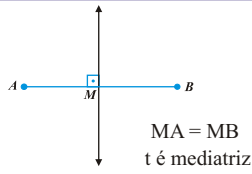
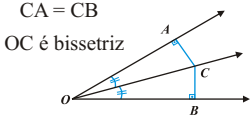


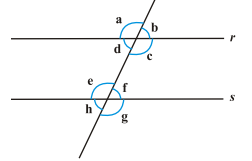
Mediatriz



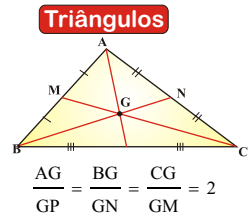
Bissetriz



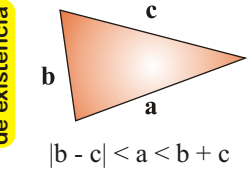
Paralelas e uma secante



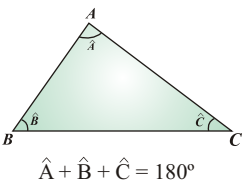
Baricentro



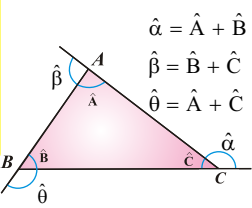
Condição de existência



Ângulo interno



Ângulo externo



Polígonos

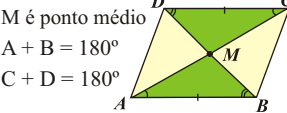
$S_n = (n - 2) \cdot 180^\circ$
 $S_e = 360^\circ$
 $a_i + a_e = 180^\circ$

Polígono Regular

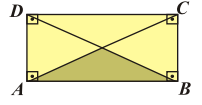
$a_e = \frac{360^\circ}{n}$ $a_i = \frac{(n-2) \cdot 180^\circ}{n}$

