42-Mavzu. To‘rtburchaklar-2

1. Romb diagonallarining tomonlari bilan hosil qilgan burchaklar nisbati 2:7 ga teng. Rombning kichik burchagini toping.
A) 20° B) 30° C) 40° D) 60°

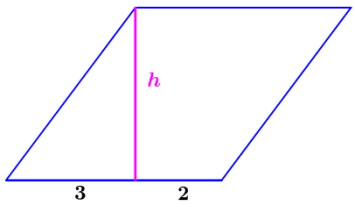
2. Diagonallari 12 cm va 22 cm ga teng rombning yuzasi topilsin.
A) 132 B) 123 C) 213 D) 65

3. Rombning perimetri 52 ga, diagonallarining yig‘indisi 34 ga teng. Rombning yuzini toping.
A) 30 B) 128 C) 120 D) 24

4. ABCD rombning diagonallari 5 va 12 ga teng. Katta diagonali AC da N nuqta olingan va AN:NC=3:2. AND uchburchakning yuzini toping.
A) 9 B) 12 C) 12,5 D) 10

5. ABCD rombning tomoni uning diagonallari o‘rta geometrigiga teng. Rombning o‘tkir burchagini toping.
A) 45° B) 60° C) 30° D) 36°

6. Rombning uchidan tushirilgan balandligi uning tomonini, o‘tkir burchagi uchidan boshlab hisoblaganda, 3 va 2 ga teng kesmalarga bo‘ladi. Rombning yuzini toping.



A) 10 B) 20 C) 15 D) 18

7. To‘g‘ri burchakli uchburchakning burchaklaridan biri 60° ga teng. Bu uchburchakka romb shunday ichki chizilganki, 60° li burchak umumiy, rombning qolgan uchlari uchburchakning tomonlarida yotadi. Agar rombning tomoni $\frac{\sqrt{12}}{5}$ ga teng bo‘lsa, berilgan uchburchakning katta katetini toping.
A) 1,8 B) 2,4 C) $\frac{3\sqrt{3}}{5}$ D) $\frac{6\sqrt{3}}{5}$

8. Agar rombning bir diagonalini 10% ga uzaytirib, ikkinchi diagonalini 20% ga qisqartirilsa, rombning yuzi qanday o‘zgaradi?
A) 8% ortadi B) o‘zgarmaydi C) 12% kamayadi D) 6,5% ortadi

9. ABCD rombda $AC > BD$ va $\frac{AC}{BD} - \frac{BD}{AC} = 2$ bo‘lsa, $\angle A$ burchakni toping.
A) $30°$ B) $45°$ C) $\operatorname{arctg} 2$ D) $2\operatorname{arctg} 2$

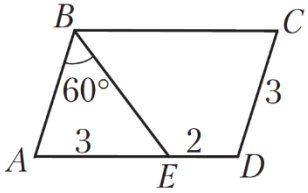
10. Perimetri 48 cm bo‘lgan parallelogrammning tomonlaridan biri ikkinchisidan 10 cm ga uzun. Parallelogrammning kichik tomoni uzunligi necha cm?
A) 2 B) 3 C) 4 D) 5

11. Yuzi 144 cm^2, balandliklari 12 cm va 8 cm bo‘lgan parallelogrammning perimetrini toping.
A) 40 cm B) 30 cm C) 80 cm D) 60 cm

12. Parallelogrammning diagonali uning ikki tomoni bilan 15° va 25° li burchaklar tashkil qiladi. Shu parallelogrammning katta burchagini toping.
A) 120° B) 140° C) 60° D) 40°

13. Perimetri 32 cm bo‘lgan parallelogrammda diagonallar o‘tkazilgan. Ikkita qo‘shni uchburchaklar perimetrlari orasidagi ayirma 8 cm ga teng. Parallelogramm katta tomonining uzunligini (cm) toping.
A) 4 B) 8 C) 12 D) 24

14. Rasmdagi parallelogrammda BE kesma o‘tkazilgan bo‘lib, ∠ABE=60°. Kesmalar uzunligi cm da berilgan. EBCD to‘rtburchakning perimetrini toping.



A) 11 cm B) 12 cm C) 13 cm D) 14 cm

15. Parallelogrammning ikkita burchaklari nisbati 13:2 kabi. Parallelogrammning kichik burchagi necha gradus?
A) 12° B) 24° C) 36° D) 48°

16. To‘g‘ri mulohazani toping.
A) Har qanday kesma cheksiz ko‘p simmetriya o‘qiga ega
B) Qavariq to‘rtburchak tomonlarining o‘rta nuqtalari ketma-ket birlashtirilsa, parallelogramm hosil bo‘ladi
C) Uchburchakning o‘rta chizig‘i uning asosiga parallel emas
D) Ikki kesmaning nisbati deb, ular bir ismli birliklar bilan ifodalanganda, birini ikkinchisiga ko‘paytirishdan hosil bo‘lgan songa aytiladi

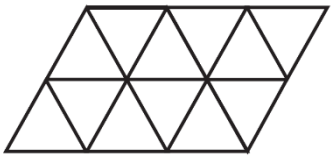
17. ABCD parallelogrammda AC diagonaliga BO perpendikulyar tushirilgan. AO=8, OC=6 va BO=4 bo‘lsa, parallelogrammning yuzini toping.
A) 50 B) 28 C) 52 D) 56

18. Parallelogramm o‘tkir burchagining bissektrisasi qarshisidagi tomondan uzunliklari 6 va 3 ga teng bo‘lgan kesmalar ajratadi. Parallelogrammning perimetrini toping.
A) 18 B) 9 C) 24 D) 30

19. Parallelogrammning tomonlari 12 va 5 ga teng. Uning katta tomoniga yopishgan burchaklarining bissektrisalari qarama-qarshi tomonni uch qismga ajratadi. Shu qismlardan eng kichigining uzunligini toping.
A) 2 B) 2,5 C) 3,2 D) 3,6

20. Tomonlari farqi 8 ga, balandliklari farqi 4 ga teng bo‘lgan parallelogrammning o‘tkir burchagini toping.
A) 60° B) 30° C) 15° D) 45°

21. 12 ta bir xil muntazam uchburchakdan rasmdagidek qilib perimetri 30 cm bo‘lgan parallelogramm hosil qilindi. Ushbu parallelogrammning yuzini toping.



