

1. 8;6;4;5;2;3 raqamlari yordamida 800 dan kichik nechta natural son tuzish mumkin.

A) 222 B) 226 C) 248 D) 250

2. 15161718....39404142 sonining raqamlari yig'indisini toping. A) 200 B) 190 C) 195 D) 205

3. Kamayuvchi 10 taga kamayib, ayiriluvchi 25 ta ortsa, ayirma qanday o'zgaradi.

A) 15 ta kamayadi B) 35 ta kamayadi
C) 15 ta ortadi D) 35 ta ortadi

4. Soatning minut ko'rsatgichi 45⁰ ga burilganda soat ko'rsatgichi necha gradusga buriladi.

A) 3 B) 3,7 C) 3,75 D) 3,6

5. $\frac{3x+1}{2x+1} = \frac{3}{2}$ tenglamani bajaring.

A) 2 B) 3 C) yechimi yo'q D) cheksiz ko'p

6. $a=(1-0,1)^2$; $b=1-0,1^2$; $c=1-0,1$ sonlarni o'sish tartibida joylashtiring. A) $a < b < c$ B) $a < c < b$ C) $b < a < c$ D) $c < b < a$

7. $2^a \cdot 3^b = 18^6$ tenglikda a va b natural sonlar uchun $a+b$ ning qiymatini toping. A) 27 B) 6 C) 24 D) 18

8. $f(2x-3) = \frac{x+3}{x-2}$ bo'lsa, $f(f(5))$ ning qiymatini toping.

A) 4 B) 3,5 C) 5 D) 3,25

9. 327^{418} sonining oxirgi raqamini toping.

A) 7 B) 8 C) 9 D) 6

10. $\begin{cases} \frac{x+1}{2-x} < 0 \\ x \leq 1 \end{cases}$ tengsizliklar sistemasini bajaring.

A) $(2; \infty)$ B) $(-\infty; -1)$ C) $(-1; 1]$ D) $[1; 2)$

11. $\frac{x^3}{x-2} \leq \frac{16x}{x-2}$ tengsizlikning butun yechimlari yig'indisini toping. A) -10 B) -3 C) 3 D) 10

12. a ning 18 % i, 60 ning $\frac{3}{5}$ qismniga teng. A ning 0,1 qismi 15 dan qanchaga ortiq A) 20 B) 15 C) 5 D) 10

13. Besh xonali $x734y$ soni 55 ga qoldiqsiz bo'lsa, x ning qabul qiladigan qiymatlari yig'indisini toping. A) 8 B) 3 C) 5 D) 11

14. Uzunligi $8\frac{3}{20}$ m ga teng bo'lgan simdan $3\frac{17}{20}$ m qismi qirildi. Qolgan qismi qirilgan qismidan necha m katta A) $54/20$ B) $9/20$ C) $114/20$ D) $86/20$

15. Agar $a+b=4$ va $ab=-2$ bo'lsa, $a^2b^4+a^4b^2$ ni hisoblang. A) 48 B) 64 C) 80 D) 96

16. 1, 3, 5 raqamlaridan foydalanib raqamlari takrorlanadigan nechta ikki xonali son tuzish mumkin. A) 6 B) 3 C) 9 D) 8

17. $5/33$ sonini o'nli kasr ko'rinishida tasvirlanganda verguldan keyingi 1997 raqamni toping. A) 1 B) 5 C) 7 D) 9

18. 1, 2, 3, 4, 5, 6 raqamlaridan raqamlar takrorlanadigan nechta uch xonali 3 ga bo'linadigan son tuzish mumkin.

A) 48 B) 72 C) 108 D) 96

19. $\frac{\sqrt{72}+\sqrt{50}+\sqrt{32}}{\sqrt{2}}$ ning qiymatini toping.

A) 15 B) 7 C) 13 D) 17

20. x^2-y^2-x+y ni ko'paytuvchilarga ajrating.

