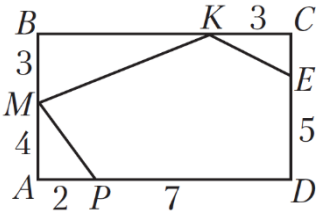
48-Mavzu. Ko‘pburchaklar

1. Rasmda ABCD to‘g‘ri to‘rtburchak va AM=4 cm, AP=2 cm, BM=3 cm, CK=3 cm, DE=5 cm, DP=7 cm berilgan. MKEDP beshburchakning yuzasini toping.



A) 45 cm^2 B) 47 cm^2 C) 50 cm^2 D) 51 cm^2

2. ABCDE qavariq beshburchak tomonlari uzunliklari bir xil – 7 cm dan. Chumoli A nuqtadan boshlab soat strelkasi yo‘nalishida beshburchak perimetri bo‘ylab harakatlanmoqda. Agar u 34 m 51 cm yo‘l yursa, qaysi nuqtaga keladi?
A) A B) B C) C D) D

3. Qavariq o‘nburchakning barcha ichki burchaklari yig‘indisini toping.
A) $1080°$ B) $1260°$ C) $1440°$ D) $1620°$

4. Qavariq beshburchakning burchaklari kattaliklari 2:3:4:5:6 kabi nisbatda. Burchaklardan kattasining miqdorini toping.
A) $136°$ B) $162°$ C) $156°$ D) $148°$

5. Muntazam beshburchakning bitta ichki burchagi necha gradus?
A) $144°$ B) $135°$ C) $120°$ D) $108°$

6. Muntazam beshburchakning bitta tashqi burchagi necha gradus?
A) $36°$ B) $45°$ C) $72°$ D) $75°$

7. Har bir tashqi burchagi $160°$ dan bo‘lgan muntazam ko‘pburchakning tomonlari soni nechta?
A) 15 B) 16 C) 17 D) 18

8. Bitta tashqi burchagi $15°$ ga teng bo‘lgan muntazam ko‘pburchakning nechta tomoni bor?
A) 32 B) 30 C) 26 D) 24

9. α-muntazam o‘n ikki burchakning ichki burchagi bo‘lsa, $\sin\alpha$ ning qiymatini toping .
A) $-\frac{1}{2}$ B) $\frac{1}{2}$ C) $-\frac{\sqrt{3}}{2}$ D) $\frac{\sqrt{3}}{2}$

10. Qavariq ko‘pburchakning o‘tkir burchaklari soni ko‘pi bilan nechta bo‘lishi mumkin?
A) 1 B) 2 C) 3 D) 4

11. Qavariq ko‘pburchak ichki burchaklarining va bitta tashqi burchagining yig‘indisi 2070° ga teng Ko‘pburchakning nechta tomoni bor?
A) 10 B) 11 C) 13 D) 15

12. Qavariq ko‘pburchakning ichki burchaklarining va bitta tashqi burchagining yig‘indisi $\frac{23\pi}{2}$ ga teng. Ko‘pburchakning diagonallari nechta?
A) 130 B) 13 C) 76 D) 65

13. Ikkita o‘xshash ko‘pburchakning pertimetrlari 18 va 36 ga, yuzlarining yig‘indisi 30 ga teng. Katta ko‘pburchakning yuzini toping.
A) 20 B) 24 C) 21 D) 18

14. Agar A_1A_4=2,24 bo‘lsa, muntazam $A_1A_2A_3A_4A_5A_6$ oltiburchakning perimetrini toping.
A) 6,43 B) 6,72 C) 6,75 D) 6,77

15. Qavariq ko‘pburchakning 14 ta diagonali bor.Uning tomonlari nechta?
A) 5 B) 6 C) 7 D) 8

16. Har bir ichki burchagi markaziy burchagidan 10 marta katta bo‘lishi uchun ko‘pburchakning nechta tomoni bo‘lishi kerak?
A) 16 B) 22 C) 24 D) 28

17. Qavariq ko‘pburchakning bir uchidan chiqishi mumkin bo‘lgan jami diagonallari soni 37 ta. Uning tomonlari sonini toping.
A) 38 B) 39 C) 40 D) 41

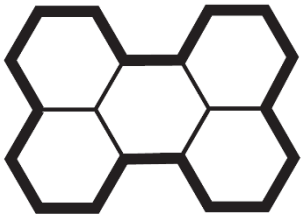
18. Muntazam ko‘pburchakning tashqi burchagi eng ko‘pi bilan necha gradusga teng bo‘lishi mumkin?
A) 60° B) 72° C) 90° D) 120°

