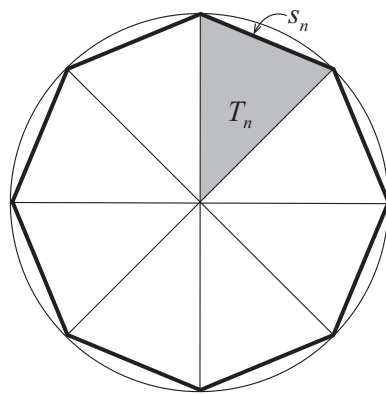


POUČAK 4

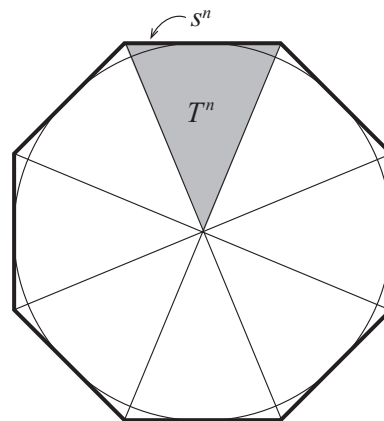
Pravilni poligoni, krug i kružnica bez riječi

ZVONIMIR ŠIKIĆ, Zagreb



$$O_n = n \cdot s_n \rightarrow O$$

$$P_n = n \cdot T_n \rightarrow P$$

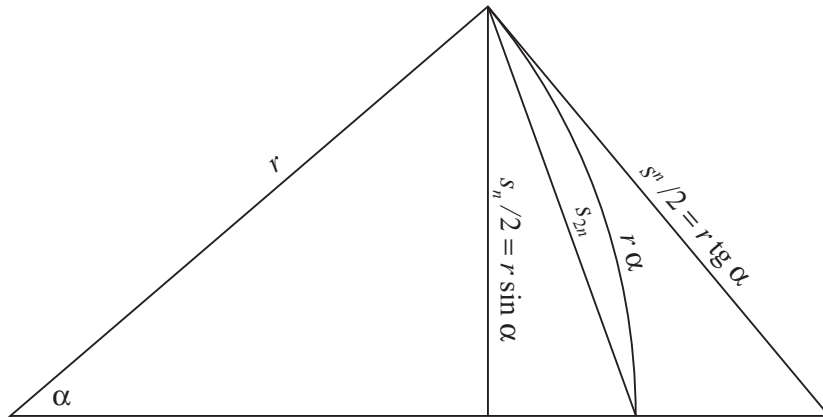


$$O^n = n \cdot s^n \rightarrow O$$

$$P^n = n \cdot T^n \rightarrow P$$



 PRAVLINI POLIGONI, KRUG I KRUŽNICA BEZ RIJEČI



$$\frac{r \sin \alpha}{r \alpha} = \frac{O_n}{O} \rightarrow 1$$

$$\frac{r \operatorname{tg} \alpha}{r \alpha} = \frac{O^n}{O} \rightarrow 1$$

$$O^n - O_n = O \frac{\operatorname{tg} \alpha - \sin \alpha}{\alpha}$$

$$P_{2n} = 2n \cdot T_{2n} = \frac{O}{r \alpha} \cdot \frac{1}{2} r^2 \sin \alpha = \frac{1}{2} r O \cdot \frac{\sin \alpha}{\alpha} =$$

$$= \frac{1}{2} r O \cdot \frac{O_n}{O} = \frac{1}{2} r O_n$$

$$P_{2n} = \frac{1}{2} r O_n$$

 \Rightarrow

$$P = \frac{1}{2} r O$$

$$P^n - P_{2n} = n \cdot T^n - 2n \cdot T_{2n} = \frac{O}{2r \alpha} \cdot r^2 \operatorname{tg} \alpha - \frac{O}{r \alpha} \cdot \frac{1}{2} r^2 \sin \alpha =$$

$$= \frac{1}{2} r O \frac{\operatorname{tg} \alpha - \sin \alpha}{\alpha}$$

$$P^n - P_{2n} = P \frac{\operatorname{tg} \alpha - \sin \alpha}{\alpha}$$

