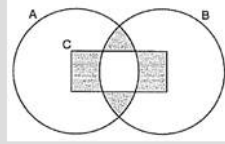




- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30
- 31
- 32
- 33
- 34
- 35
- 36
- 37
- 38
- 39
- 40

1. Quyidagilardan qaysi biri bo'yalgan sohaga teng?



$(A \cap B) \cup C$

$(A \cup B \cup C) \setminus (A \cap B \cap C)$

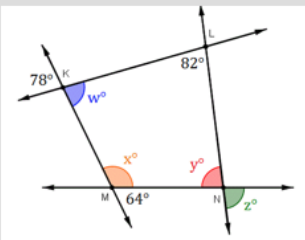
$((A \cap B) \cup C) \setminus (A \cap B \cap C)$

$(A \cap B) \setminus C$

◀ Oldingi savol      Keyingi savol ▶

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30
- 31
- 32
- 33
- 34
- 35
- 36
- 37
- 38
- 39
- 40

2.



Berilgan chizmadan  $z^\circ$  ning gradus o'lchamini toping.

84

72

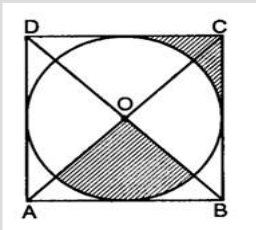
76

86

◀ Oldingi savol      Keyingi savol ▶

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

3.  $O$  markazli aylana tomoni 8 ga teng bo'lgan  $ABCD$  kvadratga ichki chizilgan bo'lsa, bo'yalgan sohani yuzini toping.



16

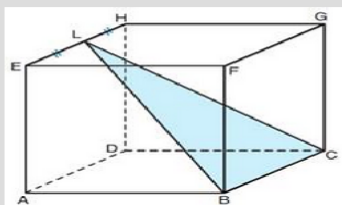
24

32

12

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

4.



$$EL = LH$$

rasmda berilgan kubdagi  $BCL$  uchburchakning perimetri 16 sm ga teng bo'lsa, **bu uchburchakning yuzasini  $sm^2$  da hisoblang.**

16

$8\sqrt{2}$

$10\sqrt{2}$

$6\sqrt{2}$

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

5. Kasrni maxrajini irratsionallikdan qutqaring:  $\frac{4}{\sqrt{2} - \sqrt{3} + \sqrt{5}}$

$\frac{(\sqrt{10}+2)(\sqrt{2}-\sqrt{3}+\sqrt{5})}{3}$

$\frac{(\sqrt{10}+2)(\sqrt{2}+\sqrt{3}+\sqrt{5})}{3}$

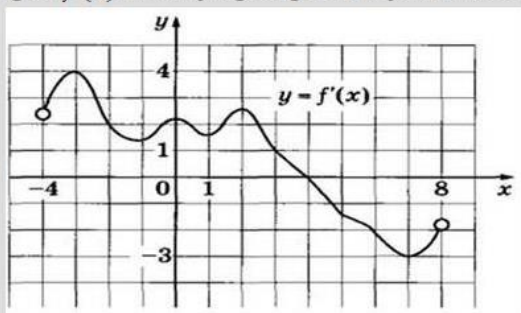
$\frac{(\sqrt{10}-2)(\sqrt{2}-\sqrt{3}+\sqrt{5})}{3}$

$\frac{(\sqrt{10}-2)(\sqrt{2}+\sqrt{3}+\sqrt{5})}{3}$

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

6.  $[-4;8]$  oraliqda berilgan  $f'(x)$  funksiya grafigidan foydalanib shu oraliqda  $f(x)$  funksiya faqat kamayadigan barcha  $x$

lar yeg'indisini toping.

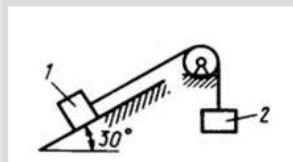


- 4
- 4
- 26
- 26

◀ Oldingi savol    Keyingi savol ▶

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

7. 1-jism  $1\text{ m}$  balandlikka ko'tarilganda 2-jism necha metr pastga tushadi?



