}^2 + 81 \text{ km}^2 + 54 \text{ km}}$$

$$B = 120^\circ \quad AC^2 = 13.07 \text{ km}$$

$$AC = ?$$

5)



$$h = 9.39 \text{ m}$$

$$\cos 20 = \frac{10}{h}$$

$$(10) \cdot \cos 20 = 9.39 \text{ m}$$