

Polígonos:

1.

① $\hat{a}_e = \frac{360^\circ}{12}$ $A_i + a_e = 180^\circ$
 $a_e = 30^\circ$ $A_i = 180^\circ - 30^\circ$
 $A_i = 150^\circ$

R: $a_i = 150^\circ$
 $a_e = 30^\circ$

R: $a_e = 30^\circ \parallel a_i = 150^\circ$

2.

② $S_i = n \cdot 180^\circ - 360^\circ$
 $S_i = 20 \cdot 180^\circ - 360^\circ$
 $S_i = 3600^\circ - 360^\circ$
 $S_i = 3240^\circ$

R: 3240°

R: 3240°

3.

$$\textcircled{3} \alpha_i = \frac{n \cdot 180^\circ - 360^\circ}{n}$$

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

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

$R: 180^\circ (n - 2)$

$$R: \frac{180^\circ (n - 2)}{n}$$

4.

$$\textcircled{4} S_i = 5 \cdot S_e$$

$$S_i = \frac{n \cdot 180^\circ - 360^\circ}{n}$$

$$S_e = 360^\circ$$

$$\frac{n \cdot 180^\circ - 360^\circ}{n} = 5 \cdot 360^\circ$$

$$n \cdot 180^\circ = 1800^\circ + 360^\circ$$

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

$$n = 12$$

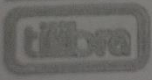
$R: \text{Dodecágono}$

R: dodecágono

5.

$$\textcircled{5} \quad d = \frac{n(n-3)}{2} \quad n = 2 \cdot \frac{n(n-3)}{2} \rightarrow n = n(n-3)$$

$$\frac{n}{n} = n-3 \rightarrow 1 = n-3 \rightarrow -n = -3-1 \rightarrow n = 4$$

 R: 4

R: 4

6.

$$\textcircled{6} \quad a_i = \frac{S_i}{n} \quad \frac{S_i}{n} = 3 \left(\frac{S_e}{n} \right) \rightarrow \frac{180(n-2)}{n} = 3 \cdot \left(\frac{360}{n} \right)$$

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

$$a_i = 3a_e$$

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

$$180n - 360 = 1080$$

$$180n = 1080 + 360$$

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

$$n = 8$$

R: c) Octógono

R: c) octógono