A) $12\sqrt{3}$ B) 12 C) $24\sqrt{3}$ D) $27\sqrt{3}$

22. Parallelogrammning tomonlari 4 va 6 ga teng bo‘lsa, uning bissektrisasi diagonalni qanday nisbatda bo‘ladi?
A) 4:7 B) 1:3 C) 5:6 D) 2:3

23. ABCD parallelogrammda $BD = 6\sqrt{2}$, $\angle ADB = 60°, \angle CDB = 75°$ bo‘lsa, AB ni toping.
A) $3\sqrt{3}$ B) $4\sqrt{2}$ C) $6\sqrt{2}$ D) $6\sqrt{3}$

24. Parallelogrammning balandliklari 9 va 8 ga, ular orasidagi burchak esa 60° ga teng. Parallelogramm yuzini toping.
A) 48 B) 24 C) 96 D) $48\sqrt{3}$

25. Parallelogrammning diagonallari 6 va 8 ga teng. Uning tomonlarai kvadratlari yig‘indisini toping.
A) 100 B) 50 C) 200 D) 49

26. Parallelogrammning tomonlari 11 va 23 ga. Diagonallari nisbati 2:3 ga teng. Uning katta diagonali uzunligini toping.
A) 24 B) 30 C) 15 D) 20

27. Parallelogrammning diagonallari uzunligi 9 va $\sqrt{23}$ ga teng bo‘lib, tomonlaridan birining uzunligi 4 ga teng. Parallelogrammning berilgan tomoniga teng bo‘lmagan tomoni uzunligini toping.
A) 5 B) 6 C) 7 D) 8

28. Parallelogramm o‘tkir burchagining bissektrisasi qarshisidagi tomondan uzunliklari 6 va 3 ga teng bo‘lgan kesmalar ajratadi. Parallelogrammning perimetrini toping.
A) 18 B) 9 C) 24 D) 30

29. Parallelogrammning 5 ga teng bo‘lgan diagonali uning 12 ga teng bo‘lgan yon tomoniga perpendikulyar. Parallelogrammning katta tomoniga tushirilgan balandligini toping.
A) $3\frac{6}{13}$ B) $3\frac{8}{13}$ C) $4\frac{5}{13}$ D) $4\frac{8}{13}$

30. AC asosli ABC teng yonli uchburchakka FBDG parallelogramm shunday ichki chizilganki, B uchdagi burchak umumiy, G nuqta esa AC asosda yotadi. Agar BC=14 cm bo‘lsa, parallelogrammning perimetri qanday bo‘ladi(sm)?
A) 14 B) 20 C) 24 D) 28

31. ABCD parallelogrammda, AD katta tomonidagi A va D burchaklarining bissektrisalari parallelogrammning ichki sohasida kesishgan bo‘lsa, tomonlari orasida qaysi munosabat to‘g‘ri bo‘ladi?
A) $2AB < AD$ B) $2DC < AD$ C) $2AB > AD$ D) $2AB = AD$

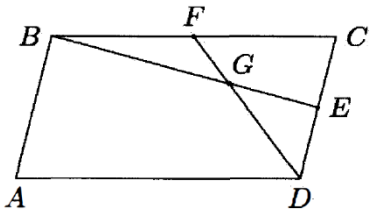
32. ABCD parallelogrammda D uchidan AB tomonga shunday DE kesma o‘tkazilganki, bu kesma parallelogramm yuzini 3:10 kabi nisbatda bo‘lsa, E nuqta AB tomonni A uchidan boshlab qanday nisbatda bo‘ladi?
A) $\frac{6}{7}$ B) $\frac{3}{10}$ C) $\frac{7}{6}$ D) $\frac{6}{13}$

33. Tomonlari 12 va 20 o‘tkir burchagi 30° bo‘lgan parallelogrammning barcha burchaklari bissektrisalari kesishishidan hosil bo‘lgan to‘rtburchak yuzini toping.
A) 16 B) 24 C) 32 D) 36

34. Asosi a va unga tushirilgan balandligi h ga teng bo‘lgan uchburchak ichiga parallelogramm shunday chizilganki, parallelogrammning bir tomoni a asosida yotadi. Shu parallelogrammning yuzi eng katta qiymatga ega bo‘lishi uchun uning tomonini qanday tanlab olish kerak?

A) $\frac{a\sqrt{3}}{2}$ B) $\frac{a}{3}$ C) $\frac{a\sqrt{2}}{2}$ D) $\frac{a}{2}$

35. Rasmda ABCD parallelogramm tasvirlangan. G nuqta BE va DF kesmalarning kesishish nuqtasi. Agar BF = FC va CE = ED bo‘lsa, $\frac{S_{ABCD}}{S_{ABGD}}$ni toping.



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

Kalitlar

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