

47-Mavzu. To‘rtburchak va aylana

1. Kvadratning perimetri $12\sqrt{2}$ ga teng. Kvadratga tashqi chizilgan aylana radiusini toping?
A) $3\sqrt{6}$ B) 6 C) $3\sqrt{2}$ D) 3

2. Radiusi $2\sqrt{2}$ ga teng bo‘lgan aylanaga kvadrat ichki chizilgan. Shu kvadratning yuzasini toping.
A) 16 B) 32 C) 8 D) 24

3. Doiraning yuzi unga ichki chizilgan kva-dratning yuzidan necha marta katta?
A) $\frac{\pi}{2}$ B) 2 C) 4 D) $\frac{\pi}{4}$

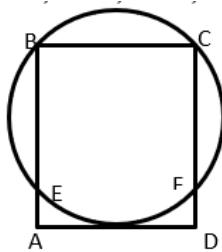
4. Aylanaga ichki chizilgan muntazam uchburchakning tomoni 3 ga teng. Shu aylanaga ichki chizilgan kvadratning yuzasini toping.
A) 8 B) 9 C) 12 D) 10

5. Doiraga ichki chizilgan to‘g’ri to‘rtbur-chakning tomonlari 12 va 16 ga teng. Shu doiraning yuzini toping.
A) 200π B) 100π C) 400π D) 120π

6. Aylanaga ichki chizilgan to‘g’ri to‘rtburchakning tomonlari uzunliklari 3 m va 4 m ga teng. Aylananing radiusini toping.
A) 5 m B) 3 m C) 3,5 m D) 2,5 m

7. Radiusi 5 ga teng bo‘lgan aylanaga muntazam uchburchak, uchburchakka yana aylana va aylanaga kvadrat ichki chizilgan. Kvadratning perimetrini toping.
A) 10 B) $10\sqrt{2}$ C) 8 D) $5\sqrt{2}$

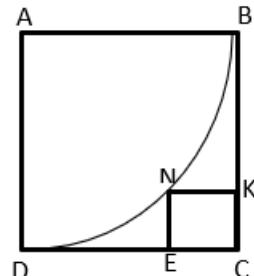
8. ABCD –to‘g’ri to‘rtburchak. BE=BC=10 bo‘lsa, AE=?



- A) $5\sqrt{3} - 5$ B) $5\sqrt{3} + 5$ C) $5\sqrt{2} + 5$ D) $5\sqrt{2} - 5$

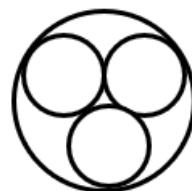
- 9.** Radiusi 34 ga teng bo‘lgan aylanaga ichki chizilgan to‘g‘ri to‘rburchakning tomonlari nisbati 8:15 kabi. Shu to‘g‘ri to‘rburchakning yuzasini toping.
 A) 1880 B) 1920 C) 2140 D) 1820

- 10.** ABCD va NECK–kvadrat. Agar AB=5 bo‘lsa, KC=?



- A) $5\sqrt{2} - 5$ B) $5 - 2,5\sqrt{2}$ C) $5\sqrt{2} - 4$ D) $5\sqrt{2} - 3$

- 11.** Kichik doiralar radiusi 3 bo‘lsa, katta doira radiusini toping.



- A) $2\sqrt{3} + 3$ B) $2\sqrt{3} + 1$ C) $3\sqrt{3} + 3$ D) $3\sqrt{3}$

- 12.** Diagonallari 12 va 16 ga teng bo‘lgan rombga ichki chizilgan aylananing radiusini toping.
 A) 3,6 B) 8 C) 6 D) 4,8

- 13.** Tomoni 6 cm bo‘lgan rombgga ichki chizilgan aylananing radiusi 1 cm. Rombning o‘tkir burchagi sinusini toping.

