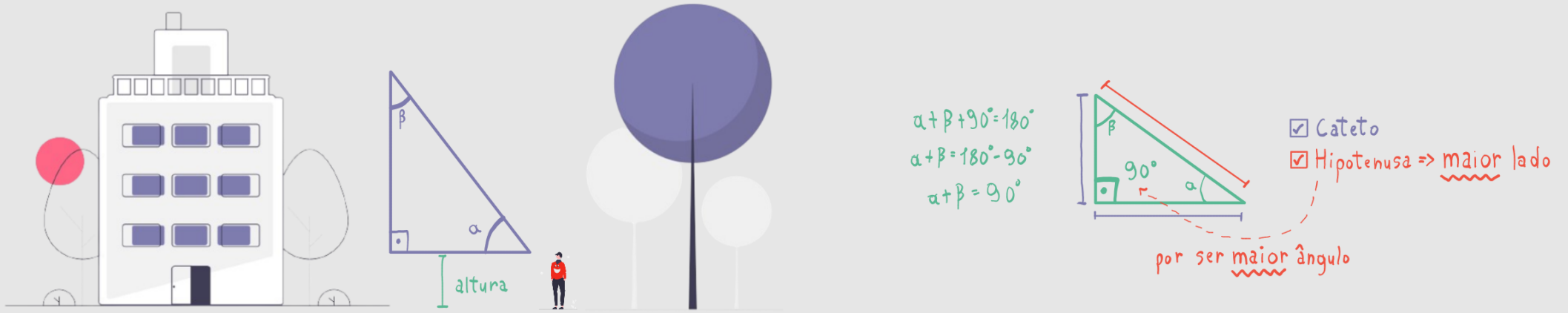


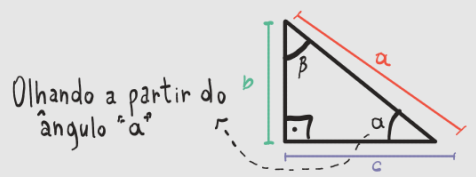
Trigonometria no Triângulo Retângulo



Temos que enxergar Δ s em tudo que é possível!

RAZÕES TRIGONOMÉTRICAS

Sen, cos e tan

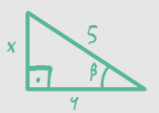


$\text{Sen } \alpha = \frac{b}{a}$ $\text{Cos } \alpha = \frac{c}{a}$ $\text{Tan } \alpha = \frac{b}{c}$

Exemplos:



1) $\text{Sen } \alpha = \frac{\text{Cat. op.}}{\text{Hip.}}$
 $\text{Sen } \alpha = \frac{8}{10}$



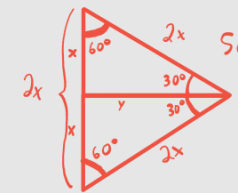
2) $\text{Cos } \beta = \frac{\text{Cat. Adj.}}{\text{Hip.}}$
 $\text{Cos } \beta = \frac{4}{5}$

Dicas

SOH CAH TOA

$\text{Sen} = \frac{\text{cateto oposto}}{\text{hipotenusa}}$
 $\text{Cosseno} = \frac{\text{cateto adjacente}}{\text{hipotenusa}}$
 $\text{Tangente} = \frac{\text{cateto oposto}}{\text{cateto adjacente}}$

... Olhando pela Geometria Plana



$\text{Sen } 60^\circ = \frac{y}{2x} = \frac{x\sqrt{3}}{2x}$
 $\frac{\sqrt{3}}{2}$

$\text{Sen} = \frac{\text{Cat. Op.}}{\text{Hip.}} \rightarrow \text{Sen } 30^\circ = \frac{x}{2x} = \frac{1}{2}$

$(2x)^2 = x^2 + y^2 \rightarrow 4x^2 - x^2 = y^2$
 $3x^2 = y^2$
 $y = x\sqrt{3}$

Pitágoras

$c^2 = a^2 + b^2$
 $5^2 = 4^2 + x^2$
 $25 = 16 + x^2$
 $x^2 = 25 - 16$
 $x^2 = 9$
 $x = 3$

Arcos notáveis

Ângulos / Arcos	30°	45°	60°
Sen	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$
cosseno	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$
Tangente	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$

FacuMatch

ENCONTRE A FACULDADE PERFEITA PARA VOCÊ