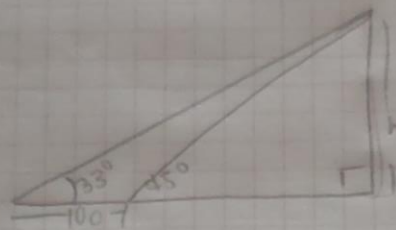


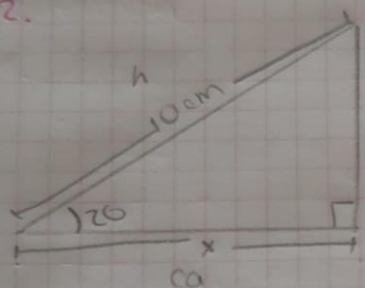
1.



$$\cos(33) = \frac{100+x}{h}$$

$$100+x = h \cdot \cos(33)$$

2.



$\theta = 20$ $ca = ?$ $cb = h = 10 \text{ cm}$

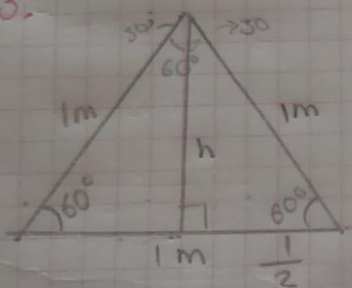
$$\cos(20) = \frac{x}{10 \text{ cm}}$$

$$x = 10 \times \cos(20) =$$

$$x = 10 \times 0.9397$$

$$x = 9.397$$

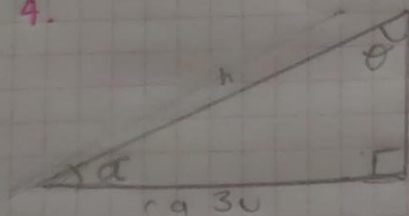
3.



$$\sin(30) = \frac{1/2}{1}$$

$$= \frac{1}{2}$$

4.



$$\frac{\sin \theta}{1} = \frac{h}{h \cdot \cos \theta} = 1$$

$$\cos \theta = \frac{ca}{h}$$

$$ca = h \cdot \cos \theta$$

5.

$$1 + \tan^2(\theta) = \frac{\sin^2 \theta}{\cos^2 \theta} + 1 = \frac{\sin^2 \theta + \cos^2 \theta}{\cos^2 \theta} = \frac{1}{\cos^2 \theta} = \sec^2(\theta)$$