- 0,25 m
- 0,5 m
- 1 m
- 2 m

◀ Oldingi savol    Keyingi savol ▶



8. Rasmdagi parallelepipedning barcha yoqlari bo'yaldi va alohida kubchalarga ajratildi. Ikki yog'i bo'yalgan

kubchalar barcha kubchalarning necha foizini tashkil qiladi?



39 %

40 %

36 %

45%

[Oldingi savol](#) [Keyingi savol](#)



9.  $A = \frac{2ab}{xy}$  ifodani 10 li asosga ko'ra logarifmlang.

$lgA = lg2 + (lga + lgb) - (lgx + lgy)$

$lgA = 2(lga + lgb) - lgx - lgy$

$lgA = 2 + (lga + lgb - lgx - lgy)$

$lgA = 2(lga + lgb - lgx + lgy)$

[Oldingi savol](#) [Keyingi savol](#)

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

10. Savollga mos javoblari belgilang

1) O'zgarmas sonning hosilasi \_\_\_\_ . 2) Chiziqli funktsiyaning hosilasi – \_\_\_\_ .

3) Kvadrat funktsiyaning hosilasi – \_\_\_\_ .

4) Ko'rsatkichli funktsiyaning hosilasi – \_\_\_\_ .

a) ko'rsatkichli funktsiya

b) o'zgarmas son

c) nol

d) chiziqli funktsiya

1-c, 2-b, 3-d, 4-a

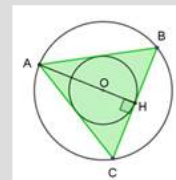
1-a, 2-b, 3-c, 4-d

1-c, 2-a, 3-b, 4-d

1-a, 2-c, 3-d, 4-b

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

11. Berilgan shaklda  $OH = 2\text{ m}$  bo'lsa, katta doira yuzini toping.



$40\pi\text{ dm}^2$

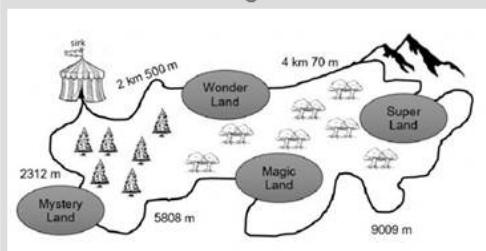
$40000\pi\text{ sm}^2$

$160\pi\text{ dm}^2$

$160000\pi\text{ sm}^2$

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

12. Sirk ustalarining bir martadan barcha shaharlarda tomosha ko'rsatib, yana joyiga qaytishidagi masofani toping?



23 km 6990 m

236990 m

236990 dm

236 km 699 m

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

13. (\*\*\*) belgisi o'rniga kerakli ishorani qo'ying:  $10^9 \text{ *** } 9^{10}$

=

>

~

<

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

14. Diametri bir birlik uzunlikka teng bo'lgan **shar** hajmini toping.

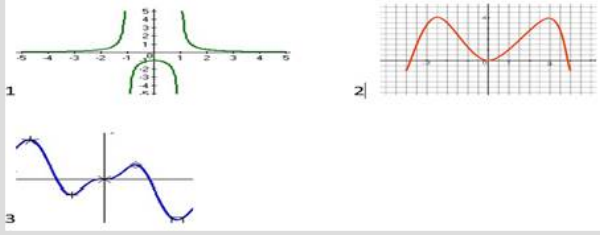
$\frac{3\pi}{2}$

$\frac{2\pi}{3}$

$\frac{\pi}{3}$

$\frac{\pi}{6}$

15. Toq funksiyalarni belgilang.

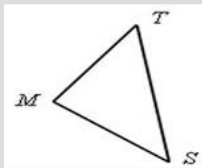


1;2;3

3

1;3

Hech biri



16. Berilgan uchburchak uchun to'g'ri javobni belgilang.

$OT > MT + MS$

$MS > TS - MT$

Barchasi to'g'ri

$MS < TS - MT$



17. Uchburchaklar uchun keltirilgan xususiyatlardan mosini tanlang1)Barcha burchaklari o'zaro teng bo'lgan uchburchak ...

