

Test

1. $\frac{4}{5} + \frac{1-\frac{3}{4}}{\frac{1}{4}} - \left(2\frac{1}{5} - \frac{2}{5}\right)$ ning qiymatini toping.

- A) -4/5 B) 1/5 C) 8/5 D) -8/5

2. 96 sonining natural bo`lvuchilari yig`indisini toping.

- A) 120 B) 124 C) 160 D) 252

3. $\frac{x+2}{x} \cdot \frac{1}{1-\frac{4}{x^2}}$ ifodani soddalashtiring

- A) $\frac{1}{x-2}$ B) $\frac{x}{x-2}$ C) $\frac{x-2}{x}$ D) x

4. Agar $1 < x < 2$ bo`lsa, $|x-1| - |2-x|$ ning qiymatini soddalashtiring. A) -1 B) 1 C) 2x-3 D) 3-2x

5. $\frac{3-x}{2x-1} \geq 0$ tengsizlikni bajaring.

- A) $[0,5;3)$ B) $(0,5;3]$ C) $[0,5;3]$ D) $x < 0,5; x \geq 3$

6. $\begin{cases} (x+3)(x+2) \leq (x+4)(x-1) + 5 \\ 2(5x-1) \geq 3(3x-2) \end{cases}$ tengsizliklar

sistemasining butun yechimlari yig`indisini toping.
A) -6 B) -7 C) -8 D) -9

7. $1 < x < 5$ bo`lsa, $|2x-1| + |2x-10|$ ning yig`indini soddalashtiring. A) 4x-11 B) 11-4x C) -9 D) 9

8. $(0,04)^2 \cdot (0,05)^{-3} \cdot (0,007)^4 = 2^a \cdot 5^b \cdot 7^c$

tenglamada a, b va c butun sonlar bo`lsa, a-b-c ni toping.
A) 0 B) 4 C) 5 D) 3

9. $\frac{(5-x)^2 \cdot (1-x)}{x+1} \geq 0$ tengsizlikning eng katta va eng kichik butun qiymatlari ayirmasini toping. A) 4 B) 5 C) 6 D) 1

10. $\left(\frac{x}{y} + \frac{y}{x} + 2\right) \left(\frac{x}{y} + \frac{y}{x} - 2\right) \cdot \frac{x^3 y^3}{(x^2 - y^2)^2}$ ni soddalashtiring.

- A) 1 B) xy C) 1:xy D) x/y

11. a-b=3 va ab=5 bo`lsa, $a^3 - b^3$ ning qiymatini toping.

- A) 18 B) 20 C) -18 D) 72

12. $7,2(1)-4,4(2)+31/90$ ning qiymatini toping.

- A) 3,1(3) B) 3,1(2) C) 2,1(3) D) 2,1(2)

13. Do`kon 3 kunda jami 175 kg kartoshka sotdi. Agar ikkinchi kun uchinchi kunga nisbatan 1,5 marta ko`p, birinchi kun esa ikkinchi kunga nisbatan 2,4 marta kam kartoshka sotgan bo`lsa, do`kon birinchi kun necha kilogramm kartoshka sotgan?

- A) 35 B) 44 C) 56 D) 27

14. Ifoda qiymatini toping. $(\sqrt{4-\sqrt{7}} + \sqrt{4+\sqrt{7}})^2$

- A) 7 B) 14 C) 11 D) 22

15. Quyidagi sonlarni o`sish tartibida joylashtiring

$$a=6; b=4\sqrt{2}; c=2\sqrt{10}$$

- A) a < b < c B) c < b < a C) b < a < c D) c < a < b

16. $(\sqrt{7} + 1 - \sqrt{3})(\sqrt{7} + \sqrt{3} - 1)$ ifodani soddalashtiring.

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

17. Sotuvchi ikki mahsulotdan birini 40% foya bilan 840 so`mga, boshqasini 40% zarar bilan 840 so`mga sotgan bo`lsa, sotuvchining tijorati haqida nima deyish mumkin?

