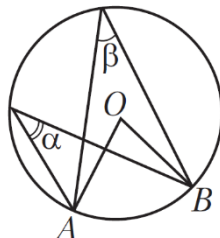


44-Mavzu. Aylana va doira

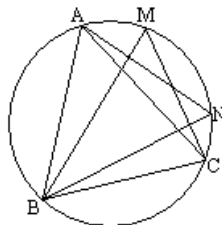
1. Agar aylananing radiusi 1 cm ga oshirilsa, uning uzunligi necha cm ga oshadi?
A) 1 B) π C) 2π D) 2
2. Aylananing vatari uni 4:6 kabi nisbatdagi yoylarga ajratadi. Kichik yoyning gradus o'lovini toping.
A) 144° B) 72° C) 160° D) 140°
3. Aylanasining uzunligi $6\sqrt{3}\pi$ ga teng bo'lgan doira yuzini toping.
A) 9π B) 18π C) 27π D) 81π
4. Aylana ichidagi nuqtadan aylanagacha eng qisqa masofa 6, eng uzun masofa 12 bo'lsa, aylana radiusini toping.
A) 8 B) 9 C) 12 D) 18
5. Aylana diametrining uchlaridan aylana urinmasigacha masofalar 2,6 va 1,6 ga teng. Diametr uzunligini toping.
A) 1,8 B) 2 C) 2,2 D) 4,2
6. Markaziy burchakka mos yoy aylananing $\frac{3}{5}$ qismiga teng. Shu markaziy burchakni toping.
A) 216° B) 15° C) 144° D) 72°
7. Aylananing markaziy burchagi 40° ga teng. Shu markaziy burchakka mos yoyga tiralgan aylanaga ichki chizilgan burchakni toping.
A) 40° B) 20° C) 60° D) 80°
8. Aylananing AB vatar uni ikkita yoyga ajratadi. Bu yoylar 17:19 nisbatda. AB vatar kichik yoyning ixtiyoriy nuqtasidan necha gradusli burchak ostida ko'rinadi?
A) 170° B) 190° C) 85° D) 95°
9. Radiusi 5 cm bo'lgan doiradagi 8 cm li vatar doira markazidan necha cm uzoqlikda bo'ladi?
A) 3 B) 4 C) 2,6 D) 2,8
10. Aylana radiusi 5 ga, markaziy burchagi 45° ga teng bo'lsa, u tiralgan yoy uzunligini toping.
A) $\frac{4\pi}{5}$ B) $\frac{5\pi}{4}$ C) $\frac{2\pi}{5}$ D) $\frac{5\pi}{2}$

11. Radiusi 8 ga teng aylananing $\frac{\pi}{8}$ radianga teng bo‘lgan yoyning uzunligini aniqlang.
A) $\frac{\pi}{64}$ B) π C) 2π D) $\frac{\pi}{32}$
12. 140° li yoyga tiralgan vatar aylanani ikki qismga ajratadi. Katta yoyning ixtiyoriy nuqtasidan qaraganda, bu vatar qanday burchak ostida ko‘rinadi
A) 70° B) 120° C) 115° D) 110°
13. Aylana tashqarisidagi nuqtadan aylanaga ikki urinma o‘tkazilgan. Agar urinmalar orasidagi burchak 72° bo‘lsa, aylananing urinmalarga urinish nuqtalari orasidagi katta yoyni toping.
A) 248° B) 240° C) 228° D) 252°
14. Radiusga teng bo‘lgan vatarning uchlaridan aylanaga urinmalar o‘tkazilgan. Shu urinmalar bilan vatar yotgan to‘g‘ri chiziq hosil qilgan burchaklarni toping.
A) $30^\circ; 150^\circ$ B) $60^\circ; 120^\circ$ C) $90^\circ; 90^\circ$ D) $50^\circ; 130^\circ$
15. Rasmda markazi O nuqtada bo‘lgan aylana tasvirlangan. Agar $\angle AOB = 50^\circ$ bo‘lsa, α va β burchaklar yig‘indisi nimaga teng bo‘ladi?



