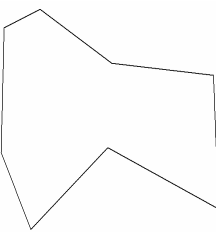
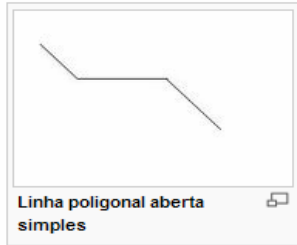
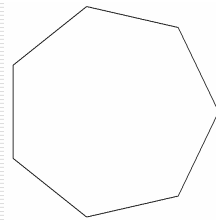


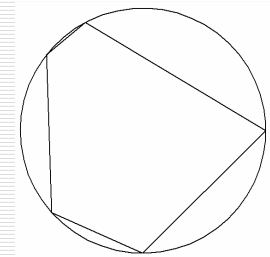
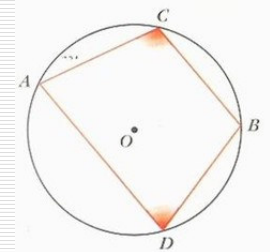
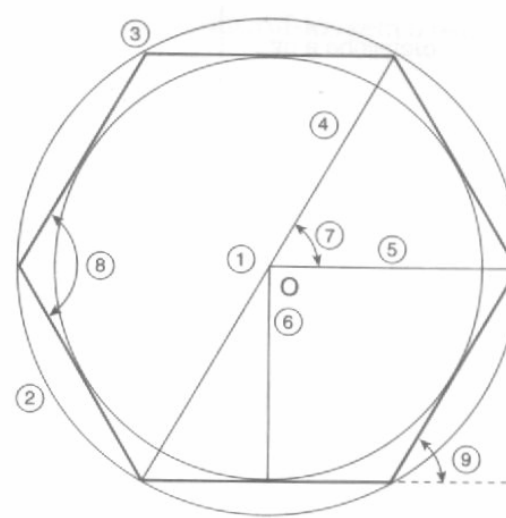
Linha Poligonal (polígono)



Colégio Academia

Matemática – Polígonos

Polígonos – Elementos



Colégio Academia

Matemática – Polígonos

Polígono Regular – NÚMEROS DE LADOS

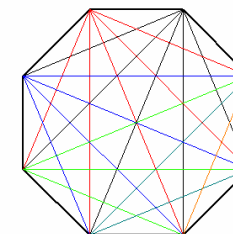
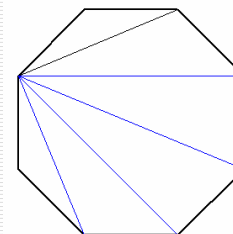
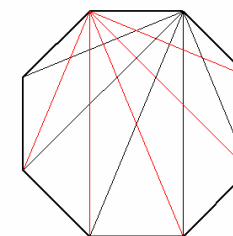
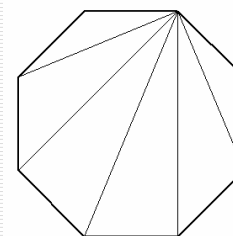
Lados	Polígono
1	Não existe
2	Não existe
3	Triângulo
4	Quadrilátero
5	Pentágono
6	Hexágono
7	Heptágono
8	Octógono
9	Eneágono
10	Decágono
11	Undecágono
12	Dodecágono

Lados	Polígono
20	Icoságono
30	Triacontágono
40	Tetracontágono
50	Pentacontágono
60	Hexacontágono
70	Heptacontágono
80	Octacontágono
90	Eneacontágono
100	Hectágono
1000	Quilógono
1.000.000	Megágono
10^{100}	Googólgono

Colégio Academia

Matemática – Polígonos

Polígonos – Número de Diagonais



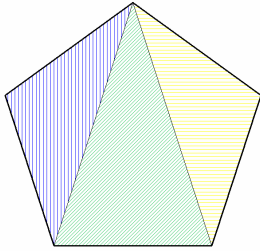
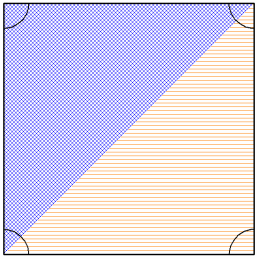
$$\frac{n(n-3)}{2}$$

