

Sirojiddin TURDALIYEV

8-SINF UCHUN
ALGEBRADAN TEST
MATERIALLARI

Umumiy o'rta ta'lim maktablari matematika
o'qituvchilari uchun

(Uslubiy qo'llanma)

«Farg'ona» nashriyoti,
2015-yil

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T88

Алишер
Алишер Навоий
Ўқимасин

Taqrizchilar:

A.O'RINOV, FDU professori, fizika-matematika fanlari doktori;
Q.SHABADIKOV, FDU dotsenti, fizika-matematika fanlari
nomzodi;

Z.MO'MINOV, Farg'ona viloyat XTXQTUMOI dotsenti, fizika-
matematika fanlari nomzodi.

TURDALIYEV, Sirojiddin.

T88 8-SINF UCHUN ALGEBRADAN TEST

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Ushbu qo'llanmada 8-sinf algebra darsligining har bir bobida berilgan mavzularga oid test topshiriqlari ikki variantda berilgan. Bu test topshiriqlaridan o'quvchilarning olgan bilimlarini tekshirish va aniqlashda foydalanish mumkin.

Qo'llanma umumiy o'rta ta'lim maktablari o'quvchilari va matematika o'qituvchilariga mo'ljallangan.

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SO‘Z BOSHI

Umumiy o‘rta ta‘lim maktablarida o‘quvchilarning matematika fanidan olgan bilim, ko‘nikmalarini aniqlash va tekshirish asosan test nazorat ishlari yordamida amalga oshirilmoqda.

Ushbu qo‘llanma, asosan, matematika fanidan umumiy o‘rta ta‘limning Davlat ta‘lim standartlarining talablari, o‘quv dasturlari hamda Sh.Alimov va boshqalarning 2014 yilda «Oqituvchi» nashriyot-matbaa ijodiy uyi tomonidan nashr etilgan 8-sinf uchun «Algebra» darsligida berilgan mavzularga moslab tuzilgan test topshiriqlarini o‘z ichiga olgan.

Qo‘llanmada berilgan test topshiriqlaridagi mashqlarning shartlari bir-biridan farqli, har xil qiyinlikda, teng kuchli qilib ikkita variantda yozilgan. Har bir variant bir xil miqdorda mashqlarni o‘z ichiga qamrab olgan.

Bitta variantdagi test topshiriqlarini bajarish uchun 35-40 daqiqa vaqt ajratish tavsiya qilinadi. Test topshiriqlarida berilgan har bir mashqlarning to‘rtta javobi bo‘lib, ulardan bittasi to‘g‘ri, qolgan uchasi esa noto‘g‘ridir. Noto‘g‘ri javoblardagi xatolar ham ilmiy tomondan asoslanib yozilgan. O‘quvchilarning test topshirig‘i javoblari ichidan to‘g‘ri javobni tez, aniq topa olishi, og‘zaki va yozma ravishda hisoblashi uchun moslab tuzilgan.

O‘qituvchi test topshiriqlaridan foydalanishda ayrim mashqlarni o‘zgartirishi yoki yangi mashq kiritishi mumkin. Test topshiriqlari o‘quvchilarning matematik bilimlarini chuqur va puxta o‘zlashtirishiga, ularning mustaqil ishlash malakalarini shakllantirishga yordam beradi. Qo‘llanmadagi test topshiriqlarini o‘quvchilar o‘zlari uyda, mustaqil holda ishlab o‘rganishi ham mumkin.

Qo‘llanma umumiy o‘rta ta‘lim maktablari matematika o‘qituvchilariga test nazorat ishlarini o‘tkazishda yordam beradi deb umid qilamiz.

Ushbu qo‘llanmadagi savol va topshiriqlar yuzasidan o‘z fikr-mulohazalari va maslahatlarini bildirgan o‘qituvchilarga minnatdorlik bildiramiz.

Muallif.

1-§. CHIZIQLI FUNKSIYA VA UNING GRAFIGI

1-TEST ISHI

1-variant

1. A $(-3;5)$ nuqta koordinata tekisligining qaysi choragida joylashgan?

- A) III chorakda; B) I chorakda; C) II chorakda;
D) IV chorakda.

2. Koordinata tekisligida: 1) A $(2;4)$; 2) B $(-3; -1)$; 3) C $(-5; -2)$; 4) D $(4; -3)$ nuqtalardan qaysi biri III chorakda joylashgan?

