

Lista de exercícios - polígonos

1. $\hat{a}_i = \frac{(n-2) \cdot 180^\circ}{n}$ $\hat{a}_i = \frac{10 \cdot 180^\circ}{12}$ $\hat{a}_n = 360^\circ/n$
 $\hat{a}_i = \frac{(12-2) \cdot 180^\circ}{12}$ $\hat{a}_i = 1500/12$ $\hat{a}_n = 360^\circ/12$
 $\hat{a}_i = 125^\circ$ $\hat{a}_n = 30^\circ$

2. $\hat{a}_i = (n-2) \cdot 180^\circ$
 $\hat{a}_i = (30-2) \cdot 180^\circ$
 $\hat{a}_i = 18 \cdot 180^\circ \rightarrow \hat{a}_i = 3240^\circ$

3. $\frac{(n-2) \cdot 180^\circ}{n}$ 4. $(n-2) \cdot 180^\circ = 5 \cdot 360^\circ$
 $180n - 360 = 1800$
 $180n = 1800 + 360$
 $180n = 2160$
 $n = 2160/180$ $n = 12$
 dodecágono //

5. $n = 2d$
 $n = 2 \cdot \left[\frac{n(n-3)}{2} \right]$
 $n = n(n-3)$ $\rightarrow n(4-n) = 0$
 $n = n^2 - 3n$ $n = 0$ ou $4 - n = 0$
 $-n^2 + 3n + n = 0$ $n = 4$
 $-n^2 + 4n = 0$

6. $\frac{(n-2) \cdot 180^\circ}{n} = \frac{360 \cdot 3}{n}$
 $(n-2) \cdot 180^\circ = 1080$ $\rightarrow n = 1440/180$
 $180n - 360 = 1080$ $n = 6 \rightarrow$ hexágono //
 $180n = 1080 + 360$ alternativa (C) //
 $180n = 1440$

tilibra