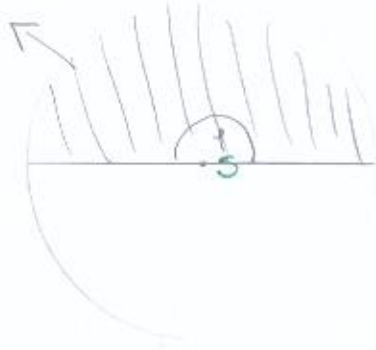


PLOŠČINA KROŽNEGA IZSEKA

ploščina krožnega izseka
 p_{iz}



r ... polmer

L ... središčni kot (L ...)

p_{iz} ... ploščina krožnega izseka

$$p_{iz} = \frac{L}{360^\circ} \cdot p_{KROGA}$$

$$p_{iz} = \frac{L \cdot \pi r^2}{360^\circ}$$

če je $L = 180^\circ$ (glej za pol kroga) $r = 2\text{cm}$

$$p_{iz} = \frac{L \cdot \pi r^2}{360^\circ} = \frac{180^\circ \cdot 1 \cdot \pi r^2}{360^\circ \cdot 2} = \frac{1 \cdot 3,14 \cdot 4 \cdot 2}{2} = \underline{\underline{6,28\text{cm}^2}}$$

1.) b.) $L = 180^\circ$
 $d = 4\text{cm}$
 $r = 2\text{cm}$
 $p_{iz} =$

$$p_{iz} = \frac{L}{360^\circ} \cdot p_K$$

$$p = \frac{1 \cdot \pi r^2}{2} = \frac{1 \cdot 3,14 \cdot 4 \cdot 2}{2} = \underline{\underline{6,28\text{cm}^2}}$$

c.) $L = 225^\circ$
 $r = 3\text{cm}$
 $p_{iz} =$

$$p_{iz} = \frac{L \cdot \pi r^2}{360^\circ}$$

$$p_{iz} = \frac{225^\circ \cdot 3,14 \cdot 9}{360^\circ \cdot 40} \leftarrow \text{lahko izračunaš na kalkulator in zaokrožiš na eno decimalo}$$

$$p_{iz} = 17,7\text{cm}^2$$

2.) a.) $p = 30\text{cm}^2$
 $L = 120^\circ$
 $p_{iz} = 10\text{cm}^2$

$$p_{iz} = \frac{L}{360^\circ} \cdot p$$

$$p_{iz} = \frac{120^\circ \cdot 1 \cdot 30 \cdot 10}{360^\circ \cdot 3}$$

$$p_{iz} = 10\text{cm}^2$$

b.) $p = 2,4\text{dm}^2 = 240\text{cm}^2$
 $L = 30^\circ$
 $p_{iz} =$

$$p_{iz} = \frac{L \cdot p}{360^\circ}$$

$$p_{iz} = \frac{30 \cdot 1 \cdot 240 \cdot 20}{360^\circ \cdot 2}$$

$$p_{iz} = 20\text{cm}^2 = 0,2\text{dm}^2$$

c.) $p = 81\text{cm}^2$
 $L = 45^\circ$
 $p_{iz} =$

$$p_{iz} = \frac{L}{360^\circ} \cdot p$$

$$p_{iz} = \frac{45^\circ \cdot 81}{360^\circ \cdot 8} = 10,125\text{cm}^2$$

3.)

a.) $r = 4 \text{ cm}$
 $L = 20^\circ$
 $p_{12} =$

$$p_{12} = \frac{L \cdot \pi r^2}{360^\circ}$$

$$p_{12} = \frac{20 \cdot 3,14 \cdot 16}{360 \cdot 18}$$

$$p_{12} = \underline{\underline{2,8 \text{ cm}^2}}$$

b.) $r = 12 \text{ cm}$
 $L = 180^\circ$
 $p_{12} =$

$$p_{12} = \frac{L \cdot \pi r^2}{360^\circ}$$

$$p_{12} = \frac{180 \cdot 3,14 \cdot 144}{360}$$

$$p_{12} = \underline{\underline{226,1 \text{ cm}^2}}$$

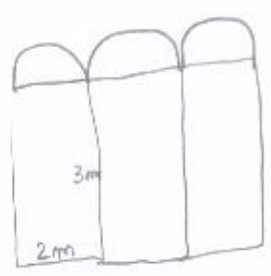
c.) $d = 18 \text{ cm}$
 $L = 270^\circ$
 $p_{12} =$
 $r = 9 \text{ cm}!!$

$$p_{12} = \frac{L \cdot \pi r^2}{360^\circ}$$

$$p_{12} = \frac{270 \cdot 3 \cdot 3,14 \cdot 81}{360 \cdot 4}$$

$$p_{12} = 190,8 \text{ cm}^2$$

4.)



$$p = 3 \cdot p_{\square} + 1,5 \cdot p_0$$

$$p = 3 \cdot 6 + 1,5 \cdot 3,14$$

$$p = 18 + 4,71$$

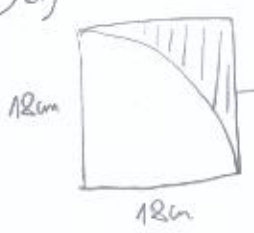
$$p = \underline{\underline{22,71 \text{ m}^2}}$$

$r_0 = 1 \text{ m}$
 $p_0 = \pi r^2 = 3,14 \cdot 1 = 3,14 \text{ m}^2$

$$p_{\square} = 3 \cdot 2 = 6 \text{ m}^2$$

$$\begin{array}{r} 3,14 \cdot 1,5 \\ 3,14 \\ \hline 4,71 \end{array}$$

5*) b.)



$$p = p_{\square} - \frac{1}{4} \cdot p_0$$

$$= 324 - \frac{1}{4} \cdot 1017,36$$

$$= 324 - 254,34$$

$$= \underline{\underline{69,66 \text{ cm}^2}}$$

$$p_{\square} = 12 \cdot 12 = \underline{\underline{324 \text{ cm}^2}}$$

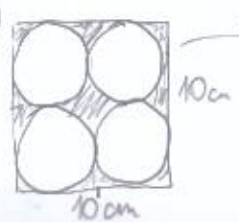
$$p_0 = \pi r^2 = 3,14 \cdot 12^2 = 3,14 \cdot 144 = 451,36$$

$$1017,36 : 4 = 254,34$$

$$\begin{array}{r} 21 \\ 17 \\ 13 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 324,00 \\ - 254,34 \\ \hline 69,66 \end{array}$$

6a.) *



$$p = p_{\square} - 4 \cdot p_0$$

$$p = 100 - 4 \cdot 19,625$$

$$= 100 - 78,5 = \underline{\underline{21,5 \text{ cm}^2}}$$

$$r = 2,5 \text{ cm}$$

$$p_0 = \pi r^2 = 3,14 \cdot 6,25 = 19,625$$