Tarefa Básica — Poligonos
Pedro Henrique — CTII 348

1) $a_i = \dfrac{(12-2) \cdot 180}{12} = \boxed{150°}$ interno

$a_e = \dfrac{360}{12} = \boxed{30°}$ externo

2)
$S_i = (20-2) \cdot 180 = \boxed{3240°}$

3) $\dfrac{(n-2) \cdot 180°}{n}$

4) $(n-2) 180 = 5n\left(\dfrac{360}{n}\right)$

$180n - 360 = 5 \cdot 360$

$180n - 360 = 1800$

$180n = 1800 + 360$

$n = 12$ \qquad dodecágono

5)

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

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

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

$$4n = n^2 \qquad\qquad 4 \cdot n = n \cdot n$$

$$\boxed{n = 4}$$

6)

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

$$180n - 360 = 1080$$

$$180n = 1440$$

$$n = 8 \qquad\qquad \text{octógono} \enspace \boxed{c}$$