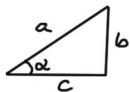


TRIGONOMETRIA

$a = \text{hipotenusa}$
 $b \text{ y } c = \text{catetos}$
 $a^2 = b^2 + c^2$
 $\hat{A} = 90^\circ$
 $\hat{A} + \hat{B} + \hat{C} = 180^\circ$



$$\text{tg } \alpha = \frac{\text{sen } \alpha}{\text{cos } \alpha}$$

$\text{Sen } \alpha = \frac{\text{Cateto opuesto}}{\text{Hipotenusa}} = \frac{b}{a}$
 $\text{Cos } \alpha = \frac{\text{Cateto contiguo}}{\text{Hipotenusa}} = \frac{c}{a}$
 $\text{tg } \alpha = \frac{\text{Cateto opuesto}}{\text{Cateto contiguo}} = \frac{b}{c}$

FORMULAS FUNDAMENTALES

$$\text{Sen}^2 \alpha + \text{Cos}^2 \alpha = 1$$

$$1 + \text{tg}^2 \alpha = \text{Sec}^2 \alpha$$

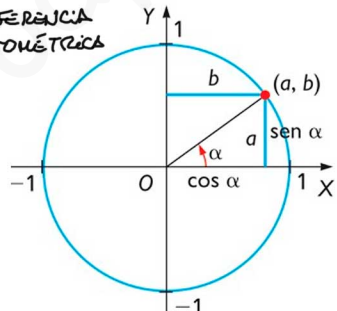
$$1 + \text{Cotg}^2 \alpha = \text{Cosec}^2 \alpha$$

INVERSAS: $\text{Cosec } \alpha = \frac{1}{\text{Sen } \alpha}$ $\text{Sec } \alpha = \frac{1}{\text{Cos } \alpha}$ $\text{Cotg } \alpha = \frac{1}{\text{tg } \alpha}$

Ángulos conocidos

ángulos	30°	45°	60°
razones			
Seno	1/2	√2/2	√3/2
Coseno	√3/2	√2/2	1/2
Tangente	√3/3	1	√3

CIRCUNFERENCIA TRIGONOMETRICA



Cuadrante	Ángulo	sen α	cos α	tg α
I	$0 < \alpha < 90^\circ$	+	+	+
II	$90 < \alpha < 180^\circ$	+	-	-
III	$180 < \alpha < 270^\circ$	-	-	+
IV	$270 < \alpha < 360^\circ$	-	+	-