

12-Mavzu. Tenglamalar sistemasi

1. $x^2 + y^2 + 12x - 2y + 37 = 0$ tenglamani yeching.

A) (6; 1) B) (-6; -1) C) (-6; 1) D) $\emptyset$

2. $|3x+6|+|y-8|=0$ bo'lsa, $x+y$ yig'indi nechaga teng?

A) 2 B) 4 C) 6 D) 7

3. Agar $\sqrt{6x + y - 25} + \sqrt{7x - y - 27} = 0$ bo'lsa, x va y sonlarning ko'paytmasini toping.

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

4. Agar $5a^2 + 4ab - b^2 = 0$ bo'lsa, a ni b orqali ifodalang.

A) $a = -b$; $a = 0,2b$ B) $a = 2b$; $a = 0,2b$ C) $a = b$; $a = -0,2b$ D) $a = b$; $a = 5b$

5. $\begin{cases} x + y = -2, \\ x^2 + y^2 - xy = 1; \end{cases}$ $3xy$ ni toping.

A) 1 B) -1 C) 3 D) -3

6. $\begin{cases} x + y + x^2y + xy^2 = 24, \\ x + y = 5; \end{cases}$ $x^3 + y^3$ ni toping.

A) 78 B) 62 C) 68 D) 42

7. Tenglamalar sistemasini yechib, x ning eng katta qiymatini toping:

$$\begin{cases} x + y = 7, \\ (x^2 - y^2)(x - y) = 175; \end{cases}$$

A) 2 B) 5 C) 6 D) 15

8. $\sqrt{a} - \sqrt{b} = 5$ va $a - b = 30$ bo'lsa, $\sqrt{a} + \sqrt{b}$ nimaga teng?

A) 5 B) 4 C) 6 D) 8

9. $\begin{cases} \frac{1}{x} + \frac{3}{y} = \frac{5}{2}, \\ xy = 3; \end{cases}$ dan x ni toping.

A) $3; \frac{1}{3}$ B) 1 C) $2; \frac{1}{2}$ D) -1

10. Agar $\begin{cases} x^2 + xy + x + y = -2, \\ y^2 + xy + x + y = 1; \end{cases}$ bo'lsa, $x+2y$ ni hisoblang.

A) 5 B) 0 C) -3 D) -1

11. Agar $\begin{cases} m^2 - mn = 60, \\ n^2 - mn = 40; \end{cases}$ bo'lsa $m+n$ ni hisoblang.

A) 10 B) ± 10 C) ± 2 D) 5

12. Agar $\begin{cases} x^2 - 6xy + y^2 = -56, \\ xy = 15; \end{cases}$ bo'lsa, $|x + y| + |x - y|$ ni hisoblang.

A) 12 B) 14 C) 10 D) -4

13. $\begin{cases} x^2 + y^2 = 5 \\ x + y + 3xy = 9 \end{cases}$ bo'lsa, $x - y$ ni toping.

A) ± 2 B) ± 1 C) ± 3 D) $\pm 1,5$

14. $\begin{cases} x^4 + y^4 = 82 \\ xy = 3 \end{cases}$ sistema nechta haqiqiy ildizga ega?

A) 2 ta B) 4 ta C) 6 ta D) 8 ta

15. Agar $\begin{cases} x^3 + 2x^2y + xy^2 - x - y = 2, \\ y^3 + 2xy^2 + x^2y + x + y = 6; \end{cases}$ bo'lsa, $x + y$ ni toping.

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

16. Agar $\begin{cases} 8a^3 - b^3 = 56, \\ 4ab^2 - 8a^2b = -32; \end{cases}$ bo'lsa, $2a-b$ ni toping.

A) $2\sqrt[3]{3}$ B) 2 C) 1 D) -2

17. Agar m va n natural sonlar $\sqrt{5}(n-3) + n^2 - 5mn + 6m = 0$ tenglikni qanoatlantirsa, $2n-m$ ni toping.

A) 5 B) 2 C) -1 D) 4

18. $\begin{cases} x + y = 4, \\ y + z = 5, \\ xz = 6; \end{cases}$ bo'lsa, $x+y+z=?$

A) 7 yoki 2 B) 5 yoki 3 C) 4 yoki 7 D) 6 yoki 5

19. $\begin{cases} xy = 15, \\ yz = 10, \\ xz = 6; \end{cases}$ tenglamalar sistemasidan xyz ni toping.

A) ± 15 B) ± 10 C) ± 30 D) ± 45

20. Agar $\begin{cases} xy + yz = 9, \\ yz + xz = 8, \\ xy + xz = 5; \end{cases}$ bo'lsa, $x+y+z$ ni hisoblang.

A) 9 yoki -9 B) 6 yoki -6 C) 11 D) 22

21. Agar
$$\begin{cases} \frac{ab}{a+b} = 1, \\ \frac{ac}{a+c} = 2, \\ \frac{bc}{b+c} = 3; \end{cases}$$
 bo'lsa, $\frac{ab}{c}$ ning qiymatini toping.

A) $\frac{6}{25}$ B) $-\frac{15}{58}$ C) $\frac{21}{40}$ D) $-\frac{12}{35}$

22.
$$\begin{cases} \frac{xy}{x+y} = \frac{3}{4}, \\ \frac{xz}{x+z} = \frac{5}{6}, \\ \frac{yz}{y+z} = \frac{15}{8}; \end{cases}$$
 sistemadan $x+y+z=?$

A) 9 B) $7\frac{3}{5}$ C) $11\frac{8}{13}$ D) 10

23.
$$\begin{cases} x^2 + y^2 = 2,5xy, \\ x - y = 0,25xy; \end{cases}$$
 tenglamalar sistemasi nechta butun yechimga ega?

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

24.
$$\begin{cases} \frac{12}{\sqrt{x-1}} + \frac{5}{\sqrt{y+\frac{1}{4}}} = 5, \\ \frac{8}{\sqrt{x-1}} + \frac{10}{\sqrt{y+\frac{1}{4}}} = 6; \end{cases}$$
 sistemadan $x+y$ ni toping.

A) 19 B) 23 C) 29 D) 30

25.
$$\begin{cases} 2x^2 + y + 1 = z, \\ z + y - 2x = 1, \\ x^4 + zy - y = 1; \end{cases}$$
 bo'lsa, xyz ni toping.

A) 0 yoki -2 B) 0 yoki 4 C) 0 yoki 2 D) 0 yoki -4

Kalitlar

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