

$$AC^2 = AB^2 + BC^2 - 2AB \cdot BC \cos 120^\circ$$

$$AC^2 = (6 \text{ km})^2 + (9 \text{ km})^2 - 2 \cdot 6 \text{ km} \cdot 9 \text{ km} \cdot (-0,5)$$

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

$$AC = 13,08 \text{ km}$$

~~A~~ A

$$A = AC = AC^2 + AB^2 - BC^2 / 2 \cdot AC \cdot AB$$

$$A = AC (13,08)^2 + (6)^2 - (9)^2 / 2 \cdot 13,08 \cdot 6$$

$$A = 53,45^\circ$$

~~C~~ C

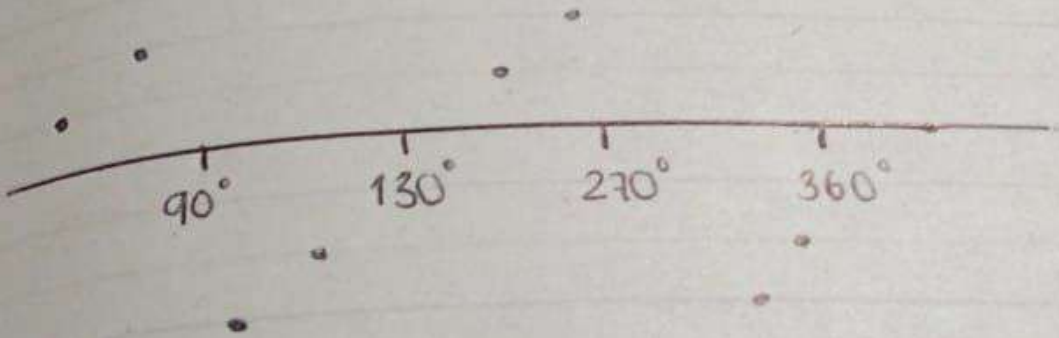
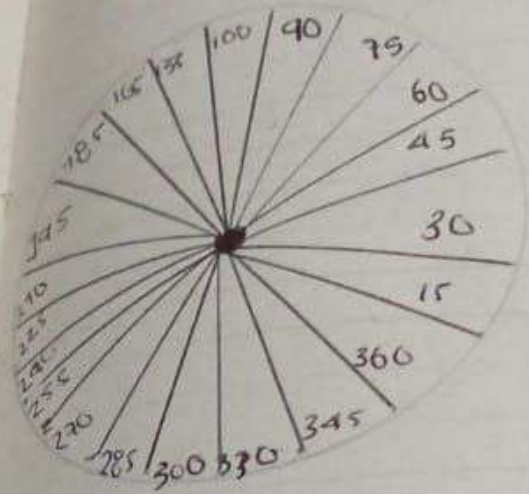
$$180^\circ - 53,45^\circ - 120^\circ = 6,55^\circ$$

$$\textcircled{H} \quad b^2 = 6^2 + 9^2 - 2 \cdot 6 \cdot 9 \cdot 0,5$$

$$b = \sqrt{36 + 81 + 54}$$

$$b = 13,08 \text{ km}$$

TANGENTE



$$A = 180 - 15 - 48 - 37$$

$$A = 116.63$$

$$\sin A = 0.81$$

$$a = \frac{8 \cdot 0.81}{0.26} = \frac{7.12}{0.26} = 27.38$$

$$\textcircled{3} \quad \sin 30^\circ = \frac{d}{10}$$

$$d = 10 \cdot \sin 30^\circ$$

$$d = 5 \text{ ft} \text{ (limited elevation of } d = 10)$$

$$\sin 60^\circ = \frac{D}{10}$$

$$= D \cdot \frac{1}{10} \quad \sin 60^\circ = 8.6$$

$$\text{Diagonal} = 13.2$$

$$\textcircled{4} \quad AB = 6 \text{ km}$$

$$BC = 9 \text{ km}$$

$$\angle B = 120^\circ$$

$$AC = ?$$

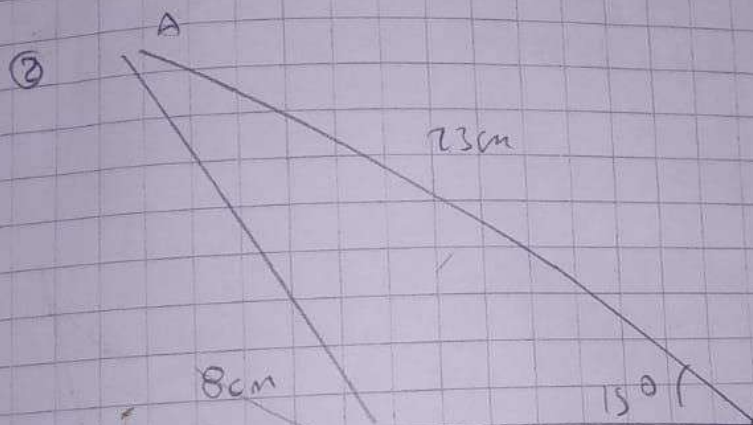
Evaluation mit

$$\textcircled{1} 200 - h = 1,73 h$$

$$200 = 1,73 h + h$$

$$200 = 2,73 h$$

$$h = 73,26 \text{ m}$$



$$\frac{8}{\sin(15)} = \frac{23}{\sin(90)}$$

$$\frac{8}{0,26} = \frac{23}{\sin(90)}$$

$$30,77 = \frac{23}{\sin(90)}$$

$$\sin(90) = \frac{23}{30,77}$$

$$\sin^{-1}(0) = 48,37$$

$$0 = 48,37$$