



STEREOMETRIYA

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Ushbu masalalar to'plami abituriyentlar, maktab va litsey o'quvchilari, mustaqil shug'ullanuvchilar uchun mo'ljallangan. Ushbu kitob masalalar to'plami bo'libgina qolmay, ish daftari sifatida ham foydalaniladi. Mavzu so'ngidagi QR code yordamida mavzuga doir testlarni telegram tarmog'i orqali rasmiy botimizda yechishingiz mumkin.

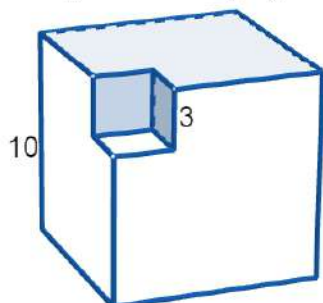
Ushbu qo'llanma haqidagi fikrlaringizni quyidagi QR code orqali yuborishingiz mumkin



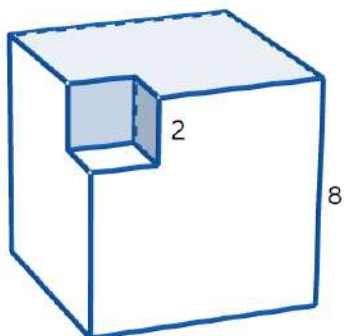
2. Kub

- | | |
|--|--|
| 1 Kubning yoqlari soni va uchlari soni yig'indisini toping. | 7 To'la sirtining yuzi 150 bo'lgan kubning qirralari yig'indisini toping. |
| 2 Kubning yoqlari soni va qirralari soni ko'paytmasini toping. | 8 To'la sirtining yuzi 90 ga teng bo'lgan kub asosining yuzini toping. |
| 3 Qirralari yig'indisi 36 ga teng bo'lgan kub asosining yuzini toping. | 9 To'la sirtining yuzi 600 ga teng bo'lgan kubning hajmini toping. |
| 4 Qirralari yig'indisi 48 ga teng bo'lgan kubning to'la sirtini toping. | 10 Qirralari yig'indisi 24 ga teng bo'lgan kub hajmini toping. |
| 5 Qirralari yig'indisi 72 ga teng bo'lgan kubning hajmini toping. | 11 Hajmi 8 ga teng bo'lgan kubning to'la sirti yuzini toping. |
| 6 Asosining yuzi 16 ga teng bo'lgan kubning to'la sirti yuzini toping. | 12 Hajmi 216 ga teng bo'lgan kubning qirralari yig'indisini toping. |

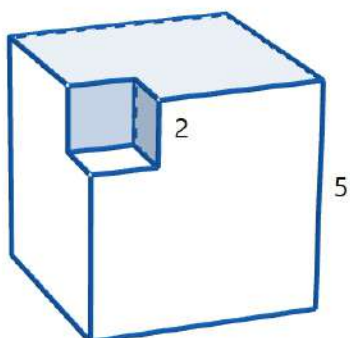
- 37 Chizmada katta kubdan kichik kub qirqib tashlangan. Hosil bo'lgan jism hajmini toping.



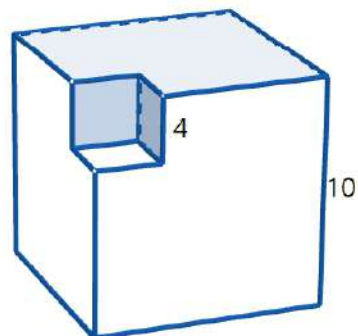
- 38 Chizmada katta kubdan kichik kub qirqib tashlangan. Hosil bo'lgan jism hajmini toping.



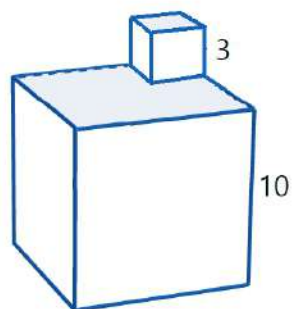
- 39 Chizmada katta kubdan kichik kub qirqib tashlangan. Hosil bo'lgan jismning to'la sirti yuzini toping.



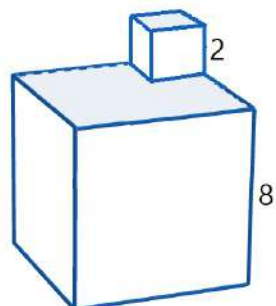
- 40 Chizmada katta kubdan kichik kub qirqib tashlangan. Hosil bo'lgan jismning to'la sirti yuzini toping.



