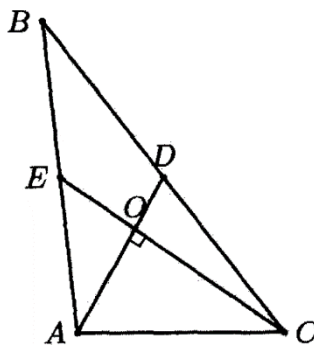


39-Mavzu. Uchburchaklar-3

1. ABC uchburchakda $AB=3$; $BC=4$; $AC=5$ bo'lsa, A burchak kosinusini toping.
A) $\frac{3}{5}$ B) $\frac{3}{7}$ C) $\frac{1}{5}$ D) $\frac{2}{5}$
2. To'g'ri burchakli uchburchakning gipotenuzasiga tushirilgan balandlik uni 4 va 2,25 ga teng kesmalarga ajratadi. Uchburchakning katta katetini toping.
A) 5 B) 3,75 C) 4,5 D) 6
3. Uchburchakning ikki tomoni 2 va 4 bo'lib, ular orasidagi burchak 30° , uchburchak yuzini toping.
A) 3 B) 6 C) 4 D) 2
4. Agar uchburchakning ikkita qo'shni tomonlari 6 va 8, ular orasidagi burchagi kosinusi $\frac{3}{5}$ bo'lsa, uning yuzini toping.
A) 38,4 B) 19,2 C) 14,4 D) 28,8
5. ABC uchburchakda $\angle A=30^\circ$ $AB=4$, $AC=\sqrt{3}$ bo'lsa, uchburchakning A uchidan tushirilgan AD balandligini toping.
A) $\frac{3\sqrt{21}}{7}$ B) $\frac{2\sqrt{21}}{7}$ C) $\frac{4\sqrt{21}}{7}$ D) $\frac{\sqrt{21}}{7}$
6. ABC uchburchakda $\angle A = 30^\circ$; $AB = \sqrt{3}$; $AC = 6$ ga teng. A uchidan tushirilgan balandlik uzunligini toping.
A) $\frac{\sqrt{7}}{7}$ B) $\frac{2}{7}\sqrt{7}$ C) $\frac{3}{7}\sqrt{7}$ D) $\frac{4}{7}\sqrt{7}$
7. Tomonlarining uzunliklari 13;11 va 8 ga teng uchburchakning katta balandligini toping.
A) $2\sqrt{30}$ B) $\frac{8\sqrt{30}}{11}$ C) $\frac{8\sqrt{30}}{13}$ D) $\sqrt{30}$
8. Teng yonli uchburchakning asosi a ga, uchidagi burchagi α ga teng. Uchburchakning yon tomoniga tushirilgan balandligini toping.
A) $\frac{a}{2 \sin \frac{\alpha}{2}}$ B) $a \cdot \cos \frac{\alpha}{2}$ C) $a \cdot \sin \frac{\alpha}{2}$ D) $\frac{a \cdot \operatorname{tg} \frac{\alpha}{2}}{2}$
9. ABC muntazam uchburchak ichida olingan M nuqtaqdan uning tomon-larigacha masofalar yig'indisi $9\sqrt{3}$ ga teng bo'lsa, ABC uchburchak yuzini toping.
A) $80\sqrt{3}$ B) $84\sqrt{3}$ C) $64\sqrt{3}$ D) $81\sqrt{3}$

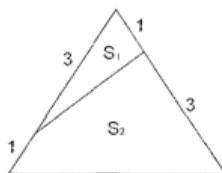
10. Balandliklari 4, 6, 4 bo‘lgan uchburchakning yuzini toping.
A) 12 B) 4,5 C) $9\sqrt{2}$ D) $4,5\sqrt{2}$
11. Tomonlari 11, 12 va $\sqrt{241}$ ga teng bo‘lgan uchburchakning katta tomoniga tushirilgan medianasi uzunligini toping .
A) 8 B) 8,5 C) 9,5 D) 10
12. Uchburchak tomonlari 4,5,6 ga teng bo‘lsa, uning kichik medianasi uzunligini qanchaga teng?
A) $\frac{1}{2}\sqrt{46}$ B) $\sqrt{46}$ C) $\frac{1}{2}\sqrt{106}$ D) $\frac{1}{2}\sqrt{79}$
13. Uchburchakning 6 va 8 ga teng medianalari o‘zaro 90° burchak ostida kesishadi. Uchburchakning uchinchi tomoniga o‘tkazilgan mediana uzunligini toping.
A) 10 B) 5 C) 15 D) 20
14. Uchburchakning uzunligi 54 va 72 ga teng bo‘lgan medianalari o‘zaro perpendikulyar, uchinchi medianasi uzunligi qanday bo‘ladi?
A) 75 B) 80 C) 90 D) $54\sqrt{3}$
15. Rasmda ABC uchburchak va uning o‘zaro perpendikulyar AD va CE medianalari tasvirlangan. Agar $AB=8$ va $BC=10$ bo‘lsa, AC ni toping.