A) $(x-y)(y-1-x)$ B) $(x-y)(x-1-y)$
C) $(x-y)(x+1+y)$ D) $(x-y)(x-1+y)$

21. $\frac{|5x-8|}{x} = -7$ tenglama ildizini toping.

A) -1 B) -4 C) $2/3$ D) -3

22. G'ildirak 4 minutda 18,4 marta aylansa, 15 minutda necha marta aylanadi? A) 69 B) 80 C) 276 D) 68

23. Agar $a+b$ soni 6 ga qoldiqsiz bo'linsa, $37a+19b$ ni 6 ga bo'lgandagi qoldiqni toping? A) 1 B) 3 C) 0 D) 5

24. Merganning bitta otgan o'qining nishonga tegishi ehtimoli 0,6 ga teng bo'lsa, otilgan ikkita o'qning bittasi nishonga tegishi ehtimolini toping. A) 0,6 B) 0,36 C) 0,24 D) 0,48

25. $\frac{512 \cdot (2^6)^4}{(2^5)^{5 \cdot 64}} \cdot (4^{-2})^{-2} \cdot 8^{-4}$ ning qiymatini toping.

A) 1 B) 0,5 C) 0,25 D) 0,75

26. Soddashtiring. $(-6a-5b)-(-4b-7a)$

A) $a+b$ B) $-a-b$ C) $a-b$ D) $b-a$

27. $\left(1-\frac{1}{4}\right)\left(1-\frac{1}{5}\right) \dots \left(1-\frac{1}{8}\right)\left(1-\frac{1}{9}\right)x = \frac{8}{3}$

Tenglamani bajaring. A) $8/15$ B) 8 C) 4 D) 9

28. Merganning bitta otgan o'qining nishonga tegishi ehtimoli 0,8 ga teng bo'lsa, otilgan ikkita o'qning bittasi nishonga tegishi ehtimolini toping. A) 0,8 B) 0,16 C) 0,32 D) 0,64

29. $3,6 \cdot 4,8 + 5,4 \cdot 3,6 + 4,8 \cdot 9,2 - 4,8 \cdot 5,6$ ni hisoblang. A) 36 B) 48 C) 54 D) 92

30. Tengsizlikni bajaring. $\frac{2x+1}{x+6} \leq 1$

A) $[-6; 0,5]$ B) $(-\infty; 5]$ C) $(-6; 5]$ D) $(-0,5; 5]$

31. Hisoblang. $1 - \frac{1}{1 - \frac{1}{1 - \frac{1}{6}}}$

A) $6/5$ B) $-6/5$ C) -6 D) 6

32. 520 sonini 20% ga oshirib, so'ng natijaning 25% ini toping. A) 150 B) 170 C) 176 D) 156

33. Ikkita turli lavozimga 7 ta odamdan necha xil usul bilan joylashtirish mumkin? A) 42 B) 21 C) 14 D) 49

34. Hisoblang. $0,07 \cdot 10^{-7} \cdot 0,31 \cdot 10^{10}$

A) 217 B) 21,7 C) 2,17 D) 0,217

35. -1,6 soniga qarama - qarshi bo'lgan son $3/4$ dan qanchaga ko'p A) 0,85 B) 0,75 C) 0,95 D) 1,05

36. Ikki sonning EKUK va EKUB lari ko'paytmasi 280 ga teng bo'lsa, bu ikki sonning ko'paytmasi 31 sonidan qanchaga ko'p? A) 249 B) 239 C) 259 D) 269

37. $\frac{\sqrt{32}+\sqrt{50}-\sqrt{72}}{\sqrt{2}}$ ning qiymatini toping.

A) 3 B) 15 C) 4 D) 5

38. Qutida M,E,H,N,A,T harflari bor. Tavakkaliga olingan harflardan "MEHNAT" so'zi hosil bo'lish ehtimolini toping.

A) 1/120 B) 1/24 C) 1/720 D) 1/6

39. Mis va ruh qotishmasi 12 kg. Mis qotishmaning 40 %ini tashkil etadi. Ruh qotishmaning 80 %ini tashkil etishi uchun qotishmaga necha kg ruh qo'shish kerak?

