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CTII348

Polígonos

①

$$Se = 360^\circ \rightarrow ae = \frac{360^\circ}{12}$$

$$|ae = 30|$$

$$Si = 180(12-2)$$

$$Si = 180 \cdot 10$$

$$Si = 1800 \rightarrow \frac{1800}{12} = 150^\circ$$

② $Si = 180(n-2)$

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

$$Si = 180 \cdot 18$$

$$|Si = 3 \cdot 240^\circ|$$

③ $Si = 180 \cdot (n-2)$

n : lados do polígono

$$\frac{180 \cdot (n-2)}{n}$$

④

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

$$Se = 360, \text{ então}$$

$$Si = 5 \cdot 360$$

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

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

$$180n - 360 = 1800$$

$$180n = 1800 + 360$$

$$180n = 2160$$

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

$$12$$

$$|n = 12 \rightarrow \text{DODECÁGONO}|$$

$$⑤ \quad n = 2d$$

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

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

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

$$n^2 - 3n - n = 0$$

$$n^2 - 4n = 0$$

$$n^2 - 4n = 0$$

$$\Delta = (-4)^2 - 4 \cdot 1 \cdot 0$$

$$\Delta = 16 - 0$$

$$\Delta = 16$$

$$n = \frac{-(-4) \pm \sqrt{16}}{2 \cdot 1} = \frac{4 \pm 4}{2}$$

$$n_1 = 0/2 = 0 \rightarrow \text{n\~ao convem}$$

$$|n_2 = 8/2 = 4|$$

① polígono tem 4 lados

$$⑥ \quad Si = 180^\circ(n-2)$$

$$Se = 360^\circ$$

$$Si = 3 \cdot 360^\circ$$

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

$$180^\circ(n-2) = 1080^\circ$$

$$180n - 360 = 1080^\circ$$

$$180n = 1080 + 360$$

$$180n = 1440$$

$$n = \frac{1440}{180} = 8 \rightarrow \text{octogono}$$

⑦