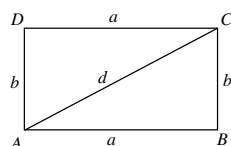# GEOMETRIJSKI LIKOVI

### Pravokutnik:
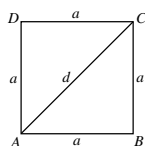


$P = a \cdot b$
$O = 2a + 2b$
$d = \sqrt{a^2 + b^2}$

### Kvadrat:
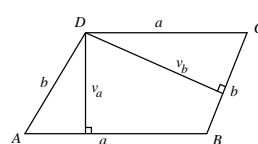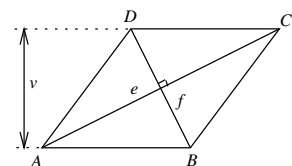


$P = a^2$
$O = 4 \cdot a$
$d = a \cdot \sqrt{2}$

### Paralelogram:
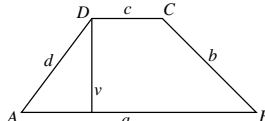


$P = a \cdot v_a = b \cdot v_b$
$O = 2a + 2b$

### Romb:



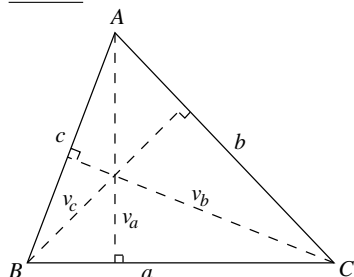$P = a \cdot v$
$P = \dfrac{e \cdot f}{2}$
$O = 4 \cdot a$

### Trapez:



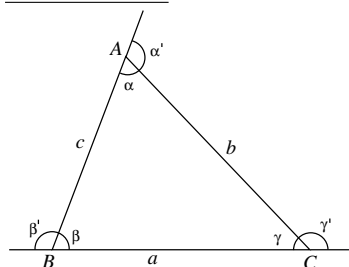$P = \dfrac{a + c}{2} \cdot v$
$O = a + b + c + d$

### Trokut



$O = a + b + c$
$P = \dfrac{a \cdot v_a}{2} = \dfrac{b \cdot v_b}{2} = \dfrac{c \cdot v_c}{2}$
$s = \dfrac{a + b + c}{2}$
$P = \sqrt{s \cdot (s - a) \cdot (s - b) \cdot (s - c)}$

### Kutovi trokuta



$\alpha + \beta + \gamma = 180°$
$\alpha' + \beta' + \gamma' = 360°$
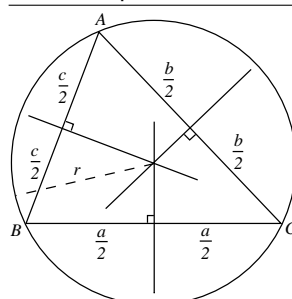
$\alpha + \alpha' = 180°$
$\beta + \beta' = 180°$
$\gamma + \gamma' = 180°$

$\alpha' = \beta + \gamma$
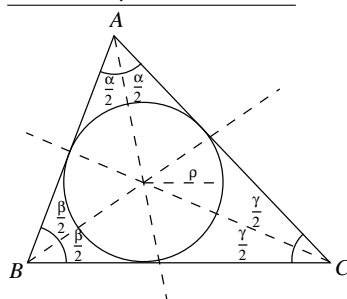$\beta' = \alpha + \gamma$
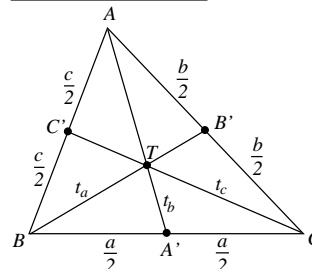$\gamma' = \alpha + \beta$

### Trokutu opisana kružnica:



$P = \dfrac{a \cdot b \cdot c}{4 \cdot r}$

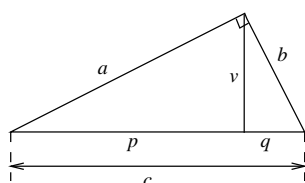### Trokutu upisana kružnica:



$P = \rho \cdot s$

### Težišnice trokuta:



$|AT| : |TA'| = 2 : 1$
$|BT| : |TB'| = 2 : 1$
$|CT| : |TC'| = 2 : 1$

### Pravokutni trokut:



$a^2 = p \cdot c$
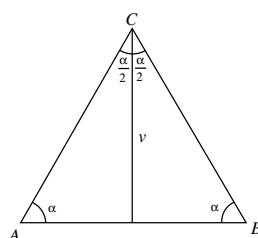$b^2 = q \cdot c$
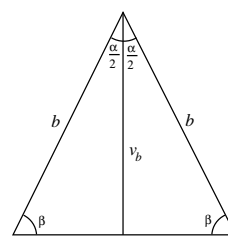$v^2 = p \cdot q$
$a^2 + b^2 = c^2$
$c \cdot v = a \cdot b$