- 41 Chizmada katta kubning ustiga kichik kub qo'yilgan. Hosil bo'lgan jismning to'la sirti yuzini toping.

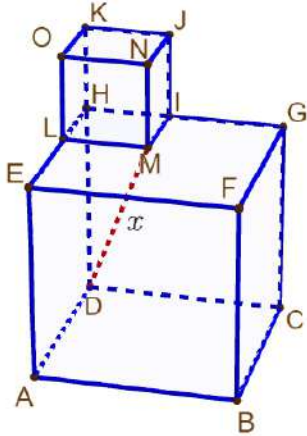


- 42 Chizmada katta kubning ustiga kichik kub qo'yilgan. Hosil bo'lgan jismning to'la sirti yuzini toping.

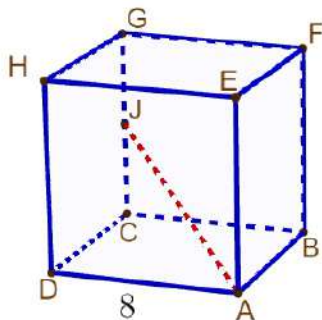


2. KUB

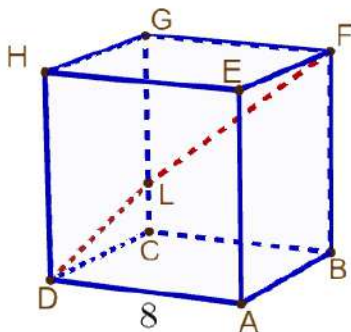
- 43 ABCDEFGH va HIJKLMNO kublar;
 $AE:LO=4:1$; $V_1 + V_2 = 520$; MD-?



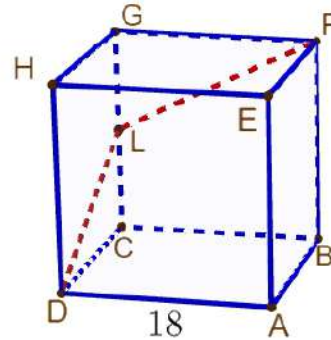
- 44 ABCDEFGH-kub; $AD=8$; $CJ:JG=3:1$; AJ-?



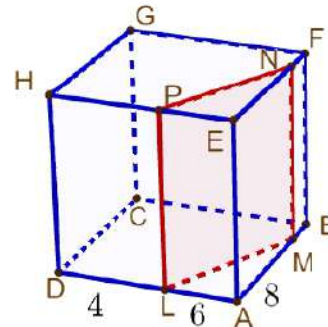
- 45 ABCDEFGH-kub; $AD=8$; $(FL + LD)_{min}$ -?



- 46 ABCDEFGH-kub; $AD=18$; $(FL + LD)$ eng kichik qiymat qabul qilsa, BL-?



- 47 ABCDEFGH-kub; $DL=4$; $LA=6$; $MA=8$; $LP \parallel MN$; S_{LPMN} -?



- 48 Kubning ikki qo'shni yog'ining ayqash diagonallari orasidagi burchakni toping.

6. PIRAMIDA

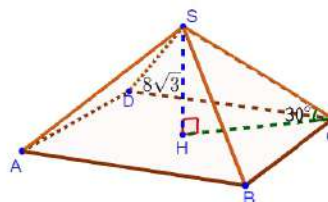
9 Muntazam to'rtburchakli piramida apofemasi 8 ga, yon qirradi 10 ga teng. Piramida asosi yuzini toping.

10 Muntazam to'rtburchakli piramida apofemasi 12 ga, yon qirradi 15 ga teng. Piramida asosi perimetrini toping.

11 Muntazam uchburchakli piramida yon qirradi 5 ga, apofemasi 4 ga teng. Piramida asosi yuzini toping.

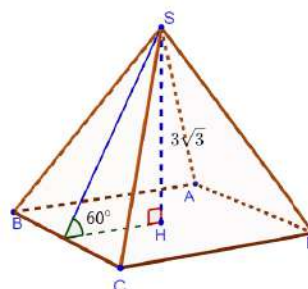
12 Muntazam uchburchakli piramida yon qirradi 17 ga, apofemasi 15 ga teng. Piramida asosi yuzini toping.