- A) 4; B) 2; C) 1; D) 3.

3. ABCD kvadrat uchta uchining koordinatalari berilgan:

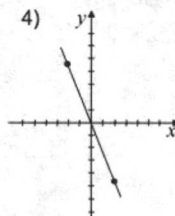
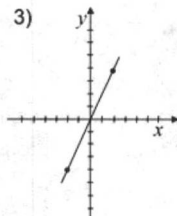
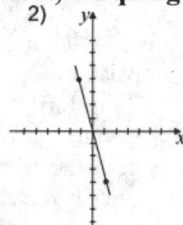
A $(3;3)$, B $(-2;3)$, C $(2; -2)$. D uchining koordinatalarini toping.

- A) D $(-3;2)$; B) D $(-2;3)$; C) D $(-2; -3)$; D) D $(3; -2)$.

4. X ning qiymati -2 ga teng bo'lganda $y = 20x + 13$ funksiyaning qiymatini toping.

- A) -27 ; B) 53 ; C) -53 ; D) 27

5. $y = 4x$ funksiyaning grafigini (1-rasm) aniqlang.



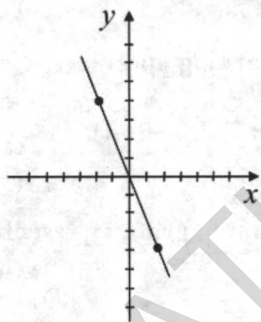
1-rasm.

- A) 3; B) 1; C) 4; D) 2.

6. $k > 0$ bo'lganda $y = kx$ funksiyaning grafigi qaysi choraklardan o'tadi?

- A) I, III choraklardan; B) II, IV choraklardan;
C) II, III choraklardan; D) I, IV choraklardan.

7. 2-rasmda tasvirlangan funksiya grafigining formulasini aniqlang.



2-rasm.

- A) $y = -x$; B) $y = 2x$; C) $y = -2x$; D) $y = -3x$.

8. $y = kx$ funksiyaning grafigi A (7;28) nuqtadan o'tadi. k ni toping.

- A) $\frac{1}{7}$; B) 7; C) $\frac{1}{4}$; D) 4.

9. Funksiya $f(x) = -12x$ formula bilan berilgan. Ushbu tengliklardan qaysi biri noto'g'ri:

1) $f\left(-\frac{1}{2}\right) = 6$; 2) $f\left(-\frac{1}{4}\right) = 3$;

3) $f\left(\frac{1}{6}\right) = 2$; 4) $f\left(\frac{1}{3}\right) = -4$;

- A) 2; B) 3; C) 1; D) 4.

10. Funksiya $f(x) = 3x + 1$ formula bilan berilgan. Ushbu tengliklardan qaysi biri noto'g'ri:

- 1) $f(2) = 7$; 2) $f(-1) = 4$; 3) $f(0) = 1$; 4) $f(-2) = -5$?
A) 3; B) 4; C) 2; D) 1.

11. Quyidagi nuqtalarning qaysi biri $y = 25x$ funksiya grafigiga tegishli:

- 1) (1;15); 2) (2;50) 3) (2;25) 4) (3;50)?
A) 2; B) 4; C) 2; D) 3.

12. Quyidagi nuqtalarning qaysilari $y = -2x + 3$ funksiya grafigiga tegishli:

- 1) (0;3); 2) (0; -1); 3) (-1; 2); 4) (2; -1)?
A) 2; B) 1;4; C) 3; D) 2;3.

13. $y = -10x$ funksiyaning grafigi qaysi choraklardan o'tadi?

- A) I, III choraklardan; B) III, IV choraklardan;
C) II, IV choraklardan; D) I, II choraklardan.

14. $y = -4x + 12$ funksiyaning grafigi qaysi choraklardan o'tadi?

- A) II, III, IV choraklardan; B) I, II, III choraklardan;
C) I, III, IV choraklardan; D) I, II, IV choraklardan.

