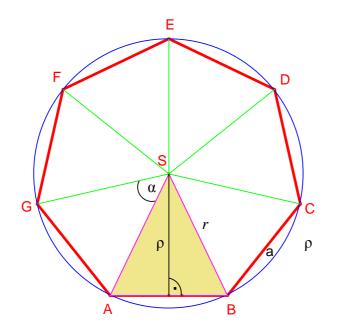
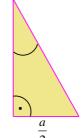
obvody a obsahy pravidelný n-uholník



$$o = n \cdot a$$

$$\alpha = \frac{360^{\circ}}{n}$$

$$\rho = \frac{a}{2 \cdot tg \frac{\alpha}{2}}$$



$$r = \frac{a}{2 \cdot \sin \frac{\alpha}{2}}$$

$$S_{\Delta} = \frac{a \cdot \rho}{2}$$

$$S_n = n \cdot S_{\wedge}$$

Vzorový príklad (1):

Vypočítajte obvod a obsah pravidelného 17-uholníka so stranou a = 9 cm.

Riešenie:

$$o = n \cdot a$$

$$o = 17 \cdot 9$$

$$o = 153 cm$$

$$\rho = \frac{a}{2 \cdot tg \frac{\alpha}{2}}$$

$$S_{\Delta} = \frac{7}{2}$$

$$S_{\Delta} = \frac{9 \cdot 24,07287378}{2}$$

$$\rho = \frac{9}{2 \cdot tg \frac{21^{\circ}10'35,29''}{2}}$$

$$S_{\Delta} = \frac{9 \cdot 24,07287378}{2}$$

$$S_{\Delta} = \frac{108,327932 \text{ cm}^2}{2}$$

$$S_{\Delta} = \frac{a \cdot \rho}{2}$$

$$S_{\Delta} = \frac{9 \cdot 24,07287378}{2}$$

$$\alpha = \frac{360^{\circ}}{n}$$

$$\alpha = \frac{360^{\circ}}{17}$$

$$\alpha = 21^{\circ} 10^{\circ} 35, 29^{\circ}$$

$$\rho = 24,07287378 \ cm$$

$$S_n = n \ . \ S_\Delta$$

$$S_{17} = 17 \ . \ 108,327932$$

$$S_{17} = 1841,574844 \ cm^2$$