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1- $n = 12$; $\hat{a}_i = \frac{(12-2)180}{12} = \frac{1800}{12} = 150° = \hat{a}_i$

$\hat{a}_e = 360/12 = 30°$

2- $S_i = (n-2)180 = (20-2)180 = 18 \cdot 180 = 3240°$

3- equiângulo = regular → $(n-2)180 / n$

4- $S_i = 5 S_e$ $\begin{cases} (n-2)180 = 5 \cdot 360 \\ n-2 = 5 \cdot 2 \end{cases}$ → $n = 10+2 = 12$ dodecágono

5- $n = d \cdot 2$ $\{ d = n(n-3)/2$

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

$n + 3n = n^2$ → $n^2 = 4n$ → $n \cdot n = 4 \cdot n$ → $n \cdot \frac{n}{n} = 4$

$4 = n \cdot 1 = n$

6- $\hat{a}_i = 3 \hat{a}_e$ $\left\{ \frac{180(n-2)}{n} = 3 \cdot \frac{360}{n} \right.$

$n(n-2) = n \cdot 3 \cdot 360 / 180 = n \cdot 3 \cdot 2 = 6n$

$n^2 - 2n = 6n$

$n^2 - 8n = 0$

$8 + 0 = 8$

$8 \cdot 0 = 0$ → Não convém.

$n = 8$ (C) [redacted] octógono