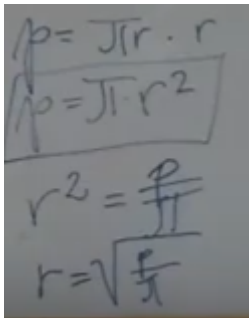


**Ploščina kroga**

Razlaga za izpeljavo obrazca za ploščino kroga in primer računanja.

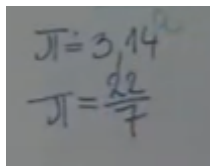
<https://www.youtube.com/watch?v=q2tDfYnMkkY>

Prepiši v zvezek obrazec za ploščino in izpeljan obrazec za polmer.



Handwritten derivation of the area of a circle formula:

$$p = \pi r \cdot r$$
$$p = \pi \cdot r^2$$
$$r^2 = \frac{p}{\pi}$$
$$r = \sqrt{\frac{p}{\pi}}$$



Handwritten values for pi:

$$\pi = 3,14$$
$$\pi = \frac{22}{7}$$

Po zgledu iz posnetka reši vaje

1. Učbenik stran 170/ nal 1,2 ,3
2. Znam za več...  
učbenik stran 171 / nal 13

Rešitve 1,2,3 na dolgo so spodaj. Namesto d je 2r.

STRAN 170 - 8. RAZRED

①  $r = 45 \text{ mm}$   
a)  $p = ?$

$$p = \pi r^2$$

$$p = \pi \cdot 45^2$$

$$p = 2025\pi \text{ mm}^2$$

$$p = \underline{6358,5 \text{ mm}^2}$$

b)  $r = 7,4 \text{ dm}$   
 $p = ?$

$$p = \pi r^2$$

$$p = \pi \cdot 7,4^2$$

$$p = 54,76\pi \text{ dm}^2$$

$$p = \underline{171,9464 \text{ dm}^2}$$

c)  $r = 1\frac{2}{5} \text{ cm}$   
 $p = ?$

$$p = \pi r^2$$

$$p = \pi \cdot \left(\frac{7}{5}\right)^2$$

$$p = \frac{49}{25}\pi \text{ cm}^2$$

$$p = \frac{49}{25} \cdot \frac{22}{7} = \frac{154}{25} \text{ cm}^2$$

$$p = \underline{6\frac{4}{25} \text{ cm}^2}$$

$$\textcircled{2} \text{ a) } \begin{array}{l} 2r = 125 \text{ cm} \\ r = 62,5 \text{ cm} \\ \hline p = ? \end{array}$$

$$\begin{aligned} p &= \pi r^2 \\ p &= \pi \cdot 62,5^2 \\ p &= 3906,25 \pi \text{ cm}^2 \\ p &= \underline{12265,625 \text{ cm}^2} \end{aligned}$$

$$\text{b) } \begin{array}{l} 2r = 2,7 \text{ m} \\ r = 1,35 \text{ m} \\ \hline p = \end{array}$$

$$\begin{aligned} p &= \pi r^2 \\ p &= \pi \cdot 1,35^2 \\ p &= 1,8225 \pi \text{ m}^2 \\ p &= \underline{5,72265 \text{ m}^2} \end{aligned}$$

$$\textcircled{2} \text{ c) } \begin{array}{l} 2r = 3 \frac{2}{11} \text{ m} \\ r = 1 \frac{13}{22} \text{ m} \\ \hline p = \end{array}$$

$$\begin{aligned} p &= \pi r^2 \\ p &= \pi \left( \frac{35}{22} \right)^2 \\ p &= \frac{1225}{484} \pi \text{ m}^2 \\ p &= \underline{\frac{175}{22} \text{ m}^2 = 7 \frac{21}{22} \text{ m}^2} \end{aligned}$$

$$\textcircled{3} \text{ a) } \frac{r=40 \text{ cm}}{p=}$$

$$p = \pi r^2$$
$$p = \pi \cdot 40^2$$
$$p = \underline{1600\pi \text{ cm}^2}$$

$$\text{b) } \frac{2r=1,5 \text{ dm}}{r=0,75 \text{ dm}}$$
$$p=$$

$$p = \pi r^2$$
$$p = \pi \cdot 0,75^2$$
$$p = \pi \cdot \left(\frac{3}{4}\right)^2$$
$$p = \underline{\frac{9}{16} \pi \text{ dm}^2}$$

$$\textcircled{13} \quad 15,07 \text{ cm}$$