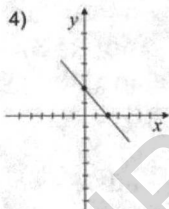
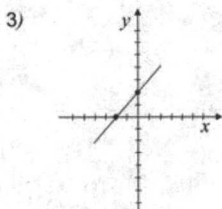
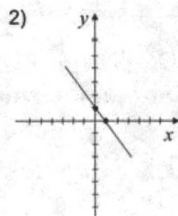
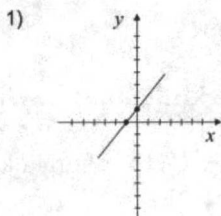
15. $y = kx + 2$ funksiyaning grafigi $P(3;8)$ nuqtadan o'tishi ma'lum bo'lsa, k ning qiymatini toping.

- A) 2; B) 0; C) 3; d) 1.

16. $y = -5x + b$ funksiyaning grafigi $M(0; -4)$ nuqtadan o'tishi ma'lum bo'lsa, b ning qiymatini toping.

- A) -5; B) -3; C) -4; d) -2.

17. $y = -x + 1$ funksiyaning grafigini (3-rasm) aniqlang.



3-rasm.

- A) 3; B) 1; C) 2; D) 4.

18. x ning qanday qiymatida $y = \frac{2}{3}x$ funksiyaning qiymati 6 ga teng bo'ladi?

- A) 9; B) 3; C) 12; D) 6.

19. x ning qanday qiymatida $y = 6x - 1$ qiymati 1 ga teng bo'ladi?

- A) 0; B) $\frac{1}{6}$; C) $\frac{1}{2}$; D) $\frac{1}{3}$.

20. $y = -2x - 3$ funksiya grafigining koordinata o'qlari bilan kesishish nuqtalari koordinatalarini aniqlang.

- A) $(0;3)$ va $(\frac{3}{2};0)$; B) $(0;-3)$ va $(-\frac{3}{2};0)$;
 C) $(0;3)$ va $(\frac{2}{3};0)$; D) $(0;3)$ va $(-\frac{2}{3};0)$;

2-variant

1. $B(4; -5)$ nuqta koordinata tekisligining qaysi choragida joylashgan?

- A) III chorakda; B) II chorakda; C) IV chorakda;
D) I chorakda.

2. Koordinata tekisligida:

1) $A(-3;4)$; 2) $B(2;-3)$; 3) $C(2;4)$ 4) $D(-2; -1)$; nuqtalardan qaysi biri II chorakda joylashgan?

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

3. $MNPH$ kvadrat uchta uchining koordinatalari berilgan: $M(1;1)$, $N(1;3)$, $P(-1;3)$. H uchining koordinatasini toping.

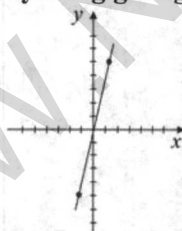
- A) $H(-1;1)$; B) $H(1;-1)$; C) $H(-1;-1)$; D) $H(-1;0)$.

4. x ning qiymati -4 ga teng bo'lganda $y = -15x + 17$ funksiyaning qiymatini toping.

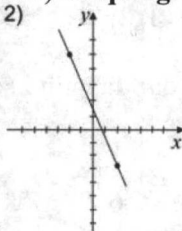
- A) 67; B) 77; C) 57; D) 87.

5. $y = -5x$ funksiyaning grafigini (4-rasm) aniqlang.

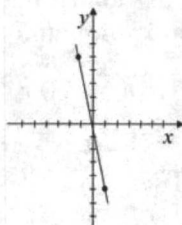
1)



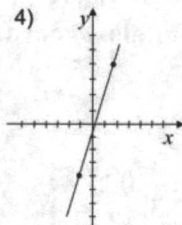
2)



3)



4)



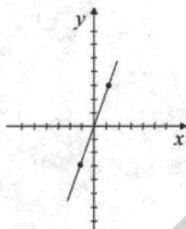
4-rasm.

- A) 4; B) 1; C) 2; D) 3.

6. $k < 0$ bo'lganda $y = kx$ funksiyaning grafigi qaysi choraklardan o'tadi?

- A) II, III choraklardan; B) I, III choraklardan;
C) II, IV choraklardan; D) III, IV choraklardan.

7. 5-rasmda tasvirlangan funksiya grafigining formulasini aniqlang.



5-rasm.

- A) $y = -2x$; B) $y = x$; C) $y = 3x$; D) $y = -0,5x$.

8. $y = kx$ funksiyaning grafigi $B(9;3)$ nuqtadan o'tadi. k ni toping.