- A) 300 so`m foya B) 300 so`m zarar
C) 320 so`m foya D) 320 so`m zarar

18. $\frac{\sqrt{3}-1}{\sqrt{15}-\sqrt{5}+\sqrt{3}-1} - \frac{\sqrt{7}+1}{\sqrt{35}-\sqrt{7}+\sqrt{5}-1}$ ning qiymatini soddalashtiring. A) 0,5 B) 2 C) -2 D) -0,5

19. $y = \sqrt{1-x} + \sqrt{x+3}$ funksiya aniqlanish sohasini nechta butun son qanoatlantiradi. A) 3 B) 4 C) 5 D) 1

20. $f(x) = 2x - 5$ bo`lsa, $f(g(x)) = \frac{2x+3}{x-5}$ bo`lsa, g(2) ni toping. A) 4/3 B) 3/4 C) -4/3 D) -3/4

21. Agar $\frac{a}{b} = 7 - \sqrt{40}$ bo`lsa, $\frac{\sqrt{a}-\sqrt{5b}}{\sqrt{b}}$ ni toping.

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

22. 12 va 39 sonlarining har birini qanday songa oshirsak, birinchisi ikkinchisining 50 % iga teng bo`ladi?

- A) 12 B) 15 C) 16 D) 20

23. Agar $a+b=3$ va $ab=-1$ bo`lsa, $a^2b^4+a^4b^2$ ni hisoblang.

- A) 12 B) 11 C) 18 D) 13

24. $\sqrt{6-4\sqrt{2}} + \sqrt{7+2\sqrt{10}} + 2 - \sqrt[4]{(-5)^2}$ ni hisoblang.

- A) 5 B) 0 C) 4 D) -3

25. 20 kg eritmaning 10% i tuzdan iborat. Tuz miqdori 8% bo`lishi uchun unga qancha kg chuchuk suv qo'shish kerak? A) 3 B) 4 C) 5 D) 6

26. Agar $x^2+y^2=281$ va $x-y=\sqrt{201}$ bo`lsa, xy ko`paytmaning qiymatini toping. A) -80 B) -160 C) 80 D) 40 E) 160

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

28. Tuyaning chanqoq holatidagi og`irligining 84 % suvdan iborat. Suv ichganidan keyin uning og`irligi 800 kg va og`irligining 85 % suvdan iborat bo`ldi. Tuyaning chanqoq vaqtidagi massasi qancha. A) 720 B) 715 C) 750 D) 680

29. Ikki sonning yig`indisi 32 ga, kvadratlar ayirmasi 192 ga teng bo`lsa, shu ikki sonning kvadratlar yig`indisini toping. A) 530 B) 630 C) 570 D) 480

30. $\left|1 + \frac{4-x}{3}\right| = 7$ bo`lsa, tenglamani bajaring.

- A) -22;-20 B) -21;22 C) -14;28 D) -20;22

31. $\sqrt{22+12\sqrt{2}} + \frac{2\sqrt{2}-1}{\sqrt{2}+1}$ ning qiymatini toping.

- A) $7 + \sqrt{2}$ B) 9 C) 7 D) $9 + \sqrt{2}$

32. $\frac{\sqrt{11}-4}{\sqrt{\sqrt{11}-3}-1} - \frac{\sqrt{11}-12}{\sqrt{\sqrt{11}-3}-3}$ ni toping.

- A) -2 B) 4 C) -4 D) 2

33. $\sqrt{28-10\sqrt{3}} - \frac{1}{\sqrt{7+4\sqrt{3}}}$ ning qiymatini toping.

- A) 3 B) 7 C) $3-2\sqrt{3}$ D) $7 - 2\sqrt{3}$

| | | | |
|----|---|----|---|
| 1 | A | 18 | D |
| 2 | D | 19 | C |
| 3 | B | 20 | A |
| 4 | C | 21 | D |
| 5 | B | 22 | B |
| 6 | B | 23 | B |
| 7 | D | 24 | C |
| 8 | D | 25 | C |
| 9 | B | 26 | D |
| 10 | B | 27 | C |
| 11 | D | 28 | C |
| 12 | A | 29 | A |
| 13 | A | 30 | C |
| 14 | B | 31 | C |
| 15 | C | 32 | A |
| 16 | D | 33 | A |
| 17 | D | | |