2)Ikkita burchagi o'zaro teng bo'lgan uchburchak ...

3)Barcha burchaklari o'zaro teng bo'lmagan bo'lgan uchburchak ...

a)Teng yonli

b)Turli tomonli

c)Teng tomonli

1 - c; 2 - b; 3 - a

1 - a; 2 - b; 3 - c

1 - b; 2 - c; 3 - a

1 - c; 2 - a; 3 - b

[Oldingi savol](#) [Keyingi savol](#)



18. Integralni hisoblang  $\int \left( \sqrt{x} + \frac{1}{\sqrt{x}} \right) dx$

$2\sqrt{x} \left( \frac{x}{3} + 1 \right) + c$

$2\sqrt{x} \left( \frac{\sqrt{x}}{3} + 1 \right) + c$

$2\sqrt{x} \left( \frac{1}{3} + x \right) + c$

$2\sqrt{3} \left( \frac{1}{3} + x \right) + c$

[Oldingi savol](#) [Keyingi savol](#)



- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

19. Hisoblang:

$$\frac{1^3+2^3}{1+2} + \frac{1^3+2^3+3^3}{1+2+3} + \frac{1^3+2^3+3^3+4^3}{1+2+3+4} + \dots + \frac{1^3+2^3+3^3+\dots+10^3}{1+2+3+\dots+10}$$

217

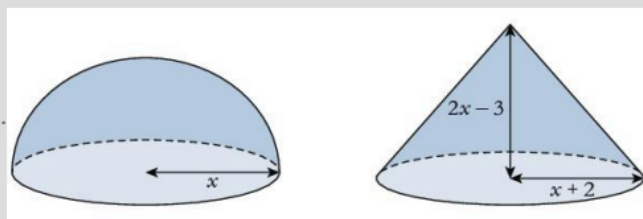
219

209

229

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

20. Ushbu ikkita jismning hajmlari teng bo'lsa  $x$  ni toping.



2

2.4

1.8

1.2

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

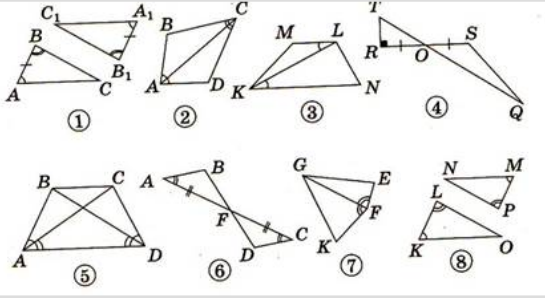
21.

$\sin^2 \alpha + \cos^2 \alpha = \operatorname{tg} \gamma \operatorname{ctg} \gamma$  tenglik to'g'rimi? ( $\alpha \neq \gamma \neq \frac{\pi k}{2}$ ),  $k \in \mathbb{Z}$

Yo'q

Ha

22.



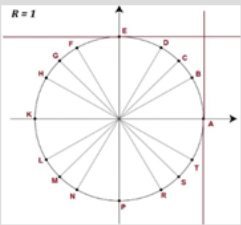
Uchburchaklar tengligining ikkinchi a'lomatiga ko'ra, teng uchburchaklarni ko'rsating

Barchasi to'g'ri

1; 2; 4; 7

1; 2; 5; 6;

1; 5; 6; 8



23. Qaysi nuqta  $765^0$  yoini ifodalaydi?(sanoq boshi A nuqta)

C nuqta

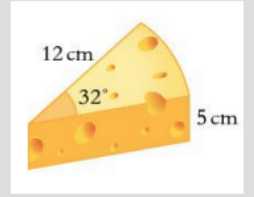
M nuqta

G nuqta

S nuqta

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

24. Ushbu pishloq prizma shaklida bo'lib, asosi radiusi 12 cm va ichki burchagi  $32^\circ$  bo'lgan sektordan iborat. Pishloqning atrofini o'rash uchun kamida necha  $cm^2$  yuzali qadoqlash paketi kerak?  $\pi = 3$  deb oling.



