

17-Mavzu. Irratsional tenglama va tengsizliklar

1. Tenglamani yeching: $\sqrt{20} - \sqrt{x-3} = \sqrt{5}$
A) 16 B) 8 C) 18 D) yechimi yo‘q
2. $(16 - x^2)\sqrt{3-x} = 0$ tenglama ildizlari yig‘indisini toping.
A) 0 B) -1 C) 3 D) 4
3. $(9 - x^2) \cdot \sqrt{2-x-x^2} = 0$ tenglamani yeching.
A) 2;-1 B) -2 C) -2;1 D) 1
4. $\sqrt{100-x} \cdot \sqrt{x-100} \cdot \sqrt{99-x} \cdot \sqrt{x-99} \cdot \sqrt{98-x} \cdot \sqrt{x-98} = 0$
tenglamaning nechta ildizi bor?
A) 3 B) 0 C) 2 D) 6
5. Tenglamani yeching: $\sqrt{5x-16} = x-2$
A) 5 B) 4 C) 5;4 D) ildizi yo‘q
6. $\sqrt{5-8x+2x^2} = x-2$ tenglamani yeching.
A) $2 - \sqrt{3}$ B) $\sqrt{14}$ C) $2 + \sqrt{3}$ D) $4 - \sqrt{3}$
7. Tenglamaning butun yechimlari nechta?
$$\sqrt[3]{x+5} + x = 5$$

A) 1 B) 3 C) 2 D) 4
8. $\sqrt{x^2+6x} + \sqrt{1-x} = \sqrt{x+14} + \sqrt{1-x}$ tenglamaning nechta ildizi bor?
A) 0 B) 1 C) 2 D) 3
9. $|\sqrt{2x+2} - 6| = 4$ tenglamaning ildizlari yig‘indisini toping.
A) 79 B) 50 C) 56 D) 51
10. $\sqrt{x^2-7} = \sqrt{x^2+9} - 2$ tenglamani yeching.
A) -4 B) ± 4 C) 3 D) 4
11. $\sqrt{x^2-5x+4} \cdot (x^2-5x+6) = 0$ tenglama nechta turli ildizlarga ega?
A) 4 B) 0 C) 1 D) 2
12. $\sqrt{x^4-16x^2+64} = 1$ tenglama ildizlarining ko‘paytmasini toping.
A) -21 B) -63 C) 21 D) 63

13. $2 - \sqrt{x - \sqrt{x + 8}} = 0$ tenglamaning haqiqiy ildizlari yig'indisini toping.
A) 1 B) 8 C) 9 D) 12
14. Agar $x - \sqrt{x + 3} - 27 = 0$ bo'lsa, $\sqrt{x + 3}$ ning qiymatini hisoblang.
A) 4 B) 5 C) 7 D) 6
15. $x^2 + 11 + \sqrt{x^2 + 11} = 42$ tenglama haqiqiy ildizlari ko'paytmasini toping.
A) -10 B) -18 C) -32 D) -25
16. $x^2 - 3x - 4 = 2\sqrt{x^2 - 3x + 11}$ tenglamaning ildizlari ko'paytmasini toping.
A) -4 B) -11 C) -14 D) -3
17. Tenglamani yeching: $x^2 + x = 0,6(x + 3 - \sqrt{5x^2 + 2x + 1})$
A) 1; -0,6 B) 0,4; 0,6 C) -1; 0,4 D) -1; 0,6
18. $\sqrt{\frac{2x+2}{x+2}} - \sqrt{\frac{x+2}{2x+2}} = \frac{7}{12}$ tenglamani yeching.
A) 7 B) 7; 1,5 C) 7; 2,5 D) -7; 9,5
19. $\sqrt{x + 3 - 4\sqrt{x - 1}} + \sqrt{x + 8 - 6\sqrt{x - 1}} = 1$ tenglamani yeching.
A) [6; 10] B) [4; 8] C) [5; 10] D) [3; 8]
20. $\frac{5}{2} = \sqrt[4]{\frac{x-2}{x+1}} + \sqrt[4]{\frac{x+1}{x-2}}$ tenglamaning ildizlari yig'indisini toping.
A) 2 B) 1 C) 6 D) 5
21. Tenglamani yeching: $\sqrt{-x + 3} + \frac{4}{\sqrt{-x+3+3}} = 2$
A) 1 B) 2 C) -1 D) -2
22. Agar $\sqrt{x + 5} + \sqrt{3x + 4} = 7$ tenglamaning ildizi x bo'lsa, $x^2 + x - 8$ ni toping.
A) -2 B) 4 C) 12 D) 22
23. $\sqrt[6]{x - 8} + \sqrt{10x + 5} = 2$ tenglamaning haqiqiy ildizlari sonini toping.
A) 0 B) 1 C) 2 D) 3
24. $\sqrt[3]{x + 45} - \sqrt[3]{x - 16} = 1$ tenglama ildizlari yig'indisini toping.
A) -39 B) -29 C) 29 D) 49
25. $\sqrt[3]{x} + \sqrt[3]{2x - 3} = \sqrt[3]{12(x - 1)}$ tenglama ildizlari ko'paytmasini toping.
A) 1 B) 2 C) 3 D) 4

Kalitlar

1.	B	16.	C
2.	B	17.	D
3.	C	18.	A
4.	B	19.	C
5.	C	20.	B
6.	C	21.	B
7.	A	22.	C
8.	B	23.	A
9.	B	24.	B
10.	B	25.	C
11.	D		
12.	D		
13.	B		
14.	D		
15.	D		