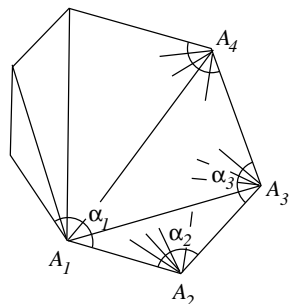### Jednakostraničan trokut:



$v = \dfrac{a \cdot \sqrt{3}}{2}$
$P = \dfrac{a^2 \cdot \sqrt{3}}{4}$

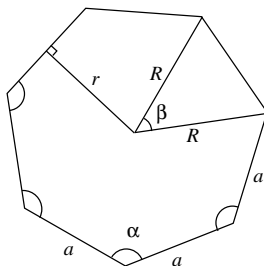### Jednakokračan trokut:



$v_a = \sqrt{b^2 - \dfrac{a^2}{4}}$

Mnogokut:



$$K(n) = (n-2) \cdot 180°$$
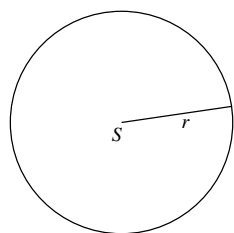$$D(n) = \frac{n \cdot (n-2)}{2}$$

Pravilni mnogokut:



$$O = n \cdot a$$
$$\alpha = \frac{(n-2) \cdot 180°}{n}$$
$$\beta = \frac{180°}{n}$$
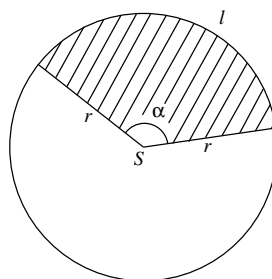$$P = \frac{a \cdot r \cdot n}{2}$$
$$R^2 = r^2 + \frac{a^2}{4}$$

Krug i kružnica:
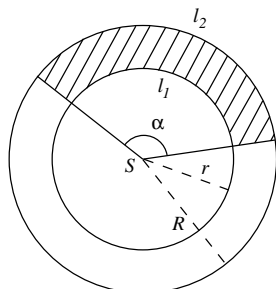


$$O = 2 \cdot r \cdot \pi$$
$$P = r^2 \cdot \pi$$

Kružni luk kružni isječak:



$$I = \frac{\alpha \cdot r^2 \cdot \pi}{360°}$$
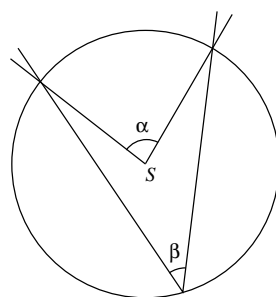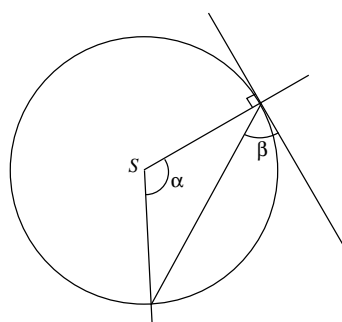$$l = \frac{r \cdot \pi \cdot \alpha}{180°}$$

Kružni vijenac i isječak:



$$P = (R^2 - r^2) \cdot \pi$$
$$I = \frac{\pi \cdot \alpha}{360°} \cdot (R^2 - r^2) = \frac{l_1 + l_2}{2} \cdot (R - r)$$

Obodni i središnji kut:
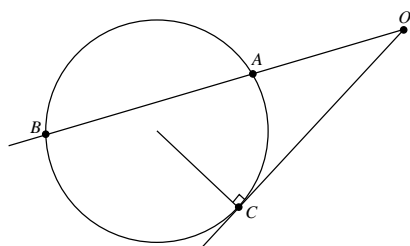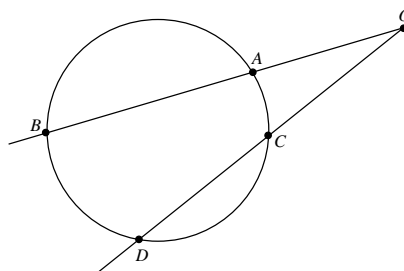


$$\beta = \frac{\alpha}{2}$$



$$\beta = \frac{\alpha}{2}$$

Potencija točke s obzirom na kružnicu:



$$|OA| \cdot |OB| = |OC|^2$$



$$|OA| \cdot |OB| = |OC| \cdot |OD|$$

v0.98 by tkr