

Nome: Rodrigo Moreira da Silva sala: CTII 317

Tarefa Básica - Polígonos

1.

$$S_i = (n-2) \cdot 180 \quad \Lambda_i = \underline{1800} \quad \Lambda_e = \underline{360}$$

$$S_i = (12-2) \cdot 180 \quad \quad \quad 12 \quad \quad \quad 12$$

$$S_i = 10 \cdot 180 = 1800,, \quad \Lambda_i = 150^\circ,, \quad \Lambda_e = 30^\circ,,$$

2.

$$S = (n-2) \cdot 180$$

$$S = (20-2) \cdot 180$$

$$S = 18 \cdot 180 = 3240^\circ,,$$

4.

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

$$180n - 360 = 1800$$

$$180n = 1800 + 360$$

$$180n = 2160$$

$$n = \frac{2160}{180} = 12,,$$

3.

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

5.

$$\frac{4 \cdot (4 - 3)}{2} = \frac{4}{2} = 2 \text{ diag} \quad 2 \times 2 = 4 //$$

6.

$$a_i + a_e = 180^\circ \rightarrow a_i = |3 \cdot a_e|$$

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

$$a_e + |3a_e| = 180^\circ \quad a_i = 3 \cdot 45^\circ$$

$$135^\circ = 180^\circ \frac{(n-2)}{n}$$

$$4a_e = 180^\circ$$

$$a_i = 135^\circ$$

$$135n = 180n - 360$$

$$135n - 180n = -360$$

$$-45n = -360 \quad (\cdot : -1)$$

$$45n = 360$$

$$n = \frac{360}{45}$$

$$\boxed{n = 8}$$

$$\boxed{a_e = 45^\circ}$$