13 Muntazam to'rtburchakli piramidada: SH-balandlik; $SH=8\sqrt{3}$; $\angle SCH = 30^\circ$; $S_{ABCD}=?$



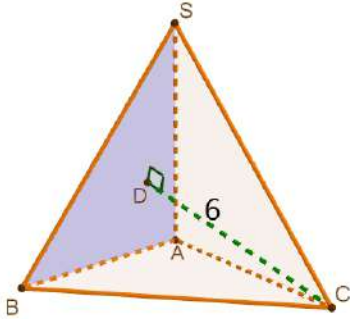
14 Muntazam to'rtburchakli piramidaning balandligi asosining tomonidan $\sqrt{2}$ marta kichik. Piramidaning barcha yon qirralari asos tekisligi bilan qanday burchak tashkil etadi?

15 Muntazam to'rtburchakli piramidada: SH-balandlik; $SH=3\sqrt{3}$. Asosidagi ikki yoqli burchagi 60° . Piramida apofemasini toping.



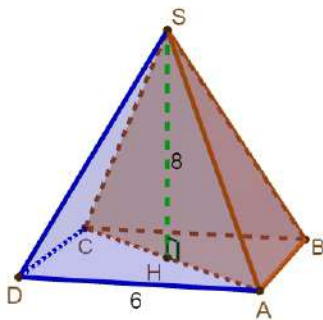
7. PIRAMIDA HAJMI VA KESIK PIRAMIDA

- 27 $S_{SAB} = 20$; $CD=6$; $V=?$



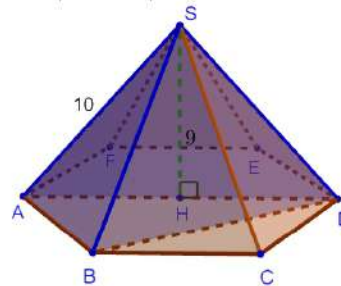
- 28 SABC uchburchakli piramidaning SAC yog'ining yuzi 30 ga teng. B nuqtadan SAC yoqqacha masofa 5 ga teng bo'lsa, piramida hajmini toping.

- 29 SABCD muntazam to'rtburchakli piramida. $DA=6$; SH-balandlik; $SH=8$; $V_{SABC}=?$

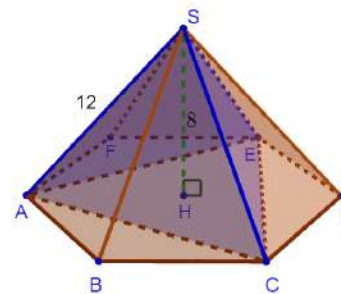


- 30 SABCDE muntazam beshburchakli piramida berilgan. Piramida asosining tomoni 8 ga, balandligi esa 6 ga teng. SABC piramida hajmini toping.

- 31 SABCDEF muntazam oltiburchakli piramida: $SH=9$; $SA=10$; $V_{SABD}=?$

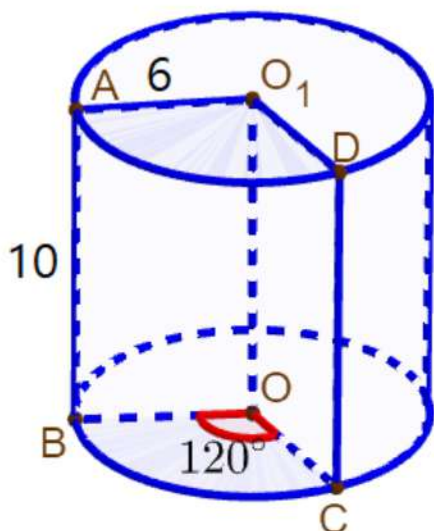


- 32 SABCDEF muntazam oltiburchakli piramida: $SH=8$; $SA=12$; $V_{SACE}=?$

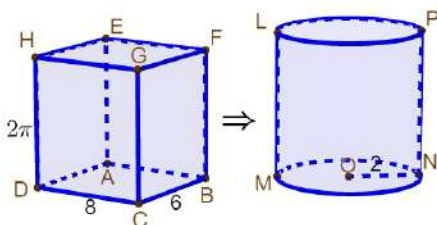


8. SILINDR

- 42 $AB=10$; $AO_1 = 6$; $\angle AO_1D = 120^\circ$; $BOCADO_1$ silindr bo'lagining hajmini toping.

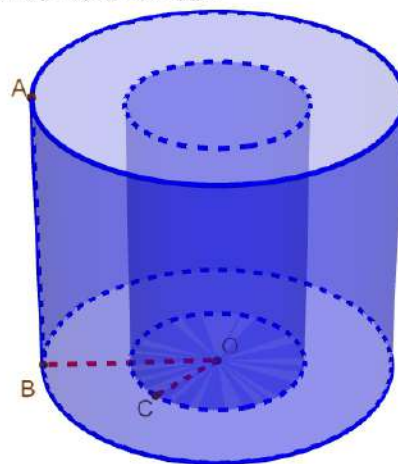


- 43 Qirralari $2\pi, 6, 8$ bo'lgan to'g'ri burchakli parallelepiped eritilib, radiusi 2 ga teng silindr yasaldi. LM -?



