

5-Mavzu. Algebraik ifodalar

1. Birhadning darajasini toping. $-3a^3b^3c^42a^4c^3d$

A) 4 B) 15 C) 18 D) 32

2. Ko'phadning darajasini toping. $3x^3y^2z^3 + 2x^2y^4z^3 - 8xyz$

A) 3 B) 8 C) 9 D) 20

3. Birhadni standart ko'rinishga keltiring: $(0,6y^2x)(-1,3x^2y)$

A) $-0,78x^3y^3$ B) $0,78x^3y^3$ C) $-0,68x^3y^3$ D) $0,68x^3y^3$

4. Ko'phadni standart ko'rinishga keltiring: $2ab + 0,3a^2 - 4ab + 0,7a^2 + 3ab$

A) $a^2 + ab$ B) $0,4a^2 + ab$ C) $a^2 - ab$ D) $0,4a^2 - ab$

5. Soddalashtiring: $3(x - 2y + z) + 5(y - 2z - x)$

A) $2x - 2y + 7z$ B) $-2x - y - 7z$ C) $8x - 2y - 7z$ D) $-8x - 2y + 7z$

6. Ko'phadlar ayirmasini toping: $(4a - 5a^2b + 6b^2) - (7b^2 + 4a^2b - a)$

A) $-9a^2b - b^2 + 5a$ B) $-a^2b - b^2 + 3a$

C) $-9a^2b + 13b^2 + 5a$ D) $-a^2b - 13b^2 + 5a$

7. Agar kamayuvchini 26 ta va ayriluvchini 12 ta kamaytirilsa, ayirma qanday o'zgaradi?

A) 14 ta kamayadi B) 14 ta ortadi C) 28 ta kamayadi D) 28 ta ortadi

8. $8b + (5 - (b - (5b + 2)))$ ifodani soddalashtiring.

A) $12b + 7$ B) $2b + 3$ C) $2b + 7$ D) $13b + 3$

9. Soddalashtiring: $2x(x + 4) - x(x - 5)$

A) $3x^2 + 13x$ B) $3x^2 - 13x$ C) $x^2 + 13x$ D) $x^2 - 13x$

10. $2x(x - 1) - (2x + 1)(x - 2)$ ko'phadni standart shaklga keltiring.

A) $2x^2 - 3x$ B) $-x + 1$ C) $x + 2$ D) $4x^2 - 1$

11. n sonini 7 ga bo'lganda qoldiq 2 ga, m sonini 7 ga bo'lganda qoldiq 3 ga teng. mn ko'paytmani 7 ga bo'lganda, qoldiq nechaga teng bo'ladi?

A) 2 B) 1 C) 4 D) 6

12. Agar bo'luvchi $x - 6$ ga, bo'linma $x - 1$ ga va qoldiq 3 ga teng bo'lsa, bo'linuvchini toping.

A) $x^2 + 7x + 9$ B) $x^2 - 7x + 9$ C) $x^2 + 7x - 9$ D) $x^2 - 7x - 9$

13. a, b, c musbat butun sonlar uchun $x=4a+3=5b+4=6c+5$ tengliklar bajarilsa, x uch xonali sonning eng katta qiymatini toping.

A) 999 B) 945 C) 959 D) 976

14. Ko'phadning ozod hadini toping:

$$f(x) = (5x^3 - 1)^{2017} \cdot (2016x^7 + 1)^5 + x^{27} + 11$$

A) 1 B) 10 C) 11 D) 12

15. Qavslarni ochib chiqib, ko'phad standart ko'rinishda yozilgandagi koeffitsientlar yig'indisini toping: $(x^3 - 2x + 2)^{35} \cdot (x^2 - 5x + 3)^{18}$

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

16. $(x - 4)(x - 3)(x - 2)$ ifodada qavslarni ochib, hosil bo'lgan ko'phadni standart shaklga keltirib, koeffitsientlar yig'indisini toping.

A) -6 B) 42 C) 24 D) -24

17. Agar $\overline{abc}, \overline{bca}, \overline{cab}$ uch xonali natural sonlar yig'indisi 666 ga teng bo'lsa, $a+b+c$ ni toping.

A) 2 B) 7 C) 6 D) 3

18. $2,6 = x + \frac{y}{5}$ tenglikda x va y sonlar 5 dan kichik natural sonlar bo'lsa, y ning qiymatini toping.

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

19. $P(x) = (3x - 1)^{2017} \cdot (x - 1)^{2016} + (4x - 3)^2 \cdot (6x - 5)^2 + 2$ ko'phadning koeffitsiyentlari yig'indisini toping.

A) 1 B) 3 C) 5 D) 7

20. $P(x) = (3x - 1)^7 \cdot (x - 2)^4 + 7x$ va $Q(x) = (2x - 1)^{12} + 4x^2$ ko'phadlar yig'indisining darajasini toping.

A) 23 B) 11 C) 12 D) 15

21. Hisoblang. $\frac{(3^4)^5 \cdot 3^3}{3^{22}}$

A) 9 B) 1 C) 27 D) 3

22. Soddalashtiring: $(a + b)(a - b + 1) - (a - b)(a + b - 1)$

A) $2b$ B) $2a - 2b$ C) $2a$ D) $2a^2 + 2b^2$

23. x ni toping: $\frac{6x+2a+3b+c}{6x+2a-3b-c} = \frac{2x+6a+b+3c}{2x+6a-b-3c}$

A) $\frac{a+b}{c}$ B) $\frac{a+c}{b}$ C) $\frac{2c+b}{a}$ D) $\frac{ab}{c}$

24. Ma'noga ega bo'lmagan ifodani ko'rsating.

A) $(5,8:2 - 2,9):7,1$ B) $\frac{15}{40 \cdot 2 - 16 \cdot 5}$ C) $\frac{6}{8,1 + |-9 \cdot 0,9|}$ D) $4 \cdot (75:3 - 25)$

25. Umumiy ko'paytuvchini qavsdan tashqariga chiqaring: $ab^2 - 2a^2b + 5a^2b^2$

A) $a(b - 2ab + 5ab)$

B) $b(ab - 2ab + 5ab)$

C) $ab(b - 2a + 5ab)$

D) $ab(b^2 - 2ab + 5ab)$

Kalitlar

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