

Tarefa Bônus - Polígonos

01 - dodecágono regular, 12 lados

$Si = (12-2) \cdot 180^\circ$	$Ai = Si : 12$	$AE = 360^\circ : 12 = 30^\circ$
$Si = 10 \cdot 180^\circ$	$Ai = 1800^\circ : 12$	$AE = 30^\circ$
$Si = 1800^\circ$	$Ai = 150^\circ$	

02 - icosaágono, 20 lados

$$Si = (20-2) \cdot 180^\circ$$

$$Si = 18 \cdot 180^\circ$$

$$Si = 3240^\circ$$

03 - n lados, ângulos internos congruentes

$$\hat{A}_i = \frac{(n-2) \cdot 180^\circ}{n}$$

04 - $Si = 5, SE$

$$(n-2) \cdot 180^\circ = 5 \cdot 360^\circ$$

$$(n-2) \cdot 180^\circ = 1.800$$

$$n-2 = \frac{1800}{180}$$

$$n = 10 + 2$$

$$n = 12$$

Polígono com 12 lados

Dodecágono

05 - $N = 2, D$

$$N = 2 \cdot \frac{n(n-3)}{2}$$

$$N = n(n-3)$$

$$N = n^2 - 3n$$

$$N - N^2 + 3N = 0$$

$$4N - N^2 = 0$$

$$N(4-N) = 0$$

$$N = 0$$

$$4 - N = 0$$

$$N = 4$$

$$N_1 = 0$$

$$N_2 = 4$$

$$06 - \hat{A}i = 3, \hat{A}E$$

$$\frac{(N-2) \cdot 180^\circ}{N} = 3 \cdot \frac{360^\circ}{N}$$

$$\frac{180N - 360}{N} = \frac{1080}{N}$$

$$180N - 360 = 1080$$

$$180N = 1080 + 360$$

$$N = \frac{1440}{180}$$

$$N = 8$$

Ⓒ octógono