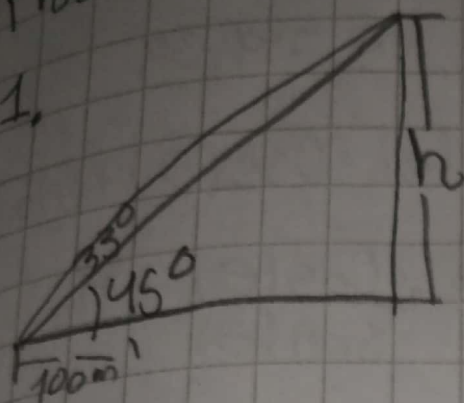


Evaluación Mate

Procedimiento

1.



$$\tan(33^\circ) = \frac{h}{100+x}$$

$$\tan(45^\circ) = \frac{h}{x}$$

$$x = \frac{h}{\tan(45^\circ)}$$

$$\tan(33^\circ) = \frac{h}{100 + \frac{h}{\tan(45^\circ)}}$$

$$\frac{100+h}{\tan(45^\circ)}$$

$$0,64 = \frac{h}{100+h}$$

$$(100+h)(0,64) = h$$

$$(100)(0,64) = h$$

$$64 + 0,64h = h$$

$$64 = h - 0,64h$$

$$64 = 0,36h$$

$$\frac{64}{0,36} = h$$

$$178$$

$$178 \text{ h}$$

$$\begin{aligned} 2. C.O &= 10 \\ C.a &= 7 \\ \theta &= 20 \end{aligned}$$

$$\cos(20) = 0,93$$

$$C.O = 10(\cos(20))$$

$$a = 9,39$$

4. Si $\text{Sen}(\theta) = \frac{1}{3} \text{Sen}(a)$, calcular $\text{Sen}(a) \cdot \text{Csc}(\theta) + 5$

$$\frac{\text{Sen}(\theta)}{1} \cdot \frac{1}{\text{Csc}(\theta)} + \frac{\text{Cos}(\theta)}{\text{Sen}(\theta)} = \frac{\text{Sen}(\theta)}{\text{Cos}(\theta)} \cdot \frac{\text{Cos}(\theta)}{\text{Sen}(\theta)} = 1$$

$$5. 1 + \tan^2(\theta) = ?$$

$$\frac{1 + \tan^2(\theta)}{\text{Sen}(\theta)} = \frac{\tan^2(\theta)}{\text{Sen}(\theta)} = \frac{\text{Sen}(\theta)}{\tan^2(\theta)} = 1$$