228,4

228,6

256

228,8

[Oldingi savol](#) [Keyingi savol](#)

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

25. Ifodani soddalashtiring:  $(\frac{a}{\sqrt{a} + \sqrt{b}} - \frac{a\sqrt{a}}{a + b + 2\sqrt{ab}}) : (\frac{\sqrt{a}}{\sqrt{a} + \sqrt{b}} + \frac{a}{b - a})$

$\frac{\sqrt{a}(\sqrt{b} - \sqrt{a})}{\sqrt{a} + \sqrt{b}}$

$\frac{\sqrt{a}}{\sqrt{a} + \sqrt{b}}$

$\sqrt{b} - \sqrt{a}$

$\sqrt{a}$

[Oldingi savol](#) [Keyingi savol](#)

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

26. 720 va 1020 sonlarining umumiy natural bo'luvchilar ko'paytmasini toping.

$30^3$

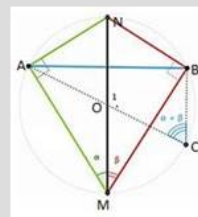
$120^4$

$60^6$

$60^4$

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

27. Bu yeda  $MN$  va  $AC$  aylana diametri, son jihatdan 1 ga teng bo'lsa,  $NA$  ni toping.



$\sin \alpha$

$\cos \alpha$

$\sin(\alpha + \beta)$

0,5

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

28.  $(0;1)$  nuqtadan  $y = x^2$  chiziqqacha bo'lgan eng qisqa masofa bo'lishi mumkin bo'lgan javobni belgilang.

$\frac{\sqrt{2}}{2}$

1

0.5

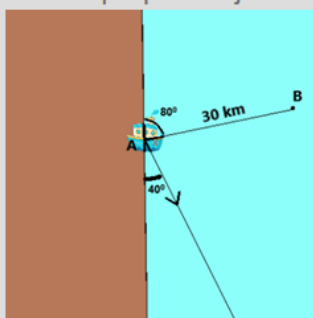
$\frac{\sqrt{3}}{2}$

Oldingi savol Keyingi savol

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

29. Kema A nuqtadan soat 12:00 da 20 km/soat tezlik bilan chizmada ko'rsatilgan yo'nalishda harakatlana boshladi. Kema harakati mobaynida B orolga kater orqali pochta jo'natishi kerak. Kater energiyani maksimum tejashi uchun

soat nechada yo'lga chiqishi kerak?



13:00

13:30

12:45

12:30

Oldingi savol Keyingi savol

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

30. Yurish musobaqasida Bahrom  $2^{5^2}$  qadam, Shoxrux esa  $8^{2^3}$  marta qadam bosdi. Kim ko'proq va necha marta ko'p qadam bosgan?

Shoxrux 2 marta

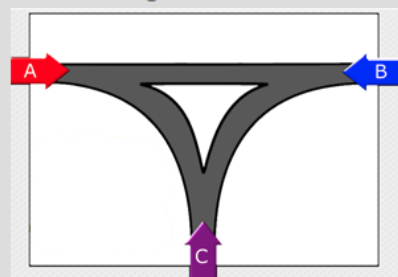
Bahrom 8 marta

Bahrom 2 marta

Aziz 4 marta

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

31. Quyidagi uchtalik yo'l kesishmasida har bir yo'nalishdan keladigan A,B va C mashinalar teng ehtimolliklar bilan o'ngga yoki chapga buriladi. Hech bir mashina to'qnashmasligi ehtimolini toping.



