

① 16-kotnik:

$$\text{št. diagonal} \frac{n \cdot (n-3)}{2} = \frac{16 \cdot 13}{2} = 104 \text{ diagonal}$$

$$\text{vsota notr. kotov} (n-2) \cdot 180^\circ = 14 \cdot 180^\circ = \underline{\underline{2520^\circ}}$$

$$\text{vsota zun. kotov} 360^\circ$$

② 5-kotnik

$$\begin{array}{r} 120^\circ \\ + 154^\circ \\ + 35^\circ \\ + 78^\circ \\ \hline 387^\circ \end{array}$$

$$\begin{array}{r} 540^\circ \\ - 387^\circ \\ \hline 153^\circ \end{array}$$

kot men' 153°

③ $\frac{n \cdot (n-3)}{2} = 324$

$$n=30? \quad \frac{30 \cdot 27 \cdot 15}{2} \neq 324$$

Tb je 27-kotnik

$$\frac{27 \cdot 24 \cdot 12}{2} = \underline{\underline{324 \text{ diagonal}}}$$

④ $(n-2) \cdot 180^\circ = 5040^\circ$

$$5040^\circ : 180^\circ = 28 + 2 = \underline{\underline{30\text{-kotnik}}}$$

⑤ Pravičen 78-kotnik

$$\frac{(n+2) \cdot 180^\circ}{n} = \frac{16 \cdot 180^\circ}{18} = 160^\circ \text{ notravnji kot}$$

$$\frac{360^\circ}{n} = \frac{360^\circ}{18} = 20^\circ \text{ zunavnji kot}$$

⑥ $\sigma = 3 + 4 + 4 + 4 + 4 + 5 + 4$

$$\sigma = \underline{\underline{28 \text{ cm}}}$$

$$\begin{aligned} p &= a \cdot b + a \cdot a + \frac{a \cdot b}{2} \\ p &= 3 \cdot 4 + 4 \cdot 4 + \frac{4 \cdot 3 \cdot 2}{2} \\ p &= 12 + 16 + 6 \\ p &= \underline{\underline{34 \text{ cm}^2}} \end{aligned}$$