Fórmulas para auxilio no desenvolvimento de projetos e especificações de materiais:

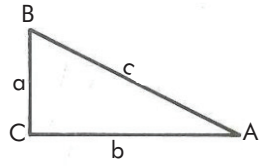
Triângulo Retângulo

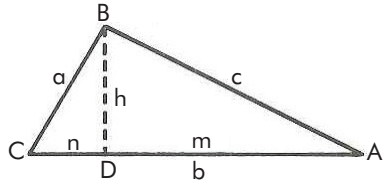
Ângulo A+B = 90º $\tan A = \frac{a}{b}$

$\text{sen } A = \frac{a}{c}$ $a^2 + b^2 = c^2$

$\cos A = \frac{b}{c}$ Área = 1/2 ab

Dado	Pedido	Fórmulas
A, B, a	C, b, c	$C = 180° - A - B$ $b = \frac{a \text{ sen } B}{\text{sen } A}$ $c = \frac{a \text{ sen } C}{\text{sen } A}$
b, c, A	B, C, a	$\cos B = \frac{c^2 + a^2 - b^2}{2ac}$ $\cos C = \frac{a^2 + b^2 - c^2}{2ab}$
		$a^2 = b^2 + c^2 - 2bc \cos A$ $h = c \text{ sen } A$
		$m = c \cos A$ $n = b - m$ $a^2 = h2 + n^2$
a, c, A	B, C, b	$\text{sen } C = \text{sen } A \times \frac{c}{a}$ $B = 180° - A - C$
		$b = a \frac{\text{sen } B}{\text{sen } A}$
a, b, c	A	$\text{sen } \frac{A}{2} = \sqrt{\frac{(s-b)(s-c)}{b \times c}}$ $\cos \frac{A}{2} = \sqrt{\frac{s(s-a)}{b \times c}}$
		$\tan \frac{A}{2} = \sqrt{\frac{(s-b)(s-c)}{s(s-a)}}$ $s = 1/2 (a + b + c)$
a, b, c	m, n	$m = \frac{c^2 + b^2 - a^2}{2b}$ $n = \frac{a^2 + b^2 - c^2}{2b}$





$\overline{AB}$ - c $\overline{BC}$ = a

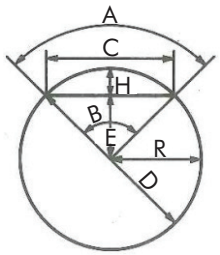
$\overline{AC}$ - b $\overline{BD}$ = h

$\overline{AD}$ = m $\overline{DC}$ = n

A, B e C são ângulos.

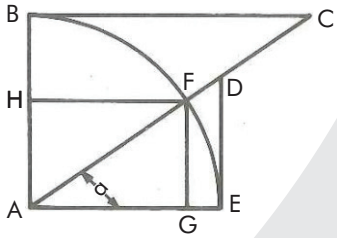
Círculo

B = ângulo em graus.	$C = 2\sqrt{2HR - H^2} = 2R \text{ sen } \frac{B}{2}$
A = comprimento do arco.	$H = R - 1/2\sqrt{4R^2 - C^2} = 2R \text{ sen } \frac{B}{4}$
Circunferência = $\pi D = 2\pi R$	E = R - H
Área = πR^2	Área do Setor = 1/2 RA
Área = $\frac{\pi RB}{180}$	Área do Segmento = 1/2 RA - 1/2 EC



Fórmulas Trigonométricas

$\text{sen}^2 a + \cos^2 a = 1$	$\tan a = \frac{\text{sen } a}{\cos a}$		$\sec^2 a - \tan^2 a = 1$	
sen a	$\sqrt{1 - \cos^2 a}$	$\frac{\tan a}{\sqrt{1 + \tan^2 a}}$	$\frac{1}{\sqrt{1 + \cot^2 a}}$	
cos a	$\sqrt{1 - \text{sen}^2 a}$	$\frac{1}{\sqrt{1 + \tan^2 a}}$	$\frac{\cot a}{\sqrt{1 + \cot^2 a}}$	
tan a	$\frac{\text{sen } a}{\sqrt{1 - \text{sen}^2 a}}$	$\frac{\sqrt{1 - \cos^2 a}}{\cos a}$	$\frac{1}{\cot a}$	
cot a	$\frac{\sqrt{1 - \text{sen}^2 a}}{\text{sen } a}$	$\frac{\cos a}{\sqrt{1 - \cos^2 a}}$	$\frac{1}{\tan a}$	



Raio AE = 1

FG = sen a BC = cot a

AG = cos a AD = sec a

DE = tan a AC = csc a