A) 12,8 B) 9,4 C) 9,6 D) 12

40. Mis va ruh qotishmasi 18 kg. Mis qotishmaning 70 %ini tashkil etadi. Ruh qotishmaning 40 %ini tashkil etishi uchun qotishmaga necha kg ruh qo'shish kerak?

A) 2 B) 3 C) 4 D) 5

41. Agar $95n$ biror sonning kvadrati bo'lsa, $n+18$ ning eng kichik qiymatini toping. A) 23 B) 37 C) 103 D) 113

42. 3 ta merganning nishonga tekkazish ehtimoli 0,7; 0,6; 0,9 ga teng bo'lsa, birinchi va uchinchi merganlarning nishonga tekkizish, ikkinchisidagi tekmasligi ehtimolini toping.

A) 0,378 B) 0,252 C) 0,748 D) 0,622

43. $|x-3| < 4$ tengsizlikning butun yechimlari nechta.

A) 6 B) 7 C) 8 D) 9

44. $(-20):[-4-(-2)\cdot 3]$ ning qiymatini toping.

A) -24 B) -20 C) -10 D) 10

45. $|5x-2| = 4-3x$ tenglamaning haqiqiy ildizlari nechta.

A) 0 B) 1 C) 2 D) 3

46. Alida 36000 so'm, Valida 24000 so'm pul bor. Vali Aliga pulining necha foizini bersa, Alining puli Valining pulidan ikki marta ko'p bo'ladi? A) 25 B) 50/3 C) 100/3 D) 50

47. Agar $27,3 \cdot 10^{n+1} = 0,0000273$ bo'lsa, n ning qiymatini toping. A) -6 B) -7 C) -5 D) -4

48. $0 < a < 10$ sonlar orasida nechta tub son mavjud

A) 4 B) 5 C) 3 D) 6

49. 59,08 sonining xona birliklari bo'yicha yoyilmasini toping

A) $5 \cdot 10^1 + 9 \cdot 10^0 + 8 \cdot 10^{-1}$ B) $5 \cdot 10^1 + 9 \cdot 10^0 + 8 \cdot 10^{-3}$
C) $5 \cdot 10^1 + 9 \cdot 10^0 + 8$ D) $5 \cdot 10^1 + 9 \cdot 10^0 + 8 \cdot 10^{-2} + 0 \cdot 10^{-1}$

50. 243^{521} sonning birlar xonasidagi raqamini toping

A) 1 B) 9 C) 7 D) 3

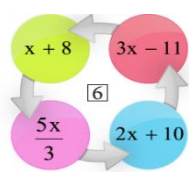
51. Demirning hozirgi yoshi 4 yildan keyingi yoshidan 3 marta kichik bo'lsa uning ikki yildan keyingi yoshini toping

A) 3 B) 4 C) 6 D) 8

52. Sinfidagi o'quvchilarning 20 % qizlar bo'lib, ular og'il bolalardan 12 ta kam bo'lsa, sinfdan nechta o'quvchi bor.

A) 20 B) 10 C) 15 D) 40

53. Doiralardagi qiymatlar yig'indisi 6 ga teng bo'lsa, x ning qiymatini toping



A) -3/23

B) 3/23 C) 5/23 D) -1/23

54. $A+B$ ning qiymatini toping

$$A = 5 \cdot 10^1 + 2 \cdot 10^{-1} + 5 \cdot 10^{-2} + 3 \cdot 10^{-3}$$

$$B = 6 \cdot 10^0 + 7 \cdot 10^{-1} + 6 \cdot 10^{-2}$$

A) 12 B) 12,3

C) 12,03

D) 57,013

55. tenglikdan

▲ ve ■ ning ko'paymasini toping

$$1,608 = 1 \cdot 10^0 + \text{▲} \cdot 10^{-1} + \text{■} \cdot 10^{-3}$$

A) 48 B) 24 C) 16 D) 49

56. $\frac{4}{\sqrt{5}-\sqrt{3}} + \frac{4}{\sqrt{5}+\sqrt{3}}$ ni soddalashtiring.

