

41-Mavzu. To‘rtburchaklar-1

1. Qavariq to‘rtburchakning uchta burchagi $70^\circ, 100^\circ, 130^\circ$ ga teng. Uning to‘rtinchi burchagini toping.
A) 40° B) 50° C) 60° D) 70°

2. Qavariq to‘rtburchakning uchta burchagi 2, 3, 5 sonlariga proporsional bo‘lib, to‘rtinchi burchagi 50° ga teng bo‘lsa, uning eng kichik burchagini toping.
A) 50° B) 42° C) 31° D) 40°

3. Qavariq to‘rtburchakning diagonallari 12 va 10 bo‘lib, ular orasidagi burchak 30° ga teng. Shu to‘rtburchakning yuzini toping.
A) 60 B) 30 C) $60\sqrt{3}$ D) $30\sqrt{3}$

4. Qavariq to‘rtburchakning diagonallari 12 va 8 bo‘lib, yuzasi $24\sqrt{3}$ ga teng. Shu to‘rtburchakning diagonallari orasidagi o‘tkir burchakni toping.
A) 60° B) 30° C) 45° D) 90°

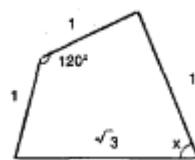
5. To‘rtburchakning tomonlari 20% orttirilganda uning perimetrii necha foiz ortadi?
A) 20 B) 40 C) 44 D) 80

6. To‘rtburchakning diagonallari 8 va 10 ga teng. Shu to‘rtburchakning barcha tomonlari o‘rtalarini ketma-ket tutashtiruvchi to‘rtburchakning perimetrini toping.
A) 11 B) 18 C) 20 D) 22

7. Qavariq ABCD to‘rtburchakning ichidagi O nuqta uning A, B, C, D uchlari bilan tutashtirildi. Agar $\angle AOB=60^\circ$, $\angle BOC=30^\circ$, $\angle COD=135^\circ$, $S_{AOB} = 20$, $S_{BOC} = 5$ va $S_{COD} = 10\sqrt{3}$ bo‘lsa, S_{DOA} ni toping.
A) $60\sqrt{3}$ B) 40 C) $\frac{10}{\sqrt{3}}$ D) 120

8. ABCD to‘rtburchakni diagonallari O nuqtada kesishadi va uni to‘rtta uchburchakka ajratadi. AOB BOC va COD uchburchaklarning yuzlari 1, 2 va 3 bo‘lsa, AOD uchburchakning yuzini toping.
A) aniqlab bo‘lmaydi B) 2 C) 1,5 D) $\frac{2}{3}$

9. Shaklda berilganlarga ko‘ra $\cos x = ?$



- A) $\frac{\sqrt{3}}{2}$ B) $\frac{\sqrt{3}}{3}$ C) $\frac{\sqrt{3}}{5}$ D) $\frac{\sqrt{3}}{6}$

10. Kvadratning tomoni 5 ga teng. Uning diagonali uzunligini toping.

- A) $5\sqrt{3}$ B) $5\sqrt{2}$ C) 10 D) 5

11. Diagonalining uzunligi 4 ga teng bo‘lgan kvadrat yuzasini toping.

- A) 4 B) 8 C) 16 D) 20

12. Kvadratning perimetri 10% ga uzaytirilsa, uning yuzi necha foizga ko‘payadi?

- A) 10 B) 20 C) 44 D) 21

13. Kvadratning perimetri 20 cm. Uning tomonini toping .

- A) 5 cm B) 10 cm C) 2,5 cm D) 16 cm

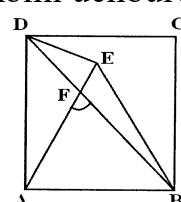
14. Kvadratning perimetri 20 cm, uning yuzini toping .

- A) 24 cm^2 B) 25 cm^2 C) 10 cm^2 D) 100 cm^2

15. Tomonlari 72 va 32 bo‘lgan to‘g‘ri to‘rtburchakka tengdosh kvadratning tomonini toping.

- A) 28 B) 36 C) 48 D) 24

16. ABCD kvadrat va ABE teng tomonli uchburchak bo‘lsa, $\angle AFB$ ni toping.



- A) 60° B) 75° C) 90° D) 105°

17. Gipotenuzasining uzunligi $12\sqrt{2}$ bo‘lgan teng yonli to‘g‘ri burchakli uchburchakka kvadrat shunday ichki chizilganki, to‘g‘ri burchak ular uchun umumiy bo‘lib, kvadratning bir uchi gipotenuzaning o‘rtasida yotadi. Shu kvadratning tomonini toping.

- A) 3 B) 4 C) 6 D) 12

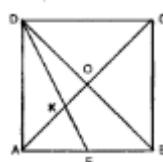
18. To‘g‘ri burchakli uchburchakning katetlari 3 va 5 ga teng bo‘lib, bu uchburchakka u bilan umumiy to‘g‘ri burchakka ega bo‘lgan kvadrat ichki chizilgan. Kvadratning perimetrini toping.