19. Sakkizburchakning tashqi burchaklari 18°, 32°, 45°, 33°, 42°, 17°, 14°, 159° bo‘lsa, ichki burchaklar yig‘indisini toping.
A) 1020° B) 1440° C) 1000° D) 1080°

20. Bir burchagi botiq, qolgan burchaklari qavariq bo‘lgan beshburchakning ichki burchaklari yig‘indisini toping.
A) 450° B) 720° C) 540° D) 960°

21. Muntazam oltiburchakning tomoni $2\sqrt{6}$ ga teng. Unga tengdosh bo‘lgan muntazam uchburchakning tomonini toping.
A) 12 B) 18 C) 24 D) 30

22. Tomonlari 6 cm bo‘lgan beshta bir xil muntazam oltiburchaklar rasmdagidek qilib joylashtirilgan. Ajratib ko‘rsatilgan siniq chiziqning uzunligini toping.



A) 90 cm B) 96 cm C) 108 cm D) 120 cm

23. Muntazam oltiburchak ichidagi ixtiyoriy nuqtadan uning tomonlari yotgan to‘g‘ri chiziqlargacha bo‘lgan masofalari yig‘indisi 12 ga teng. Shu oltiburchakning tomonini toping.
A) $5\sqrt{3}$ B) $5{,}5\sqrt{3}$ C) $\frac{4\sqrt{3}}{3}$ D) $\frac{5\sqrt{3}}{3}$

24. ABCDEF muntazam oltiburchakning AD va CF diagonallari O nuqtada kesishadi. Agar AOC uchburchakka tashqi chizilgan aylana radiusi 4 ga teng bo‘lsa, shu muntazam oltiburchakning perimetrini toping.
A) 24 B) $12\sqrt{3}$ C) $12\sqrt{2}$ D) 18

25. Muntazam oltiburchak tomonining uzunligi 1 ga teng. Shu oltiburchak tomonlarining o‘rtalari ketma-ket tutashtirildi, so‘ngra hosil bo‘lgan oltiburchak tomonlarining o‘rtalari yana ketma-ket tutashtirildi va h.k. Hosil bo‘lgan barcha oltiburchaklar yuzlarining yig‘indisini toping.
A) $2\sqrt{3}$ B) $2\sqrt{6}$ C) $3\sqrt{3}$ D) $6\sqrt{3}$

26. Eng kichik burchagi 50° bo‘lgan biror qavariq ko‘pburchakning ichki burchaklari, ayirmasi 10° bo‘lgan arifmetik progressiyani tashkil qiladi. Bu ko‘pburchakning tomonlari soni eng ko’pi bilan nechta bo‘lishi mumkin?
A) 3 ta B) 27 ta C) 24 ta D) 5 ta

27. Qavariq ABCDEF oltiburchakda ichki burchaklari o‘zaro teng. AB=3, BC=4, CD=5, EF=5, AF va DE kesmalar o‘rta arifmetigini toping.
A) 1,5 B) 2 C) 2,5 D) 3

28. Qavariq teng tomonli ABCDEF oltiburchakning tomoni $\frac{11}{\sqrt{4+\sqrt{3}+\sqrt{7}}}$ ga teng hamda B va F uchlaridagi burchaklari to‘g‘ri burchaklar. Agar CE=AB bo‘lsa, shu oltiburchakning yuzini toping.
A) 2,75 B) 30,25 C) 30,75 D) 31,25

29. ABCDEF muntazam oltiburchakda AC, CE, BF, FD diagonallar o‘tkazilgan. AC va BF diagonallar L nuqtada, CE va FD diagonallar K nuqtada kesishadi. Agar oltiburchakning tomoni $2\sqrt{3}$ ga teng bo‘lsa, LCKF to‘rtburchak yuzini toping.
A) $5\sqrt{3}$ B) $6\sqrt{3}$ C) $8\sqrt{3}$ D) $9\sqrt{3}$

30. ABCDEF muntazam oltiburchakda AC, CE, BF, FD diagonallar o‘tkazilgan. AC va BF diagonallar L nuqtada, CE va FD diagonallar K nuqtada kesishadi. Agar oltiburchak tomoni $2\sqrt{3}$ ga teng bo‘lsa, CKF uchburchaknini yuzini toping.
A) $4\sqrt{3}$ B) $5\sqrt{3}$ C) $6\sqrt{3}$ D) $9\sqrt{3}$

Kalitlar

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