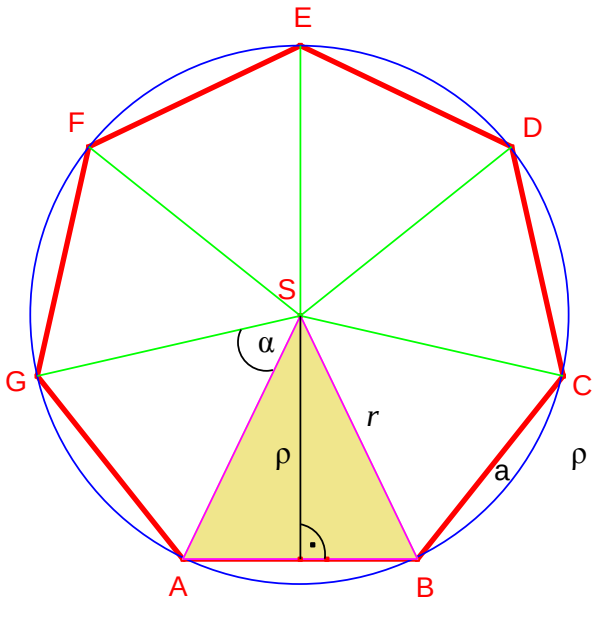

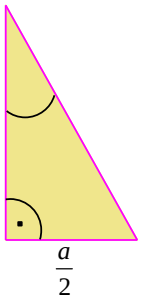

$$o = n \,.\, a$$

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

$$\rho = \frac{a}{2 \,.\, tg\frac{\alpha}{2}}$$

$$r = \frac{a}{2 \,.\, \sin\frac{\alpha}{2}}$$

$$S_\Delta = \frac{a \,.\, \rho}{2}$$

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

Vzorový príklad (1):

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

Riešenie:

$o = n \,.\, a$

$o = 17 \,.\, 9$

$$\boxed{o = 153\ cm}$$

$$\rho = \frac{a}{2 \,.\, tg\frac{\alpha}{2}}$$

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

$$\boxed{\rho = 24,07287378\ cm}$$

$$S_\Delta = \frac{a \,.\, \rho}{2}$$

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

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

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

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

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

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

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

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