- A) 25° B) 45° C) 50° D) 100°

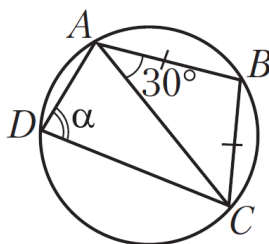
16. Shaklda $AB=AC$ va $\angle BMC=70^\circ$ bo‘lsa, $\angle ANB$ necha gradusga teng?



- A) 50° B) 55° C) 65° D) 100°

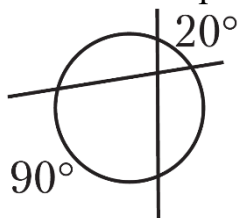
17. Aylananing vatari diametрни uzunliklari 2 va 6 ga teng ikki qismga ajratib, u bilan 30° li burchak hosil qiladi. Aylana markazidan vatargacha masofani toping.
A) 1 B) 2 C) 3 D) 4

18. Radiusi 17 cm bo‘lgan aylananing 30 cm li vatari aylananing markazidan necha cm masofadan o‘tadi?
A) 5 B) 6 C) 7 D) 8
19. Aylanadagi 2 ta vatari o‘zaro to‘g‘ri burchak ostida kesishib, kesishish nuqtasida har biri uzunliklari 3 cm va 7 cm bo‘lgan ikkita qismga ajraladi. Aylananing markazidan har bir vatargacha masofani toping.
A) 1 cm B) 2 cm C) 3 cm D) 4 cm
20. Radiuslari 5 va 10 bo‘lgan aylanalar tashqi urinadi. Ularga tashqi urinma to‘g‘ri chiziq o‘tkazilgan. Tashqi urinish nuqtalari orasidagi masofani toping.
A) $10\sqrt{5}$ B) $5\sqrt{10}$ C) $10\sqrt{3}$ D) $10\sqrt{2}$
21. Radiusi 11 cm ga teng aylana markazidan 7 cm masofada bo‘lgan P nuqta berilgan. Ushbu nuqtadan uzunligi 18 cm ga teng vatar o‘tkazilgan. Vatarning P nuqta ajratadigan eng kichik kesmasi uzunligini toping.
A) 2 B) 11 C) 6 D) 12
22. Aylana tashqarisidagi M nuqtadan urinma o‘tkazilgan. M nuqtadan urinish nuqtasigacha bo‘lgan masofa 7 ga teng, aylanagacha masofa 1 ga teng. Aylana radiusini toping.
A) 24 B) $5\sqrt{2}$ C) $\frac{-1+\sqrt{197}}{2}$ D) 25
23. Radiuslari 3 va 27 bo‘lgan aylanalar o‘zaro tashqi tomondan urinadi. Ularning umumiy urinmasi va urinish nuqtasi orasidagi masofani toping.
A) 5,4 B) 3,6 C) 4,8 D) 5
24. Rasmda ABC ($AB=BC$) teng yonli uchburchak tasvirlangan bo‘lib, AB va AC vatarlar orasidagi burchak 30° ga teng. AD va DC vatarlar orasidagi burchakni toping.



- A) 30° B) 60° C) 90° D) 120°

25. Rasmda keishish nuqtasi aylananing ichida kesishuvchi va aylanani kesib o‘tuvchi ikki to‘g‘ri chiziqning aylanadan ajratgan yoylari kattaliklari berilgan. Shu ikki to‘g‘ri chiziq orasidagi burchakni toping.



- A) 35° B) 55° C) 70° D) 110°

Kalitlar

1.	C	16.	B
2.	A	17.	A
3.	C	18.	D
4.	B	19.	B
5.	D	20.	D
6.	A	21.	C
7.	B	22.	A
8.	D	23.	A
9.	A	24.	B
10.	B	25.	B
11.	B		
12.	A		
13.	D		
14.	A		
15.	C		