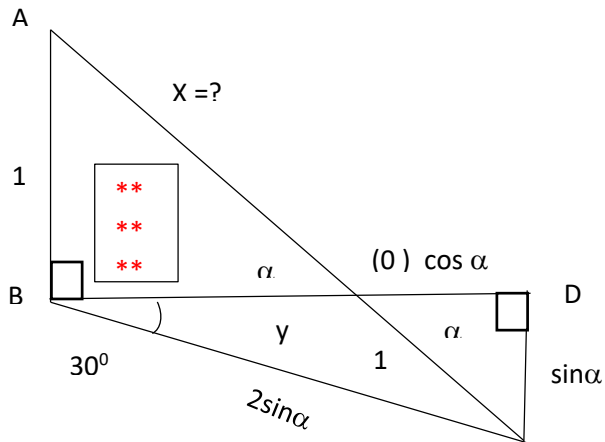


Trigo 5



$$\frac{AB}{y} = \operatorname{tg} \alpha \Rightarrow \operatorname{tg} \alpha = \frac{1}{y} \quad y = BO$$

$$BD = \sqrt{2^2 - 1^2} \cdot \sin \alpha \quad / \quad BD = \sqrt{3} \sin \alpha$$

$$BD = \sqrt{3} \sin \alpha = X \cos \alpha + \cos \alpha \quad / : \cos \alpha$$

$$\sqrt{3} \cdot \operatorname{tg} \alpha = X + 1$$

$$\sqrt{3} \cdot \frac{1}{y} = X + 1 \Rightarrow y = \frac{\sqrt{3}}{X+1}$$

$$y^2 + 1^2 = x^2 \quad , \text{ triangle ABO}$$

$$\left(\frac{\sqrt{3}}{x+1}\right)^2 + 1 = x^2$$

$$x^4 + 2x^3 - 2x - 4 = 0$$

$$x^3(x+2) - 2(x+2) = 0$$

$$(x^3 - 2)(x+2) = 0$$

$$x^3 = 2$$

$$x = \sqrt[3]{2}$$