

1477. 2)  $(ab) = \frac{4}{5}m$ ,  $(cd) = 1\frac{5}{8}m$ ,  $(ad) = 0,6m$ ,  $P(abcd) = ?$

$$(ab) = \frac{4}{5}m, (cd) = 1\frac{5}{8}m = \frac{13}{8}m, (ad) = 0,6m = \frac{3}{5}m.$$

$$P = \frac{(ab) + (cd)}{2} \cdot (ad) = \frac{\frac{4}{5} + \frac{13}{8}}{2} \cdot \frac{3}{5} m^2 = \frac{291}{400} m^2 = 0,7275 m^2$$

или  $(ab) = \frac{4}{5}m = 0,8m$ ;  $(cd) = \frac{13}{8}m = 1,625m$ ;  $(ad) = 0,6m$

$$P = \frac{(ab) + (cd)}{2} = \frac{0,8 + 1,625}{2} \cdot 0,6 = 2,425 \cdot 0,3 = 0,7275 m^2$$

1479. 1)  $(aa') = 3,5cm$ ,  $(mm) = 2,4cm$

$$P(aa'b'b) = [(aa') \cdot (mm)] k_i = (3,5 \cdot 2,4) cm^2 = 8,4 cm^2$$

2)  $(a'b') = 10,4cm$ ,  $(ef) = 5,2cm$

$$P(aa'b'b) = [(a'b') \cdot (ef)] k_i = (10,4 \cdot 5,2) cm^2 = 54,08 cm^2$$

1484.  $n=5$ ,  $\alpha = 36^\circ$ ,  $a = 2r \sin \alpha$ ,  $h = r \cot \alpha$

$$P_5 = na \cdot \frac{h}{2} = \frac{5}{2} ah$$

$$a = 2r \sin 36^\circ = 2r \cdot 0,588 = 1,176r, \quad h = r \cot 36^\circ = r \cdot 0,809 = 0,809r, \quad a = 1,176r, \quad h = 0,809r$$

$$P_5 = \frac{5}{2} 1,176r \cdot 0,809r \approx 2,38 r^2$$

$n=8$ ,  $\alpha = 22^\circ 30'$ ,  $a = 2r \sin 22^\circ 30' = 2r \cdot 0,382 = 0,764r$   
 $h = r \cot 22^\circ 30' = r \cdot 0,923 = 0,923r$

$$P_8 = 8a \cdot \frac{h}{2} = 4ah = 4 \cdot 0,764r \cdot 0,923r \approx 2,83 r^2$$

$n=12$ ,  $\alpha = 15^\circ$ ,  $a = 2r \sin 15^\circ = 2r \cdot 0,259 = 0,518r$ ;  
 $h = r \cot 15^\circ = r \cdot 0,966 = 0,966r$ .

$$P = 12a \cdot \frac{h}{2} = 6ah = 6 \cdot 0,518r \cdot 0,966r \approx 3 r^2$$

1485.  $n=5$ ,  $\alpha = 36^\circ$ ,  $a = 2r \tan \alpha$ ,  $h = r$

$$a = 2r \tan 36^\circ = 2r \cdot 0,726 = 1,452r, \quad h = r$$

$$P_5 = 5a \cdot \frac{h}{2} = \frac{5}{2} ah = \frac{5}{2} 1,452r \cdot r = 3,63 r^2$$

$n=8$ ,  $\alpha = 22^\circ 30'$ ;  $a = 2r \tan \alpha$ ,  $h = r$



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$$a = 2r \operatorname{tg} 22^\circ 30' = 22 \cdot 0,414 = 0,8282, \quad h = 2$$

$$P_8 = 80 \cdot \frac{h}{2} = 4ah = 4 \cdot 0,8282 \cdot 2 \approx 3,312^2$$

$$n = 12, \quad \alpha = 15^\circ, \quad a = 2r \operatorname{tg} \alpha \quad h = 2$$

$$a = 2r \operatorname{tg} 15^\circ = 22 \cdot 0,268 = 0,5362, \quad h = 2$$

$$P_{12} = 12a \cdot \frac{h}{2} = 6ah = 6 \cdot 0,5362 \cdot 2 = 3,2162^2 \approx 3,222^2$$

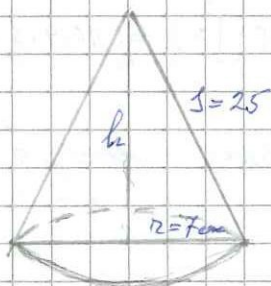
1499.  $S = 175 \pi \text{ cm}^2$ ,  $S$  - area,  $r = 7 \text{ cm}$ .

$$S = \pi r s$$

$$\pi r s = 175 \pi$$

$$r s = 175$$

$$7s = 175 \Rightarrow s = 25$$



Задача 131

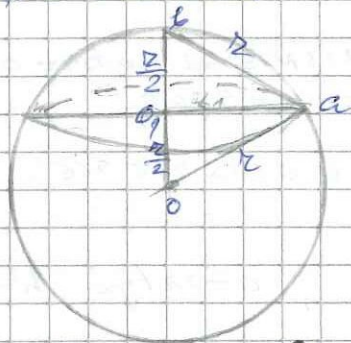
$$h^2 = s^2 - r^2 = 25^2 - 7^2 = (25-7)(25+7) = 18 \cdot 32 = 576$$

$$h = \sqrt{576} = 24 \quad h = 24 \text{ cm}$$

$$P = \pi r (r + s) = \pi \cdot 7 (7 + 25) = \pi \cdot 7 \cdot 32 = 224 \pi$$

$$= \frac{1}{3} r^2 \pi h = \frac{1}{3} 7^2 \pi \cdot 24 = 49 \cdot 8 \pi = 392 \pi \quad V = 392 \pi \text{ cm}^3$$

1500.  $P_p = 48 \pi \text{ cm}^2$



Задача 132

$\Delta OAB$  је једнакострано

$$P_p = 48 \pi$$

$$r_1^2 \pi = 48 \pi$$

$$r_1^2 = 48 \Rightarrow r_1 = \sqrt{48} = 4\sqrt{3}$$

$$\text{N3 } \triangle OAC \text{ je } r_1^2 + \left(\frac{r}{2}\right)^2 = r^2$$

$$r_1^2 = r^2 - \left(\frac{r}{2}\right)^2 = \frac{4}{4}r^2 - \frac{1}{4}r^2 = \frac{3}{4}r^2$$

$$r_1 = \sqrt{\frac{3}{4}r^2} = \frac{r\sqrt{3}}{2}$$

$$\frac{r\sqrt{3}}{2} = 4\sqrt{3} \Rightarrow \frac{r}{2} = 4 \Rightarrow r = 8 \text{ cm}$$

$$P = 4r^2\pi = 4 \cdot 8^2\pi = 4 \cdot 64\pi = 256\pi$$

$$P = 256\pi \text{ cm}^2$$

$$V = \frac{4}{3}r^3\pi = \frac{4}{3}8^3\pi = \frac{4}{3} \cdot 512\pi = \frac{2048}{3}\pi$$

$$V = \frac{2048}{3}\pi \text{ cm}^3$$