- A) $\frac{1}{4}$ B) $\frac{1}{2}$ C) $\frac{1}{3}$ D) $\frac{1}{5}$

- 14.** Rombning tomoni unga ichki chizilgan aylananing urinish nuqtasida 2 va 18 ga teng kesmalarga bo‘linadi. Ichki chizilgan aylananing radiusini toping.
 A) 9 B) 10 C) 4 D) 6

- 15.** Aylanaga tashqi chizilgan parallelogrammning bir tomoni 6 ga teng bo‘lsa, uning ikkinchi tomonini toping.
 A) 4 B) 5 C) 6 D) 7

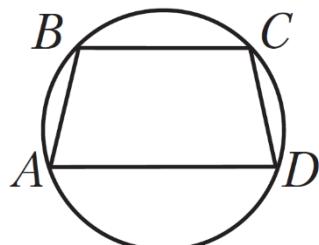
16. To‘g‘ri burchakli uchburchakka ichki va tashqi chizilgan aylana radiuslari uzunliklari yig‘indisi 4 ga, gipotenuzasi esa 6 ga teng. Uchburchakning peremetrini toping.

- A) 12 B) 14 C) 18 D) 20

17. To‘g‘ri burchakli uchburchakka ichki va tashqi chizilgan aylana radiuslari uzunliklari yig‘indisi 5 ga, gipotenuzasi esa 8 ga teng. Uchburchakning peremetrini toping.

- A) 12 B) 18 C) 20 D) 14

18. Rasmda aylanaga ichki chizilgan trapetsiya tasvirlangan. AB tomonning CD tomonga nisbatini toping.



- A) aniqlab bo‘lmaydi B) 1 C) 2 D) 0,5

19. Aylanaga tashqi chizilgan teng yonli trapetsiyaning yon tomoni 17 cm ga teng bo‘lsa, uning o‘rta chizig‘ uzunligini toping.

- A) 17 cm B) 20 cm C) 21 cm D) 23 cm

20. Aylanaga tashqi chizilgan teng yonli trapetsiyaning perimetri 60 cm ga teng bo‘lsa, uning o‘rta chizig‘ uzunligini toping.

- A) 12 cm B) 13 cm C) 14 cm D) 15 cm

21. Aylanaga tashqi chizilgan teng yonli trapetsiyanig asoslari 54 va 24 ga teng. Aylananing radiusini toping.

- A) 15 B) 16 C) 17 D) 18

22. Asoslaridan birining uzunligi 4 ga teng bo‘lgan teng yonli trapetsiyaga radiusi 1 ga teng aylanaga ichki chizilgan. Shu trapetsiyaning peremetrini toping.

- A) 18 B) 12 C) 10 D) 8

23. Aylanaga tashqi chizilgan teng yonli trapetsiyaning asoslari uzunliklari 54 cm va 24 cm ga teng. Shu aylananing radiusi necha cm?

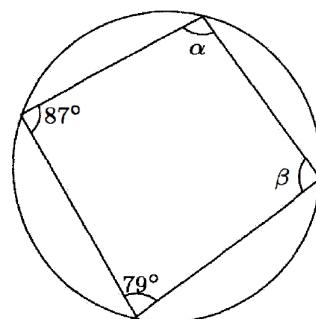
- A) 15 B) 16 C) 17 D) 18

- 24.** Burchagi 60° ga teng, katta asosi 10 ga teng bo’lgan teng yonli trapetsiyaga aylana ichki chizilgan. Trapetsiya kichik asosining uchi va aylana markazi orasidagi masofani toping.
- A) $\frac{4\sqrt{2}}{3}$ B) $\frac{3\sqrt{3}}{2}$ C) $3\frac{2}{5}$ D) $3\frac{1}{3}$
- 25.** Yuzasi 120 cm^2 ga teng bo’lgan to‘g‘ri burchakli trapetsiyaga ichki chizilgan aylananing radiusi 2 cm ga teng. Shu trapetsiyaning o‘tkir burchagi sinusini toping.
- A) $\frac{1}{12}$ B) $\frac{1}{13}$ C) $\frac{1}{14}$ D) $\frac{1}{15}$
- 26.** Teng yonli trapetsiyaning burchaklaridan biri 45° ga teng. Shu trapetsiyaga tashqi chizilgan aylana radiusining ichki chizilgan aylana radiusiga nisbatini toping.
- A) $\sqrt{6}$ B) $2\sqrt{6}$ C) $0,5\sqrt{6}$ D) $\sqrt{2}$
- 27.** Teng yonli trapetsiyaning perimetri 40 ga, unga ichki chizilgan aylananing radiusi 3 ga teng. Shu trapetsiyaning yuzini hisoblang.
- A) 40 B) 50 C) 60 D) 80
- 28.** Teng yonli trapetsiyaga ichki chizilgan aylananing markazi ustki asosining uchidan 3 ga, pastki asosining uchidan 4 ga teng masofada joylashgan. Shu trapetsiyaga ichki chizilgan doiraning yuzini toping.
- A) $2,56\pi$ B) $4,84\pi$ C) $5,76\pi$ D) $6,76\pi$
- 29.** ABCD qavariq to‘rtburchakka aylana ichki chizilgan. Agar $AB = 8$ va $BC = 12$ bo‘lsa, CD va AD tomonlari ayirmasini toping.
- A) 4 B) 3 C) aniqlab bo‘lmaydi D) 2
- 30.** ABCD to‘rtburchak aylanaga tashqi chizilgan. $AB=6$, $AD=4$, $DC=3$ bo‘lsa, BC ni toping.
- A) 4 B) 4,5 C) 5 D) 5,5
- 31.** Aylanaga tashqi chizizlgan to‘rtburchakning uchta ketma-ket tomonlari nisbati 1:2:3 kabi. Agar to‘rtburchakning perimetri 28,8 ga teng bo‘lsa, uning eng kichik tomoni uzunligini toping.
- A) 4 B) 3,6 C) 4,5 D) 3