- A) $2\sqrt{\frac{42}{5}}$ B) $2\sqrt{\frac{43}{5}}$ C) $4\sqrt{2}$ D) $2\sqrt{\frac{41}{5}}$

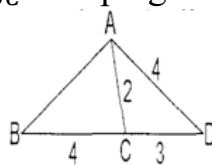
16. Uchburchakning ikkita medianasi uni 3 ta uchburchak va bitta to‘rtburchakka ajratadi. Agar to‘rtburchak yuzi 12 ga teng bo‘lsa, berilgan uchburchak yuzini toping.
A) 36 B) 48 C) 24 D) 40

17. $x + 2y - 6 = 0$ to‘g‘ri chiziq va koordinata o‘qlari bilan chegaralangan uchburchakning yuzini toping.
A) 3 B) 6 C) 9 D) 18
18. Agar uchburchakning asosi 20% uzaytirilib, balandligi 30% qisqartirilsa, uning yuzi qanday o‘zgaradi?
A) o‘zgarmaydi B) 16% kamayadi C) 4% ortadi D) 9% kamayadi
19. Uchburchakning ikkita medianasi o‘zaro perpendikulyar bo‘lib, uzunliklari 8 va 9 ga teng bo‘lsa, uchburchakning yuzi qanday bo‘ladi?
A) 24 B) 48 C) 72 D) 96
20. Uchburchakda medianalar kvadratlarining yig‘indisini tomonlar kvadratlari yig‘indisiga nisbati nechaga teng?
A) $\frac{3}{4}$ B) $\frac{2}{3}$ C) $\frac{1}{2}$ D) $\frac{5}{9}$
21. Uchburchakning yuzi uning medianalari o‘rtalarini tutashtirishdan hosil bo‘lgan uchburchak yuzidan necha marta katta?
A) 9 B) 12,25 C) 16 D) 36
22. Rasmda berilganlarga ko‘ra $\frac{S_1}{S_2}$ nisbatni toping.



- A) $\frac{2}{5}$ B) $\frac{3}{7}$ C) $\frac{4}{9}$ D) $\frac{3}{13}$

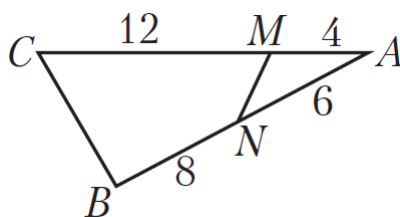
23. Rasmda berilganlarga ko‘ra S_{ABC} ni toping.



- A) $4\sqrt{15}$ B) 4 C) $\sqrt{15}$ D) $\frac{3\sqrt{15}}{4}$

24. ABC uchburchakning BC tomonida D nuqta olingan. Agar $BD=16$, $DC=4$ va $AB=AD=10$ bo‘lsa, ADC uchburchakning yuzini toping.
A) 10 B) 12 C) 14 D) 16

25. ABC uchburchakning BC tomonida D nuqta olingan. Agar $BD=12$, $DC=4$ va $AB=AD=10$ bo'lsa, ADC uchburchakning yuzini toping.
A) 10 B) 12 C) 14 D) 16
26. To'g'ri burchakli $\triangle ABC$ ning AB gipotenuzasiga C uchdan o'tkazilgan CO mediana va CE balandliklar nisbatini $BO:BE=5:1$ kabi bo'lganda aniqlang.
A) $\frac{2}{3}$ B) $\frac{5}{2}$ C) $\frac{5}{3}$ D) $\frac{7}{2}$
27. Uchburchakning 10 ga teng balandligi uning asosini 10 va 4 ga teng kesmalarga ajratadi. Uchburchakning qolgan ikki tomonidan kichigiga o'tkazilgan mediana uzunligini toping.
A) 12 B) 14 C) 11 D) 13
28. ABC to'g'ri burchakli uchburchakda E nuqta BC tomonini $BE:EC = 3:1$ kabi nisbatda bo'ladi. D nuqta esa AB gipotenuzada yotadi. Agar $BD=8$, $AC=12$ va $\angle BAC=60^\circ$ bo'lsa, BDE uchburchak yuzini toping.
A) $18\sqrt{3}$ B) 48 C) 36 D) $24\sqrt{3}$
29. ABC uchburchakda $\angle A=120^\circ$, $AB=2$ va $AC=8$ bo'lsa, AD bissektrisini toping.
A) 1,6 B) $2\sqrt{3}$ C) 3,2 D) $\sqrt{3}$
30. Rasmda AMN uchburchak yuzi 9 m^2 ga teng bo'lsa, ABC uchburchakning yuzini toping.



- A) 56 m^2 B) 84 m^2 C) 112 m^2 D) 60 m^2

Kalitlar

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