

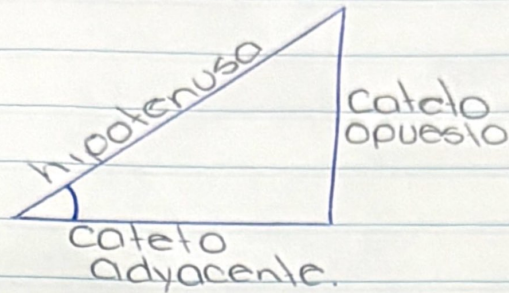


# GEOMETRIA Y TRIGONOMETRIA

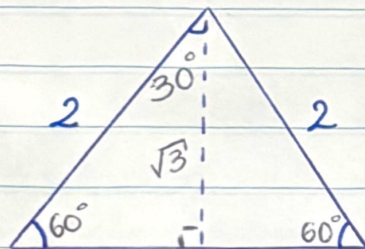
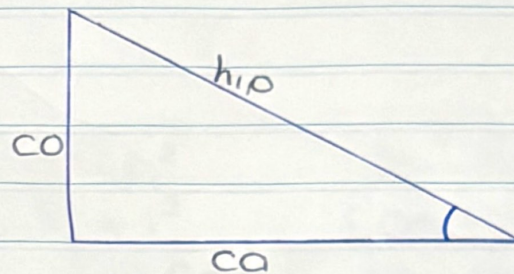
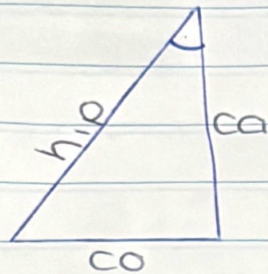
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# Funciones Trigonométricas



$$\begin{aligned} \text{Sen } \theta &= \frac{c}{o} \\ \text{Cos } \theta &= \frac{a}{o} \\ \text{Tan } \theta &= \frac{c}{a} \end{aligned}$$



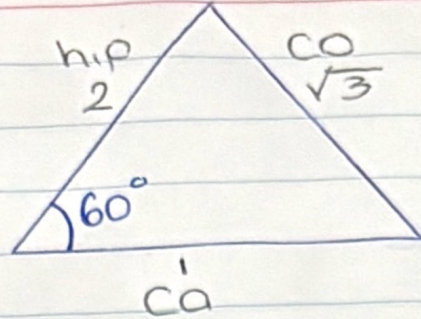
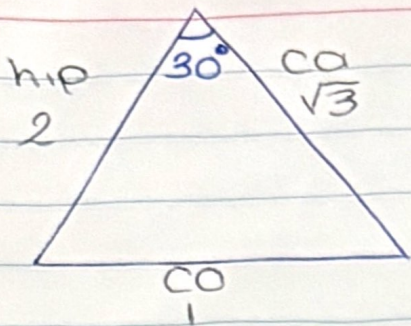
$$c^2 = a^2 + b^2$$

$$b^2 = c^2 - a^2$$

$$b^2 = 2^2 - 1^2 \Rightarrow b^2 = 4 - 1 \Rightarrow b^2 = 3 \Rightarrow b = \sqrt{3}$$

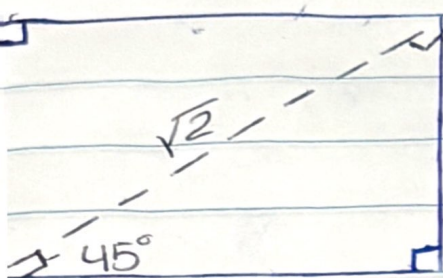
$$\text{Sen } 30^\circ = \frac{1}{2} = 0.5 \quad \text{Cos } 30^\circ = \frac{\sqrt{3}}{2} \Rightarrow \frac{1.17}{2} = 0.86$$

$$\text{Tan } 30^\circ = \frac{1}{\sqrt{3}} \left( \frac{\sqrt{3}}{\sqrt{3}} \right) = \frac{\sqrt{3}}{3} = \frac{1.17}{3} = 0.57$$



$$\begin{aligned} \text{Sen } 60^\circ &= \frac{\text{co}}{\text{ca}} = \frac{\sqrt{3}}{2} \\ \text{Cos } 60^\circ &= \frac{\text{hip}}{\text{ca}} = \frac{2}{2} = 1 \\ \text{Tan } 60^\circ &= \frac{\text{hip}}{\text{co}} = \frac{2}{\sqrt{3}} \end{aligned}$$

$$\begin{aligned} \text{Sen } 30^\circ &= \text{Cos } 60^\circ \\ \text{Sen } 60^\circ &= \text{Cos } 30^\circ \\ \text{Tan } 30^\circ &= \text{Tan}^{-1}(60) \\ \text{Sen } 45^\circ &= \text{Cos } 45^\circ \end{aligned}$$



$$c^2 = a^2 + b^2$$

$$a^2 = 1^2 + 1^2$$

$$a^2 = 2 \Rightarrow c = \sqrt{2}$$

$$\text{Sen } 45^\circ = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\text{Cos } 45^\circ = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\text{Tan } 45^\circ = \frac{1}{1} = 1$$

	30°	60°	45°
Sen	0.5	0.86	0.7
Cos	0.86	0.50	0.7
Tan	0.57	1.17	1