**11-sinflar uchun Matematika**

1.  sonning oxirgi ikkita raqamini toping.

A) 13 B) 03 C) 63 D) 83

2. Doiraga ichki chizilgan kvadrat undan yuzasi  ga teng bo‘lgan segmentni ajratadi. Kvadratning yuzasini toping.

A) 8 B) 4 C) 2 D) 16

3.  uchburchakka aylana tashqi chizilgan. Uchburchakning  medianasi aylana bilan  nuqtada kesishguncha davom ettirilgan. Agar  bo‘lsa,  tomonini toping.

A) 12 B) 15 C) 14 D) 16

4. Ifodaning oxirgi raqamini aniqlang: 

A) 0 B) 1 C) 3 D) 6

5.  tenglama nechta ildizga ega?

A) 1 B) 2 C) 3 D) 4

6. Koordinata boshidan o‘tuvchi, simmetriya o‘qi ordinata o‘qiga parallel, cho‘qqisi  va  to‘g‘ri chiziqlar kesishgan nuqtada bo‘lgan parabolaning tenglamasini toping.

A)  B)  C)  D) 

7.  funksiyaning qiymatlar to‘plamini toping.

A)  B)  C)  D) 

8.  tengsizlik yechimlari joylashgan interval uzunligini toping.

A) 0,25 B) 0,75 C) 0,125 D) 0,5

9. 2, 3, 4, 5, 6, 7, 8, 9, 10 sonlariga bo‘lganda mos ravishda 1, 2, 3, 4, 5, 6, 7, 8, 9 qoldiqlar hosil bo‘ladigan eng kichik natural sonni toping.

A) 5039 B) 1019 C) 1519 D) 2519

10.  sonining oxirgi raqamini toping.

A) 3 B) 0 C) 5 D) 7

11. Tenglamani yeching: 

A) (-2;1) B) (2;1) C) (1;-2) D) (1;-2)

12.  tenglamaning ildizlari yig‘indisini toping.

A) 10 B) -6 C) 6 D) -2

13.  va  bo‘lsa,  ifodaning eng kichik qiymatini toping.

A)  B)  C)  D) 2

14.  bo‘lsa,  nimaga teng?

A) 3 B) 5 C) 9 D) 7

15. -to‘g‘ri burchakli uchburchakning katetlari va -gipotenuzaga tushirilgan balandligi bo‘lsa,  yig‘indini toping.

A)  B)  C)  D) 

16. Beshyulduzning uchidagi burchaklarining yig‘indisini toping.

A) 1800 B) 2400 C) 2700 D) 900

17. To‘g‘ri burchakli uchburchakka ichki va tashqi chizilgan aylanalar radiuslari 2 va 5 ga teng. Katetlarning yig‘indisini toping.

A) 7 B) 14 C) 12 D) 9

18.  tenglama nechta natural yechimga ega?

A) 1 B) 2 C) 3 D) 4

19. Agar f(g(x))= − x+13 bo`lsa, f(x) va g(x) to`g`ri chiziqlar orasidagi burchakni toping.

A)$\frac{π}{4}$ B) $\frac{π}{3}$ C) $\frac{π}{2}$ D) 0

20. a+b=−1 a+c=6 vab+c=1 bo`lsa,

$a^{2}\left(3b+3c+2a\right)+b^{2}\left(3a+3c+2b\right)+c^{2}(3a+3b+2c)$ = ning son qiymatini toping.

A)45 B) 27 C) 100 D) 216

21. Ifodanisoddalashtiring.$1-\frac{\frac{1}{\sqrt{a-1}}-\sqrt{a+1}}{\frac{1}{\sqrt{a+1}}-\frac{1}{\sqrt{a-1}}}$ :$\frac{\sqrt{a+1}∙\sqrt{a^{2}-1}}{\left(a-1\right)\sqrt{a+1}-(a+1)\sqrt{a-1}}$

A) 0 B) 1+$\sqrt{a+1}$C) 1−$\sqrt{a-1}$ D) $\sqrt{a^{2}-1}$

22. Bir savdogar 1 mеtrini 1200 tiyindan olgan matosini yuvib, kuritgandan so`ng 1800 tiyindan sotyapti. Mato yuvilib kuritilganidan so`ng 20 foizi qisqardi. Bularga ko`ra savdogar nеcha foiz foyda ko`radi?

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

23. $\left|x^{2}+2x-8\right|=3a$ tenglama a ning qanday qiymatlarida 3 ta haqiqiy yechimga ega bo`ladi.

A) a=3 B) (0;3) C) 1<a<3 D) a>3, a=0

24. Tenglamaniyeching:$\left|x^{2}-3x-2\right|=x^{2}+3\left|x+2\right|+4$

A) [−2;∞) B) (−∞;−2]C) [−2;0] D) [2;∞)

25.Tenglamaniyeching: $\frac{ctg^{2}x+4ctgx}{5cos^{2}x-4cosx}=0$

A) πk; −arcctg4+πk; k$\in Z$

B) arccos0,8+2πk; k$\in Z$

C) πk; π−arcctg4+πk; k$\in Z$

D) π −arcctg4+πk; k$\in Z$

26. Asosi$\sqrt[3]{18}$ ga teng bo`lgan muntazam to`rtburchakli piramidaning uchidan o`tkazilgan kesma asos tomonini 2:4 nisbatda bo`ladi va asos tekisligi bilan 60o li burchakhosilqiladi. Piramidahajmini toping.