Quadriláteros

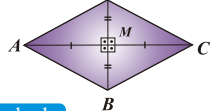
Paralelogramo



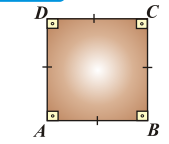
Retângulo



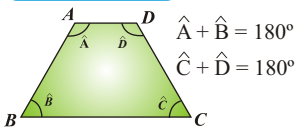
Losango



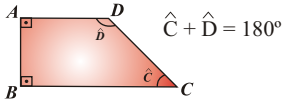
Quadrado



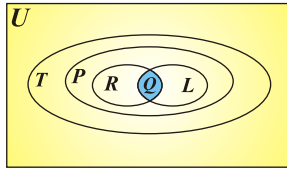
Trapézio Isósceles



Trapézio Retângulo

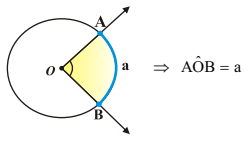


Hierarquia entre os quadriláteros

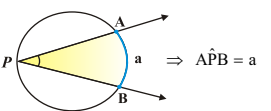


Círculo

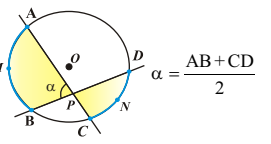
Ângulo central



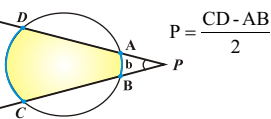
Ângulo Inscrito



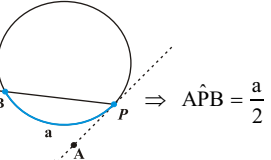
Ângulo Excêntrico Interno



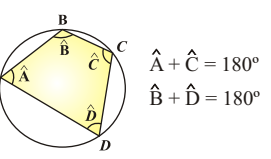
Ângulo Excêntrico Externo



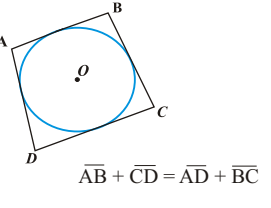
Ângulo de Segmento



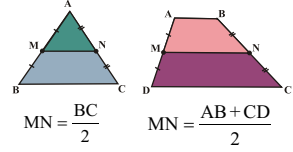
Quadrilátero Inscrito



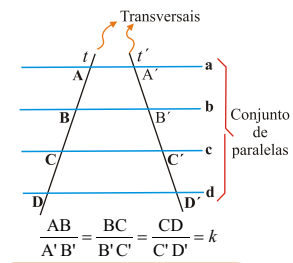
Quadrilátero Circunscrito



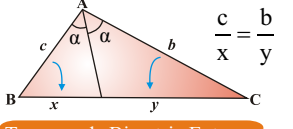
Base Média



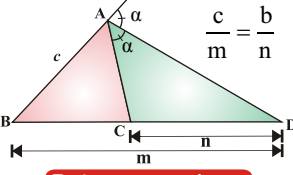
Teorema de Tales



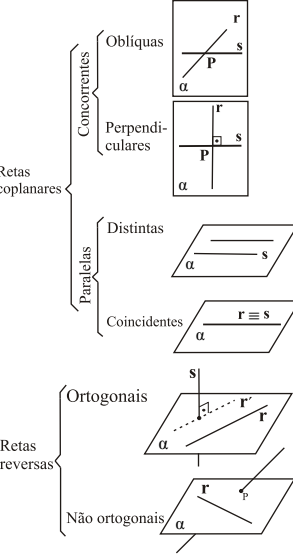
Teorema da Bissetriz Interna



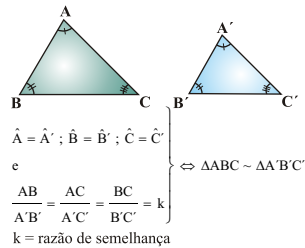
Teorema da Bissetriz Externa



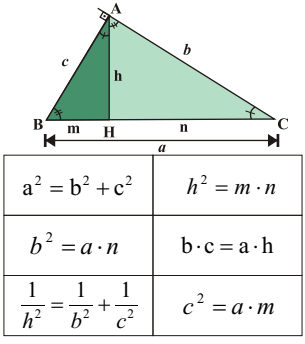
Retas e um plano



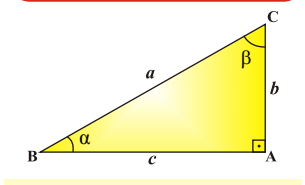
Semelhança de Triângulos



Triângulo Retângulo

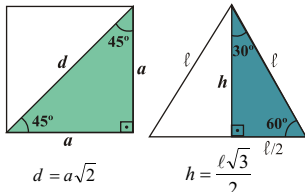


Razões trigonométricas

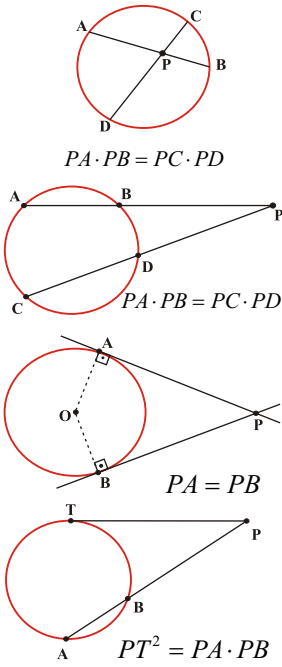


seno do ângulo = $\frac{\text{cateto oposto ao ângulo}}{\text{hipotenusa}}$
co-seno do ângulo = $\frac{\text{cateto adjacente ao ângulo}}{\text{hipotenusa}}$
tan gente do ângulo = $\frac{\text{cateto oposto ao ângulo}}{\text{cateto adjacente ao ângulo}}$

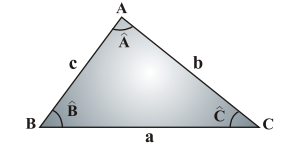
| | 30° | 45° | 60° |
|-----|----------------------|----------------------|----------------------|
| sen | $\frac{1}{2}$ | $\frac{\sqrt{2}}{2}$ | $\frac{\sqrt{3}}{2}$ |
| cos | $\frac{\sqrt{3}}{2}$ | $\frac{\sqrt{2}}{2}$ | $\frac{1}{2}$ |
| tg | $\frac{\sqrt{3}}{3}$ | 1 | $\sqrt{3}$ |



Potência de Ponto



Relações métricas num triângulo qualquer



Lei dos cossenos

$a^2 = b^2 + c^2 - 2bc \cdot \cos \hat{A}$
 $b^2 = a^2 + c^2 - 2ac \cdot \cos \hat{B}$
 $c^2 = a^2 + b^2 - 2ab \cdot \cos \hat{C}$

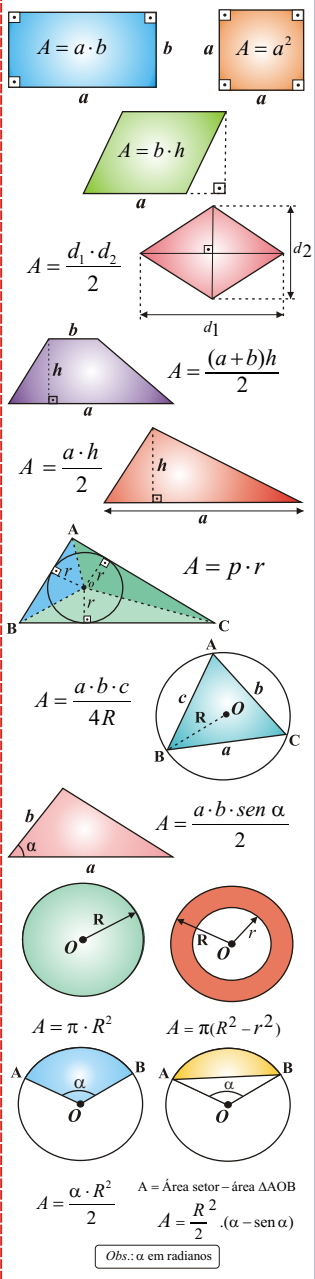
Lei dos senos

$\frac{a}{\sin \hat{A}} = \frac{b}{\sin \hat{B}} = \frac{c}{\sin \hat{C}} = 2R$

Polígonos Regulares

| | 3 | 4 | 5 | 6 |
|---------|---------------|-----------------------|-----------------------|-----------------------|
| Apótema | $\frac{R}{2}$ | $\frac{R\sqrt{2}}{2}$ | $\frac{R\sqrt{3}}{2}$ | $\frac{R\sqrt{3}}{2}$ |
| Lado | $R\sqrt{3}$ | $R\sqrt{2}$ | R | R |

Áreas



Projeto desenvolvido por:
José Anchieta.
Agradecimentos a esse grande mestre !!!