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

9. Funksiya $f(x) = 10x$ formula bilan berilgan. Ushbu tengliklardan qaysi biri noto'g'ri:

- 1) $f\left(\frac{1}{2}\right) = 5$; 2) $f\left(\frac{1}{10}\right) = 1$;
3) $f\left(\frac{1}{5}\right) = 4$; 4) $f\left(-\frac{1}{5}\right) = -2$?

- A) 2; B) 3; C) 1; D) 4.

10. Funksiya $f(x) = -4x - 3$ formula bilan berilgan. Ushbu tengliklardan qaysi biri to'g'ri:

- 1) $f(-1) = -7$; 2) $f(0) = -3$;
 3) $f\left(-\frac{1}{2}\right) = -5$; 4) $f\left(-\frac{1}{4}\right) = 4$?

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

11. Quyidagi nuqtalarning qaysi biri $y = -30x$ funksiya grafigiga tegishli:

- 1) $\left(\frac{1}{10}; 3\right)$; 2) $\left(\frac{1}{15}; 3\right)$; 3) $\left(\frac{1}{30}; 1\right)$; 4) $\left(\frac{1}{2}; -15\right)$?

A) 3; B) 4; C) 2; D) 3.

12. Quyidagi nuqtalarning qaysilari $y = 4x - 5$ funksiya grafigiga tegishli?

- 1) $\left(\frac{5}{4}; 0\right)$; 2) $(0; 5)$; 3) $\left(\frac{1}{2}; -3\right)$; 4) $\left(\frac{3}{4}; 0\right)$?

A) 1; B) 4; C) 1, 3; D) 1, 4.

13. $y = -8x$; funksiyaning grafigi qaysi choraklardan o'tadi?

- A) I, IV choraklardan; B) I, III choraklardan;
 C) II, III choraklardan; D) II, IV choraklardan.

14. $y = 5x + 7$ funksiyaning grafigi qaysi choraklardan o'tadi?

- A) I, II, IV choraklardan; B) I, IV, III choraklardan;
 C) I, II, III choraklardan; D) II, III, IV choraklardan.

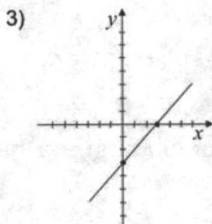
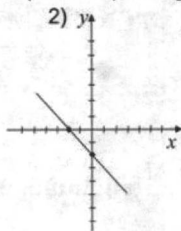
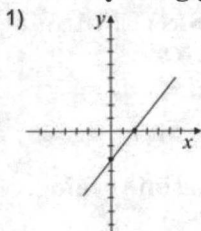
15. $y = 4x + b$ funksiyaning grafigi $A(2; 5)$ nuqtadan o'tishi ma'lum bo'lsa, b ning qiymatini toping.

A) -5; B) -3; C) -2; D) 0.

16. $y = kx - 3$ funksiyaning grafigi $B(-3; 6)$ nuqtadan o'tishi ma'lum bo'lsa, k ning qiymatini toping.

A) -6; B) -2; C) -4; D) -3.

17. $y = x - 2$ funksiyaning grafigini (6-rasm) aniqlang.



6-rasm.

- A) 2; B) 4; C) 1; D) 3.

18. x ning qanday qiymatida $y = \frac{3}{4}x$ funksiyaning qiymati 9 ga teng bo'ladi?

- A) 4; B) 12; C) 8; D) 16.

19. x ning qanday qiymatida $y = 5x + 1$ funksiyaning qiymati 1 ga teng bo'ladi?

- A) $\frac{1}{15}$; B) $\frac{1}{10}$; C) 0; D) $\frac{1}{5}$.

20. $y = -4x + 3$ funksiya grafigining koordinata o'qlari bilan kesishish nuqtalari koordinatalarini toping.

- A) $(0;3)$ va $(\frac{3}{4};0)$; B) $(0;-3)$ va $(-\frac{3}{4};0)$;
 C) $(3;0)$ va $(0;\frac{3}{4})$; D) $(-3;0)$ va $(0;0)$.

**2-§. IKKI NOMA'LUMLI IKKITA CHIZIQLI
TENGLAMALAR SISTEMASI
2-TEST ISHI
1-variant**

1. $\begin{cases} x - y = 3, \\ x + y = 5 \end{cases}$ tenglamalar sistemasini yeching.