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

57. $\frac{3}{\sqrt{3}-\sqrt{2}} + \frac{3}{\sqrt{3}+\sqrt{2}}$ ning qiymatini toping.

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

58. $\sqrt{6-4\sqrt{2}} + \sqrt{7+2\sqrt{10}} + 2 - \sqrt[4]{25}$ ning qiymatini toping. A) 5 B) 0 C) -3 D) 4

59. Xaritaning masshtabi 1:50000 ga teng. Agar daryoning ikki sohili orasidagi masofa 200 m bo'lsa, xaritada bu masofa necha mm ga teng bo'ladi A) 0,4 B) 4 C) 40 D) 1

60. 10 ga bo'lganda 3 qoldiq qoladigan raqamlari takrorlanmaydigan 3 xonali sonlar nechta.

A) 120 B) 84 C) 64 D) 75

61. Agar $5537a2$ soni 18 ga qoldiqsiz bo'linsa, a ning qiymatini toping. A) 1 B) 5 C) 3 D) 7

62. Agar $m:n:p=1:3:5$ va $2n-m+3p=60$ bo'lsa, n ning qiymatini toping. A) 3 B) 15 C) 9 D) 21

63. Tengsizlikni bajaring. $(13-x)(x+4)(2x+5) < 0$

A) $(-4; -2,5)(13; \infty)$ B) $(-2,5; 13)$

C) $(-\infty; -4)(-2,5; 13)$ D) $(-4; -2,5)$

64. $\left(\frac{1}{2-\sqrt{3}} - \frac{1}{2+\sqrt{3}}\right) \cdot (\sqrt{12} - \sqrt{75})$ ning qiymatini toping.

A) -18 B) -6 C) 18 D) 6

65. $13 + \frac{13}{2-x} < 0$ tengsizlikni bajaring.

A) $(-2; 13]$ B) $(2; 13)$ C) $(2; 3)$ D) $(2; 3]$

66. $\left(\sqrt{2-\sqrt{3}} + \sqrt{2+\sqrt{3}}\right)^2$ ning qiymatini toping.

A) 4 B) 2 C) 6 D) 9

67. $3n+1$ sonining 60%i 51 ga teng bo'lsa, n ning qiymatini toping. A) 26 B) 27 C) 28 D) 29

68. Hisoblang. $\sqrt{98 \cdot 0,02 \cdot 2,25}$

A) 2,15 B) 2,25 C) 2,3 D) 2,1

69. $f(x-2)=2x-1$ va $g(x+2)=3x-2$ bo'lsa, $f(-1)+g(1)$ ning qiymatini toping. A) -5 B) -4 C) -3 D) -2

70. Agar $x = \sqrt{45} - \sqrt{18}$ va $y = \sqrt{80} + \sqrt{32}$ bo'lsa, $x \cdot y$ ning qiymatini toping.

A) $3\sqrt{5}$ B) $3\sqrt{5} - 4\sqrt{2}$ C) 12 D) 36

71. Agar $x^2=2019$ bo'lsa, $(x-3)(x+3)$ ning qiymatini toping. A) 2018 B) 2017 C) 2012 D) 2010

72. Hisoblang. $(2 - \sqrt{5})^2 \cdot (9 + 4\sqrt{5})$

A) 1 B) 4 C) 25 D) 29

73. $(x+3)^2 - (x-5)^2 = 256$ tenglamani bajaring.

A) 13 B) 17 C) 16 D) 15

74. $|2x - 1| + |2 - 4x| + |6x - 3| = 48$ tenglamaning ildizlari yig'indisini toping. A) 1 B) 2 C) 3 D) 4

75. Agar $3^x=90$ bo'lsa, $|x - 4| + |7 + x|$ ning qiymatini toping. A) $2x-11$ B) $11-2x$ C) -11 D) 11