32. To‘rtburchakning uchta ketma-ket tomonlarining uzunliklari 2; 3 va 4 ga, unga ichki chizilgan aylananing radiusi 1,2 ga teng bo‘lsa, to‘rtburchakning yuzini toping.

- A) 7,2 B) 8,6 C) 7,8 D) 6,8

33. Rasmda berilgan ma’lumotlardan foydalanib, $\alpha - \beta$ ni aniqlang.

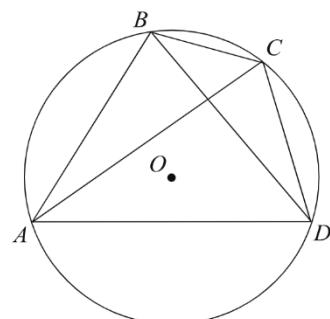


- A) 6° B) 8° C) 12° D) aniqlab bo‘lmaydi

34. ABCD to‘rtburchak aylanaga ichki chizilgan, $\angle ABC = 105^\circ$, $\angle CAD = 35^\circ$ bo‘lsa, $\angle ABD$ ni toping.

- A) 70° B) 60° C) 75° D) 80°

35. ABCD to‘rtburchak aylanaga ichki chizilgan $\angle ABC = 110^\circ$, $\angle ABD = 70^\circ$. $\angle ABC$ ni toping.

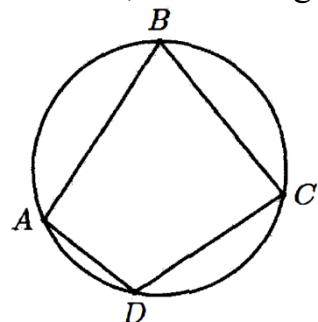


- A) 80° B) 40° C) 60° D) 20°

36. ABCD to‘rtburchak aylanaga ichki chizilgan, $\angle ABC = 105^\circ$, $\angle CAD = 45^\circ$ bo‘lsa, $\angle ABD$ ni toping.

- A) 60° B) 70° C) 75° D) 80°

37. Rasmda ABCD to‘rtburchak va unga tashqi chizilgan aylana tasvirlangan. Agar AB=5, BC=4, CD=3 va AD=2 bo‘lsa, $\angle ABC$ ning kosinusini toping.



- A) $\frac{5}{13}$ B) $\frac{6}{13}$ C) $\frac{7}{13}$ D) $\frac{8}{13}$

38. Asoslari uzunliklari 3 cm va 5 cm bo‘lgan teng yonli trapetsiya aylanaga tashqi chizilgan. Shu trapetsiyaning o‘tmas burchagi bissektrisasi trapetsiya yuzasini qanday nisbatda bo‘ladi?

- A) 1:2 B) 3:5 C) 1:1 D) 1:3

Kalitlar

1.	D	16.	B	31.	B
2.	A	17.	B	32.	A
3.	A	18.	B	33.	B
4.	A	19.	A	34.	A
5.	B	20.	D	35.	B
6.	D	21.	D	36.	A
7.	B	22.	C	37.	C
8.	D	23.	D	38.	C
9.	B	24.	D		
10.	B	25.	C		
11.	A	26.	A		
12.	D	27.	C		
13.	C	28.	C		
14.	D	29.	A		
15.	C	30.	C		