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Tarefa Básica.

1)

$$Ae = \frac{360^\circ}{12} = 30^\circ$$

$$Ae = 30^\circ$$

$$Ai + Ae = 180$$

$$Ai = 180 - 30$$

$$Ai = 150^\circ$$

$$Ai = 150^\circ$$

2)

$$Si = 180(N-2)$$

$$Si = 180(20-2)$$

$$Si = 180 \cdot 18$$

$$Si = 3240^\circ$$

$$\underline{\underline{3240^\circ}}$$

3)

$Ai \rightarrow$ ângulos internos

$Si \rightarrow$ soma dos internos $\rightarrow 180(N-2)$

$N \rightarrow$ número de lados

$$Ai = \frac{180(N-2)}{N}$$

$$\frac{180^\circ(N-2)}{N}$$

N

N

4)

$$Si = 180(N-2)$$

$$Se = 360^\circ$$

$$Si = 5 \cdot Se$$

$$180(N-2) = 5 \cdot 360$$

$$180(N-2) = 1800$$

$$180N - 360 = 1800$$

$$180N = 1800 + 360$$

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

Dodecágono

$$\underline{\underline{N = 12}}$$

5)

$$N = 2d$$

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

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

$$2d = 4d^2 - 6d$$

$$4d^2 - 8d = 0$$

$$\Delta = b^2 - 4ac$$

$$\Delta = (-8)^2 - 4 \cdot 4 \cdot 0$$

$$\Delta = 64$$

$$x' = \frac{8+8}{8} = 2$$

$$x'' = \frac{8-8}{8} = 0$$

$$d = 2$$

$$N = 2d = N' = 2 \cdot 2 = \underline{\underline{4}}$$

(4)

6)

$$A_1 = \frac{180(N-2)}{N}$$

$$A_e = \frac{360}{N}$$

$$A_1 = 3A_e$$

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

$$\frac{180(N-2)}{N} = \frac{1080}{N}$$

$$180N - 360 = 1080$$

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

$$\underline{\underline{N = 8}}$$

(C)