- A) 7,5 B) 8 C) 7 D) 9,5

19. Tomonining uzunligi $28 + 14\sqrt{3}$ ga teng muntazam uchburchakka ichki chizilgan kvadratning yuzini toping.

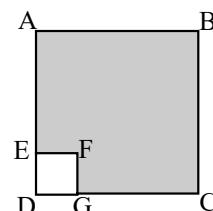
- A) 441 B) 882 C) 588 D) 1176

20. ABCD kvadrat. AE=EB va $S_{OKEB}=20 \text{ cm}^2$ bo‘lsa, $S_{ABCD}=?$



- A) 120 B) 100 C) 90 D) 80

21. Rasmda ABCD va EFGD kvadratlar tasvirlangan. Agar $|GC|=4|GD|$ va bo‘yagan sohaning perimetri 20 cm ga teng bo‘lsa, bo‘yagan sohaning yuzasi necha cm^2 ?



- A) 12 B) 24 C) 17 D) 25

22. To‘g‘ri to‘rtburchakning eni 5 ga teng, bo‘yi undan 7 ga ortiq. Shu to‘g‘ri to‘rtburchakning perimetrini toping.

- A) 34 B) 24 C) 12 D) 17

23. Agar to‘g‘ri to‘rtburchakning tomonlari 3 marta orttirilsa, uning yuzi necha marta ortadi?

- A) 6 B) 9 C) 16 D) 12

24. To‘g‘ri to‘rtburchakning bo‘yi 25% ga orttirildi. Uning yuzi o‘zgarmasligi uchun enini necha protsentga kamaytirish kerak?

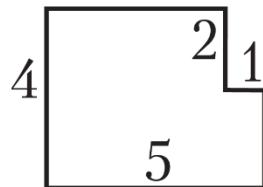
- A) 20% B) 16% C) 25% D) 18%

25. ABCD to‘g‘ri to‘rtburchakda $S_1=2$; $S_2=8$; $S_3=3$ bo‘lsa, S_4 ni toping.

S_1	S_2
S_3	S_4

- A) 9 B) 10 C) 8 D) 12

26. Rasmda tasvirlangan shakling perimetritini toping. (barcha burchaklar – to‘g‘ri burchak)



- A) 15 B) 18 C) 20 D) 16

27. MNKE to‘g‘ri to‘rtburchakning diagonallari O nuqtada kesishadi, ME=10, MK=18. MOE uchburchakning perimetritini toping.

- A) 19 B) 23 C) 25 D) 28

28. To‘g‘ri to‘rtburchakning tomonlaridan biri ikkinchisidan 2 cm uzun, yuzi esa tomonlari to‘g‘ri to‘rtburchak perimetridan 4 cm kichik bo‘lgan kvadratning yuziga teng. To‘g‘ri to‘rtburchakning katta tomonini toping.

- A) $2\frac{2}{15}$ B) $\frac{2}{15}$ C) 2 D) $2\frac{4}{15}$

29. To‘g‘ri to‘rtburchakning bo‘yi kvadratning tomonidan 8 m uzun, eni esa shu kvadrat tomonidan 4 m qisqa. Kvadrat tomonini x bilan belgilab, to‘g‘ri to‘rtburchak perimetri va yuzi uchun ifoda tuzing.

- A) $P = 4x + 8; S = 4(x + 8)$ B) $P = 4x + 2; S = (x + 8)(x - 4)$
 C) $P = 4x + 4; S = x^2 + 4x - 18$ D) $P = 4(x + 2); S = (x + 8)(x - 4)$

30. To‘g‘ri to‘rtburchakning perimetri 32 ga, yuzasi esa 48 ga teng. Uning daiagonallari orasidagi burchakning sinusini toping.

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

31. Diagonali 16 ga teng bo‘lgan to‘g‘ri to‘rtburchakning yuzi eng ko‘pi bilan nechaga teng bo‘lishi mumkin?

- A) aniqlab bo‘lmaydi B) 160 C) 162 D) 128

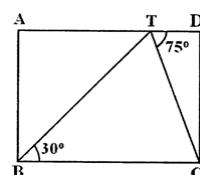
32. To‘g‘ri to‘rtburchakning ikkita uchidan diagonaliga tushirilgan perpendikulyarlar uning diagonalini uchta 1:2:1 nisbatda bo‘laklarga ajratadi. To‘g‘ri to‘rtburchakning kichik tomoni a ga teng. Uning katta tomonini toping.

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

33. Tomonlari 75 va 27 bo‘lgan to‘g‘ri to‘rtburchakka tengdosh kvadratning tomonini toping.

A) 45 B) 51 C) 48 D) 49

34. ABCD perimetri 12 cm bo‘lgan to‘g‘ri to‘rtburchak. Shaklga ko‘ra S(ABCD) necha cm^2 ?



- A) 12 B) 10 C) 8 D) 6

35. ABCD to‘g‘ri to‘rtburchakning B burchagini bissektrissasi AD tomonni P nuqtada kesadi hamda uni AP=10 va PD=20 ga teng kesmalarga ajratadi. Shu to‘g‘ri to‘rtburchakning perimetrini toping .

- A) 100 B) 80 C) 90 D) 60

36. ABCD to‘g‘ri to‘rtburchakda AB=5, BC=3. CD kesmadan F va G nuqtalar shunday olinganki DF=1, CG=2. AF va BG to‘g‘ri chiziqlar E nuqtada kesishadi. AEB uchburchak yuzini toping.

- A) $\frac{21}{2}$ B) $\frac{25}{2}$ C) $\frac{23}{2}$ D) 10

Kalitlar

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