0,5

0,125

0,375

0,25

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

32. Beilgan ( $b_n$ ) geometrik progressiyada  $b_1; 10; b_3; b_4; 80$  ketma ketlik bajarilsa  $b_4$  ni toping.

40

30

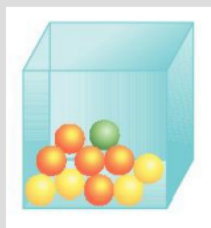
20

60

◀ Oldingi savol Keyingi savol ▶

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

33. Qutida 5 ta apelsin rang, 4 ta sariq va bitta yashil sharcha bor. Aliga yashil sharcha kerak. U sharchalarni birin-ketin qaytarib qutiga solmasdan toki yashil shar chiqquncha bittadan ola boshladi. Unga faqat 3 marta tanlash imkoniyati berilsa, Alining yashil sharchaga ega bo'lish ehtimolini toping.



$\frac{121}{720}$

0,3

0,2

$\frac{242}{720}$

◀ Oldingi savol Keyingi savol ▶



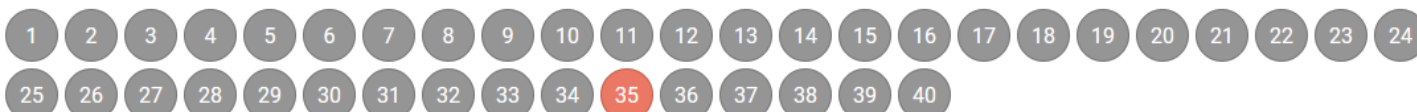
34. Berilgan  $(a_n)$  arifmetik progressiyada  $S_4 = -28$ ,  $S_6 = 57$  bo'lsa,  $S_{16}$  ni toping.

1132

1152

1122

1142



35. Fermer har kuni to'rt dona bolalar bog'chasini sut bilan ta'minlaydi. Birinchi bolalar bog'chasiga barcha sutning yarmi va yana 10 kg, ikkinchi bolalar bog'chasiga qolgan sutning yarmi va yana 10 kg, uchinchisiga ham qolgan sutning yarmi va yana 10 kg sut topshirilganidan so'ng oxirgi bolalar bog'chasiga 50 kg sut qoldi. Fermerda jami qancha sut bo'lgan ?

720

100

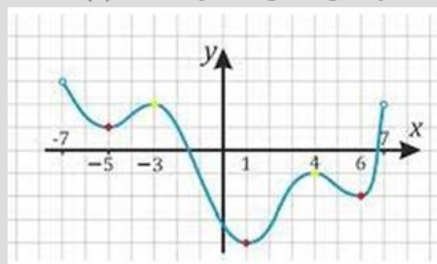
540

280



36. Rasmda,  $[-7;7]$  oraliqda berilgan  $F(x)$  funksiya grafigidan foydalanib  $f(x)$  funksiyaning nolga aylantiruvchi

qiymatlari sonini toping. ( $F(x)$  funksiyaning hosilasi  $f(x)$  funksiyadir)



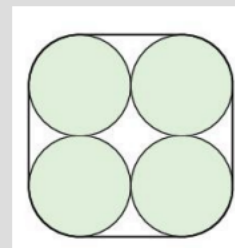
5 ta

3 ta

2 ta

7 ta

37. To'rtta diametri 10 cm bo'lgan g'ildirak bir-biriga ulandi va atrofi arqon bilan mahkam o'raldi. Arqonning uzunligini necha cm?



$80 + 20\pi$

$80 + 40\pi$

$40 + 10\pi$

$40 + 20\pi$

38. Hisoblang  $13i^{13} + 15i^{15}$   
 ( $i$  – kompleks son)

$28i$

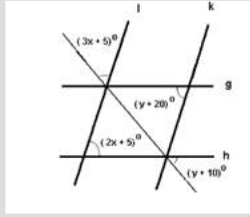
$-28i$

$-2i$

$2i$

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

39. Agarda  $l//k$ ,  $g//h$  bo'lsa  $x + y$  ni toping.



$80^\circ$

$45^\circ$

$60^\circ$

$75^\circ$

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

40.  $10! + 1$  soni 11 ga bo'linadimi?

Yo'q

Ha

Telegram: <https://t.me/ustoz>