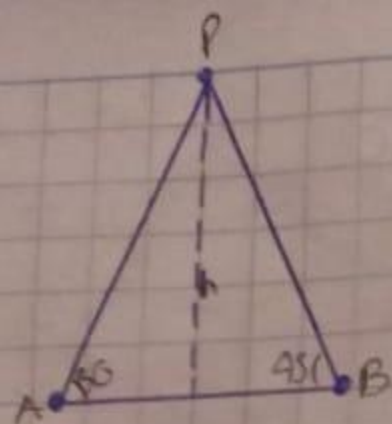


1



Ley del seno

$$\frac{x}{\text{sen}(60^\circ)} = \frac{h}{\text{sen}(30^\circ)} \quad \frac{(200-x)}{\text{sen}(45^\circ)} = \frac{h}{\text{sen}(45^\circ)}$$

$$x = \frac{h \cdot \text{sen}(60^\circ)}{\text{sen}(30^\circ)} \quad 200 - x = \frac{h \cdot \text{sen}(45^\circ)}{\text{sen}(45^\circ)}$$

$$x = \frac{h \cdot 0.866}{0.5} \quad 200 - x = h \cdot 1$$

$$x = 1.73h$$

$$200 - h = x$$

$$200 - h = x$$

$$x = 200 - h$$

$$200 - h = 1.73h$$

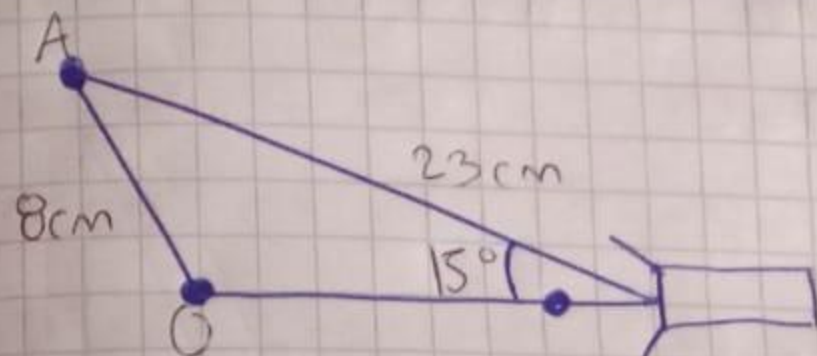
$$200 = 1.73h + h$$

$$200 = 2.73h$$

$$h = \frac{200}{2.73}$$

$$h = 73.26 \text{ cm}$$

2



$$\frac{a}{\text{sen} A} = \frac{b}{\text{sen} B} = \frac{c}{\text{sen} C}$$

$$\frac{8}{0.26} = \frac{23}{\text{sen} O}$$

$$30.77 = \frac{23}{\text{sen} O}$$

$$\text{sen} O = \frac{23}{30.77}$$

$$\frac{a}{\text{sen} A} = \frac{c}{\text{sen} C}$$

$$\text{sen} 10 = 40.37 \quad a = \frac{b \text{ sen} A}{\text{sen} B} = \frac{8 \cdot 0.17}{0.26} = \frac{41.2}{0.16}$$

$$= 27.39$$

$$O = 48.37$$

$$A = 180 - 15$$

$$A = 116.65$$

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

$$3 \operatorname{sen} 30^\circ = d/10$$

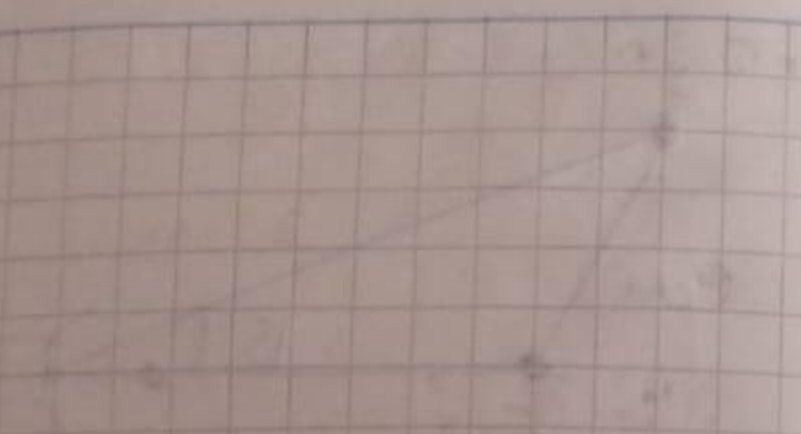
$$d = 10 \operatorname{sen} 30^\circ$$

$$d = 10$$

$$\operatorname{sen} 60^\circ = D/10$$

$$D = 10 \cdot \operatorname{sen} 60^\circ = 8,6$$

$$= 17,2$$



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

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

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

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

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

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

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

$$5 \quad 180 - 20 - 90 = 70 \quad h = 9,40 \quad a = 3,42 \quad b = 70$$

$$\theta = 20$$

$$\theta = 20$$

$$\text{sen } 20 = \frac{CO}{10}$$

$$h = 10m$$

$$h = 10m$$

$$10 \cdot \text{sen } 20 = CO$$

$$CO = ?$$

$$CO = ?$$

$$3,42 = CO$$

$$\text{cos } 20 = \frac{CA}{10m}$$

$$10 \cdot \text{cos } 20 = CA$$

$$9,40 = CA$$