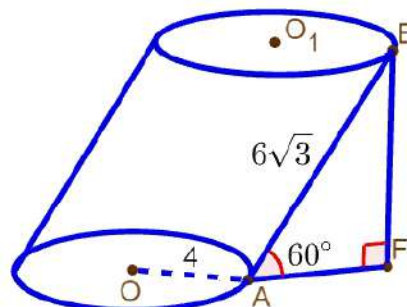
- 44 O'lchamlari 9; 6; 3π ga teng bo'lgan to'g'ri burchakli parallelepiped ko'rinishidagi metall eritilib, radiusi 3 ga teng bo'lgan silindr shakliga keltirildi. Silindrning balandligini toping.

- 45 $OB=6$ dm, $OC=3$ dm, $AB=\frac{30}{\pi}$ dm. Metall quvurlar orasini suv bilan to'ldirish uchun necha litr suv zarur bo'ladi?



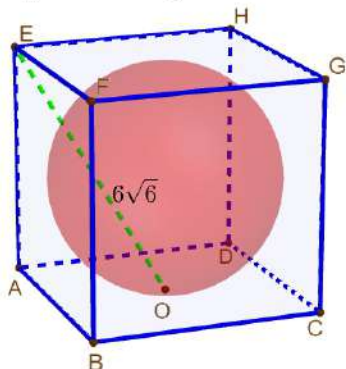
- 46 Radiuslari 2 dm va 4 dm, balandligi esa $\frac{20}{\pi}$ dm bo'lgan metall quvurlar ichma ich joylashgan. Quvurlar orasini suv bilan to'ldirish uchun necha litr suv zarur bo'ladi?

- 47 Og'ma silindrda: $AB = 6\sqrt{3}$; $OA = 4$; $\angle BAF = 60^\circ$; V -?



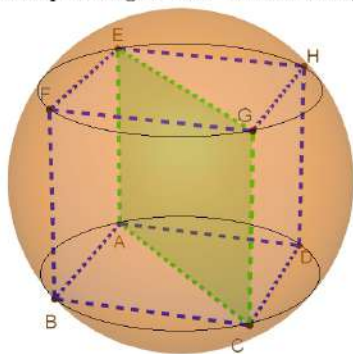
11. JISMLARNING KOMBINATSIYALARI: PRIZMA VA SHAR, PRIZMA VA SILINDR

- 11 ABCDEFGH-kub. O-asos markazi. $EO = 6\sqrt{6}$; Kubga ichki chizilgan shar radiusini toping.



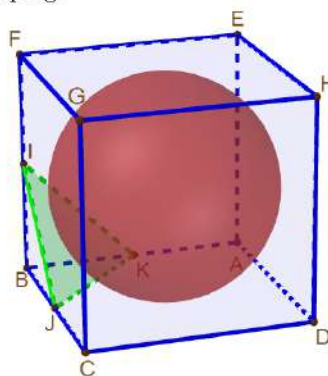
- 12 Kub ustki asosi uchidan ostki asosning markazigacha bo'lgan masofa $8\sqrt{6}$ ga teng. Kubga ichki chizilgan shar sirtining yuzini toping.

- 13 ABCDEFGH-kub. $S_{AEGC} = 48\sqrt{2}$; Kubga tashqi chizilgan shar to'la sirtining yuzini toping.



- 14 Kub diagonal kesimining yuzi $24\sqrt{2}$ ga teng. Kubga tashqi chizilgan shar to'la sirtining yuzini toping.

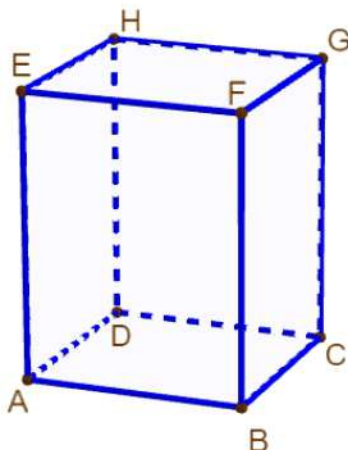
- 15 J,I,K - mos qirralarining o'rtalari; $S_{IJK} = 9\sqrt{3}$; Kubga ichki chizilgan shar sirtining yuzini toping.



