Nome: Kemily Teixeira Cruz CTII-317

Tarefa Básica - Polígonos

01 $\hat{a}_e = \frac{360}{n}$ $\hat{a}_i = \frac{10.180^\circ}{12}$ dodecagono = 12 lados

$\hat{a}_e = \frac{360}{12}$ $\hat{a}_i = 10.15^\circ$

$\hat{a}_e = 30^\circ$ $\hat{a}_i = 150^\circ$

02. $S_i = (n-2).180^\circ$ icoságono = 20 lados

$S_i = (20-2).180^\circ$

$S_i = 18.180^\circ$

$S_i = 3.240^\circ$

03. $\hat{a}_i = \frac{180^\circ.(n-2)}{n}$

04. $S_i = 5.S_e$ R: dodecagono

$(n-2).180^\circ = 5.360^\circ$

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

$n-2 = 10$

$n = 12$

05. $n = 2 \cdot \left(\frac{n(n-3)}{2}\right)$

$n = \cancel{2} \cdot \frac{n^2 - 3n}{\cancel{2}}$

$n = n^2 - 3n$

$n^2 - 3n - n = 0$

$n^2 - 4n = 0$

$\frac{4}{4} + \frac{0}{4 \cdot 0} = 4$

$n = 4$

06. $\hat{a}_i = 3 \cdot \hat{a}_e$

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

$180^\circ n - 360^\circ = 1080^\circ$

$180^\circ n = 1440^\circ$

$n = \frac{1440^\circ}{180^\circ} = 8 \rightarrow$ octógono Letra C