

$$1 \quad \tan 33 = \frac{x}{100}$$

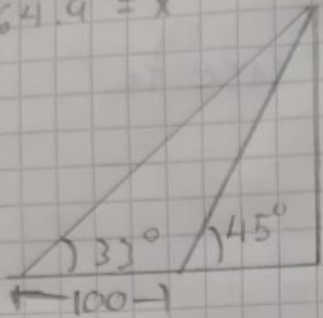
$$100 \cdot \tan 33 = x$$

$$64.9 = x$$

$$L.O = 100$$

$$\theta = 33$$

$$L.O = x$$



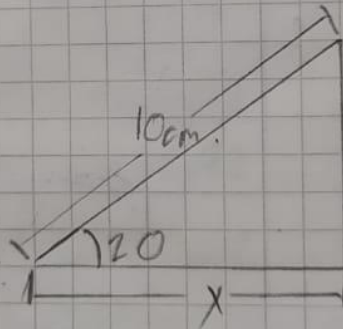
$$\sin 45 = \frac{64.9}{x}$$

$$x \cdot \sin 45 = 64.9$$

$$x = \frac{64.9}{\sin 45} = 92$$

$$x = 185$$

2



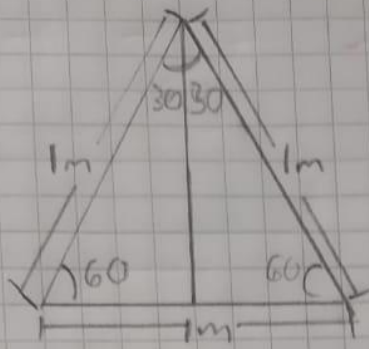
$$\cos(20) = \frac{x}{10}$$

$$(10) \cdot \cos 20 = 9.39$$

$$x = 9.39$$



3



$$\cos(30) = \frac{x}{1}$$

$$(1) \cdot \cos 30 = 0.866 \text{ m}$$

$$0.866 = \frac{2}{\sqrt{3}}$$

$$x = \frac{2}{\sqrt{3}}$$

4

$$\sin(\theta) = \frac{1}{3} \sin(a) = \sin(a) \cdot \csc \theta + 5 \tan(a)$$

$$\sin(a) = \csc(\theta) + 5 \tan(a)$$

$$a = 67.5$$

$$\frac{\sin a}{k} = \frac{1}{\csc \theta} + 5 \frac{\sin a}{\cos a}$$

$$\theta = 22.5$$

$$\frac{\sin a}{\csc \theta} + 5 \frac{\sin a}{\cos a}$$

$$5 \frac{\sin a}{\cos a} = 5 \tan \theta = 5 \cdot 0.41$$

$$= 2.07$$