Expressão
válida para
qualquer tipo
de polígono
CONVEXO

Colégio Academia

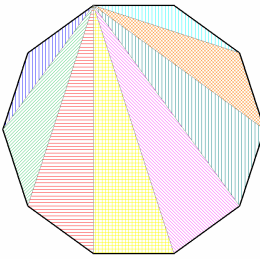
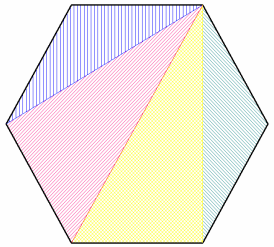
Matemática – Polígonos

Polígonos – Soma dos Ângulos Internos

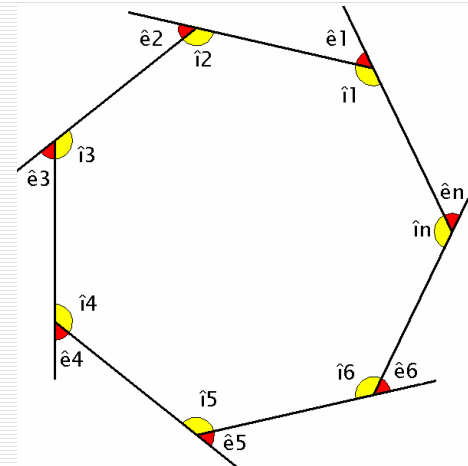


$$S_i = (n - 2) \cdot 180^\circ$$

Expressão
válida para
qualquer
polígono
CONVEXO



Polígono - SOMA DOS ANGULOS EXTERNOS



$$(\hat{e}_1 + \hat{i}_1) + \dots + (\hat{e}_n + \hat{i}_n) = n \cdot 180^\circ$$

$$(\hat{e}_1 + \dots + \hat{e}_n) + (\hat{i}_1 + \dots + \hat{i}_n) = n \cdot 180^\circ$$

$$S_{\hat{e}} + S_{\hat{i}} = n \cdot 180^\circ$$

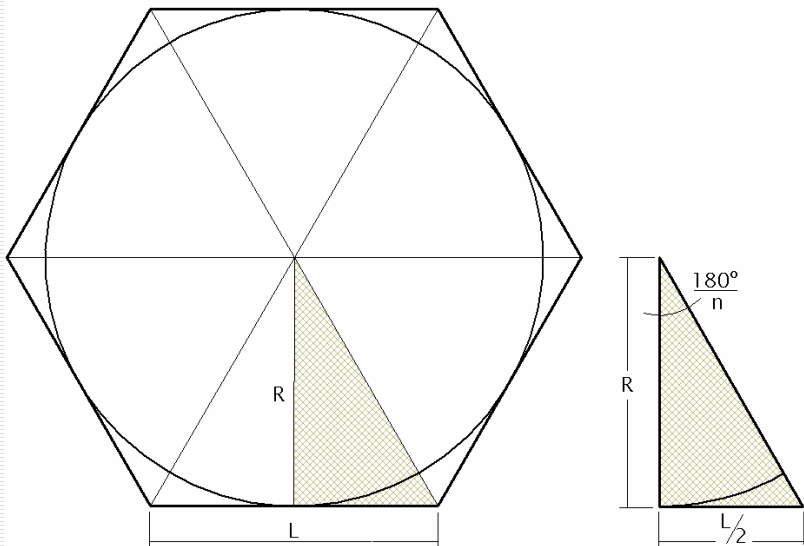
$$S_{\hat{e}} = n \cdot 180^\circ - S_{\hat{i}}$$

$$S_{\hat{e}} = n \cdot 180^\circ - 180^\circ(n - 2)$$

$$S_{\hat{e}} = n \cdot 180^\circ - n \cdot 180^\circ + 360^\circ$$

$$S_{\hat{e}} = 360^\circ$$

Polígono Regular INSCRITO



Polígono Regular CIRCUNSCRITO