A) 6 B)$\sqrt{10}$ C) 12$\sqrt{30}$ D) $\sqrt{30}$

27. Agar 2a =27, 3c=16 bo’lsa a ∙ 𝑐ningqiymatini toping.

A)10 B)13 C)11 D)12

28. *GH*kesmani O nuqta, G nuqtadanboshlabhisoblaganda, 5 : 7 kabi, *P* nuqtaesa 5:11 kabinisbatdabo’ladi.Ova*P*nuqtalarorasidagimasofa 30 smbo’lsa, *GH*kesmaninguzunligini toping.

A) 288 B) 18 C) 72 D) 324

29. Bitta tekislikda yotuvchi n ta turli tog`ri chiziq o`tkazilgan. Ularning ixtiyoriy ikkitasi parallel emas va ixtiyoriy uchtasi bitta nuqtadan o`tmaydi ,ya`ni bitta nuqtada kesishmaydi. Bu to`g`ri chiziqlar tekislikni 1276 qismga ajratadi. n ni aniqlang?

A) 51 B) 49 C) 50 D) 52

30. Radiusi 6 ga teng bo`lgan uchta aylana o`zaro tashqi urinishidan hosil bo`lgan egri chiziqli uchburchakka ichki chizilgan aylana radiusini toping.

A) $6-2\sqrt{3}$ B) 4$\sqrt{3}-6$C) 2$\sqrt{2}$−1 D) 1

31. ABCD tetraedrning D uchidagi barcha yassi burchaklari to`g`ri. Shu tetraedrda kub shunday ichki chizilganki, kubning bitta uchi D nuqtada, unga qarama−qarshi uchi esa ABC yoqda yotibdi. Agar DA=5, DB=6 va DC=10 bo`lsa, kub qirrasining uzunligini toping.

A) $\frac{25}{12}$ B) $\frac{15}{7}$ C) 2 D) 2$\sqrt{2}$

32. $f\left(x\right)=\frac{x^{3}}{3}-x^{2}-35x+2$ funksiya uchun f `(x)=0 bo`lsa x ni toping.

A) 5va7 B) −7va 5 C) −5 va 7 D) −7 va −5

33. $y=log\_{\frac{2}{3}}\left|6x-8\right|$ funksiyaning aniqlanish sohasini toping.

A) $\left(\frac{2}{3};\infty \right)$B) $\left(-\infty ;\frac{2}{3}\right)∪\left(\frac{2}{3};\infty \right)$

C) $\left(-\infty ;\frac{4}{3}\right)∪\left(\frac{4}{3};\infty \right)$D) $\left(-\infty ;\frac{4}{3}\right)$

34. Perimetri 4 gao`tkirburchagi 30oga vashuburchakqarshisidagitomoni$\sqrt{3}$ ga teng bo`lgan uchburchakka ichki chizlgan aylana radiusini toping.

A)$4\sqrt{3}+7$ B) $\frac{\sqrt{3}-1}{2}$ C) $\frac{1+\sqrt{3}}{2}$ D) $7-4\sqrt{3}$

35. y=$\frac{1}{\sqrt[3]{x^{2}}}+x\sqrt[3]{x^{2}}$−$5^{x}+2$ funksiyaning boshlang`ich funksiyasini toping.

A) 3$\sqrt[3]{x}+\frac{3}{8}x^{2}\sqrt[3]{x^{2}}$−$5^{x}+2x+C$

B) 3$\sqrt[3]{x}+\frac{3}{8}x^{2}\sqrt[3]{x^{2}}$−$5^{x}ln5+2x+C$

C) $\sqrt[3]{x}+3x^{2}\sqrt[3]{x^{2}}$−$5^{x}+2x+C$

D) 3$\sqrt[3]{x}+\frac{3}{8}x^{2}\sqrt[3]{x^{2}}$−$\frac{5^{x}}{ln5}+2x+C$

36. Agar $lg5=a va lg3=b$ bo`lsa, $log\_{30}8$ ni toping.

A) 1+b B) 3(1−a) C) 3(1−a)(1+b) D) $\frac{3(1-a)}{1+b}$

37. f(x)=70cosxcos6x uchunboshlang`ichfunksiya toping.

A) 7cos5x−5cos7x+c B) −7cos5x−5cos7x+cC) 7sin5x+5sin7x+C D) 7sin5x−5sin7x+c

38. y=6sin2x+sin12x funksiyaninghosilasini toping.

A) 24sin5xcos7x B) −24sin7xcos5xC) 24cos7xcos5x D) 24sin7xsin5x

39. tengsizlikniyeching.$log\_{\sqrt{3}}\left(2x-1\right)<log\_{\sqrt{3}}\left(x^{2}+6x+9\right)$

A) $\left(\frac{2}{3};2\right)$ B) $\left(\frac{5}{3};2\right)$ C) $\left(\frac{1}{2};\infty \right)$ D) $\left(\frac{4}{3};3\right)$

40. 3cos2x-3$\sqrt{3}$sin2x=0 trigonometrik tenglamani yeching.

A$) \frac{π}{12}+\frac{πk}{2}; k\in Z$) $B) \frac{π}{6}+πk; k\in Z$ $C)\frac{π}{12}+2πk; k\in Z$

D) $\frac{π}{12}+πk; k\in Z$

11 синф

Javoblar

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| Savol | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| T.javob | C | D | B | A | D | A | B | A | D | A | A | A | C | D | A | A | B | A |

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