

Polymos

②

$$A_i = \frac{(n-2) \cdot 180^\circ}{n} \Rightarrow \frac{(12-2) \cdot 180}{12} = \frac{10 \cdot 180}{12} = \frac{1800}{12} = 150^\circ //$$

$$A_e = \frac{360^\circ}{n} = \frac{360^\circ}{12} = 30^\circ //$$

$$\begin{aligned} A_i &= 150^\circ \\ A_e &= 30^\circ \end{aligned}$$

②

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

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

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

$$Si = 3240^\circ$$

③

$$A_i = \frac{S_i}{n}$$

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

$$A_i = \frac{(n-2) \cdot 180^\circ}{n}$$

④

$$S_i = 5Se$$

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

$$180n - 360 = 1800$$

$$180n = 1800 + 360$$

$$180n = 2160$$

$$n = \frac{2160}{180}$$

$$n = 12$$

12 lados = dodecágono

⑤

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

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

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

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

$$4n - n^2 = 0$$

$$n(4-n) = 0$$

↓

$$0$$

↓

$$4 - n = 0$$

$$n = 4$$

⑥

$$A_i = 3A_e$$

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

$$\frac{180n - 360}{\cancel{n}} = \frac{1080}{\cancel{n}}$$

$$180n - 360 = 1080$$

$$180n = 1080 + 360$$

$$180n = 1440$$

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

$$n = 8$$