- 16 Kubning bir uchidan chiqqan qirralari o'rtalarini tutashtirishdan hosil bo'lgan uchburchak yuzi $16\sqrt{3}$ ga teng. Bu kubga ichki chizilgan shar hajmini toping.

14. ENG KATTA VA ENG KICHIK QIYMAT TOPISHGA OID GEOMETRIK MASALALAR

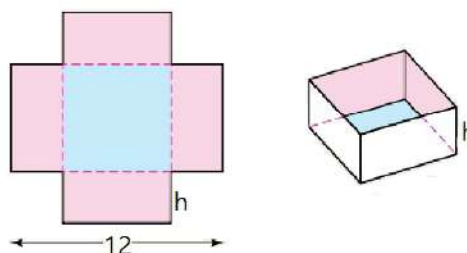
- 31 To'g'ri burchakli parallelepipedda: ABCD-kvadrat; $S_{to'la} = 150$; $V_{ABCDEFGH}$ ning eng katta qiymatini toping.



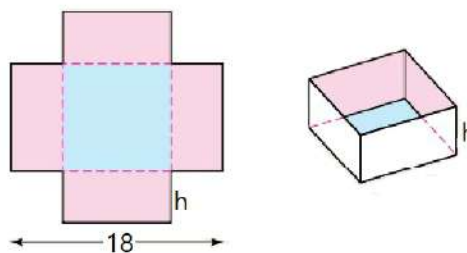
- 32 To'la sirti yuzi 600 ga teng bo'lgan to'g'ri burchakli parallelepiped asosi kvadratdan iborat. Parallelepiped hajmining eng katta qiymatini toping.

- 33 To'la sirti yuzi 2400 ga teng bo'lgan to'g'ri burchakli parallelepiped asosi kvadratdan iborat. Parallelepiped hajmining eng katta qiymatini toping.

- 34 Tomoni 12 ga teng bo'lgan kvadratning chetlaridan tomoni h ga teng bo'lgan kvadratchalar qirqib olinib, qolgan qismidan quticha yasaldi. Qutichaning hajmi eng katta bo'lishi uchun qirqib olingan kvadratchalar tomoni qanday bo'lishi kerak?



- 35 Tomoni 18 ga teng bo'lgan kvadratning chetlaridan tomoni h ga teng bo'lgan kvadratchalar qirqib olinib, qolgan qismidan quticha yasaldi. Qutichaning hajmi eng katta bo'lishi uchun qirqib olingan kvadratchalar tomoni qanday bo'lishi kerak?



14. ENG KATTA VA ENG KICHIK QIYMAT TOPISHGA OID GEOMETRIK
MASALALAR

JAVOBLAR

1.	$\frac{25}{4}$	28.	$\frac{405}{4}$	57.	$\frac{256}{27}$
2.	$\frac{81}{4}$	29.	200	58.	288π
3.	25	30.	1125	59.	16
4.	12	31.	125	60.	16
5.	16	32.	1000	61.	$6\sqrt{2}$
6.	20	33.	8000	62.	$4\sqrt{3}$
7.	$\sqrt{34}$	34.	2	63.	8
8.	5	35.	3	64.	4
9.	$\sqrt{149}$	36.	5	65.	8
10.	$\frac{25}{2}$	37.	4	66.	24
11.	$\frac{81}{2}$	38.	8	67.	$\frac{64}{3}$
12.	50	39.	10	68.	$\frac{512}{3}$
13.	8	40.	1000	69.	72
14.	$\frac{9}{2}$	41.	216	70.	4π
15.	18	42.	8000	71.	128π
16.	$8\sqrt{3}$	43.	8	72.	120π
17.	$18\sqrt{3}$	44.	4	73.	$16\sqrt{3}\pi$
18.	$50\sqrt{3}$	45.	6	74.	10
19.	36	46.	10	75.	2
20.	64	47.	8	76.	$9\sqrt{3}$
21.	100	48.	6	77.	8
22.	$9\sqrt{3}$	49.	54π	78.	12
23.	$16\sqrt{3}$	50.	128π	79.	$64\sqrt{3}$
24.	$25\sqrt{3}$	51.	2000π	80.	$8\sqrt{3}$
25.	50	52.	96π	81.	$216\sqrt{3}$
26.	200	53.	54π	82.	216
27.	450	54.	150π	83.	36
		55.	4	84.	144
		56.	32		

Mavzuga doir testlarni yechish uchun QR code ni skanerlang
yoki suratga olib, @idcuzbot ga yuboring.