- A) $x=5, y=2$; B) $x=4, y=1$; C) $x=1, y=4$; D) $x=3, y=2$.

2. Tenglamalar sistemasi berilgan: $\begin{cases} x - 2y = a, \\ x + 3y = b. \end{cases}$ $x = 4$ va

$y = 1$ sonlari juftligi uning yechimi ekanligi ma'lum, a va b ni toping.

- A) $a=2, b=7$; B) $a=3, b=7$; C) $a=7, b=2$; D) $a=7, b=3$.

3. Tenglamalar sistemasini yeching: $\begin{cases} x + 3y = 5, \\ 2x - 3y = 1. \end{cases}$

- A) $x=3, y=1$; B) $x=2, y=0$; C) $x=0, y=3$; D) $x=2, y=1$.

4. Tenglamalar sistemasini yeching: $\begin{cases} x - y = -2, \\ 3x = 0. \end{cases}$

- A) $x=0, y=2$; B) $x=1, y=0$; C) $x=0, y=-2$;
D) $x=-2, y=0$.

5. Tenglamalar sistemasini yeching: $\begin{cases} 2x + y = -13, \\ 3x - y = -12. \end{cases}$

- A) $x=-5, y=3$; B) $x=-5, y=-3$; C) $x=-3, y=-5$;
D) $x=-4, y=-2$.

6. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x}{2} + \frac{y}{3} = 4, \\ \frac{x}{4} - \frac{y}{6} = 0. \end{cases}$$

- A) $x=4, y=3$; B) $x=2, y=6$; C) $x=4, y=6$; D) $x=2, y=3$.

7. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x}{6} - \frac{y}{3} = 0, \\ \frac{x}{4} + \frac{y}{2} = 6. \end{cases}$$

- A) $x=12, y=6$; B) $x=6, y=12$; C) $x=6, y=3$; D) $x=18, y=6$.

8. $(x; y)$ sonlar juftligi $\begin{cases} x - y = 3, \\ x + y = 9. \end{cases}$ sistemaning yechimi

bo'lsa, $x + y$ ni toping.

- A) 10; B) 6; C) 12; D) 9.

9. $(x; y)$ sonlar juftligi $\begin{cases} 4x - 3y = 6, \\ 2x + 3y = 12. \end{cases}$ sistemaning yechimi

bo'lsa, $x \cdot y$ ni toping.

- A) 12; B) 6; C) 8; D) 4.

10. Ikki sonning yig'indisi 10 ga teng, ular ayirmasi esa 4 ga teng. Shu sonlarni toping.

- A) $x=7, y=3$; B) $x=3, y=7$; C) $x=5, y=7$; D) $x=4, y=5$.

11. To'g'ri to'rtburchakning perimetri 28 sm ga teng. Qo'shni tomonlarining ayirmasi 4 sm ga teng. To'g'ri to'rtburchakning tomonlarini toping.

- A) 8 sm va 5 sm; B) 10 sm va 7 sm;
C) 9 sm va 5 sm; D) 9 sm va 7 sm.

12. Otasi o'g'lidan 26 yosh katta. 4 yildan keyin uning yoshi o'g'lining yoshidan 3 marta katta bo'ladi. Otasi va o'g'li necha yoshda?

- A) 35 yosh va 9 yosh; B) 40 yosh va 9 yosh;
C) 36 yosh va 8 yosh; D) 32 yosh va 8 yosh.

13. $2x + 3y = 6$ to'g'ri chiziqning koordinata o'qlari bilan kesishish nuqtalarining koordinatalarini toping.

- A) (2;0), (0;3); B) (0;0), (2;3); C) (0;2), (3;0);
D) (0;8), (0;2).

14. $3x - 4y = -12$ to'g'ri chiziqning koordinata o'qlari bilan kesishish nuqtalarining koordinatalarini toping.

- A) (0;0), (-4;3); B) (0; -2), (-3;0);
C) (0; -3), (4;0); D) (0;3), (-4;0).

15. Tenglamalar sistemasini yeching:
$$\begin{cases} 3x = y, \\ x + 2y = -7. \end{cases}$$

- A) $x=3, y=1$; B) $x=-1, y=-3$; C) $x=1, y=3$;
D) $x=-1, y=3$.

16. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x-y}{3} = 2, \\ \frac{2x+y}{5} = 3. \end{cases}$$

- A) $x=1, y=7$; B) $x=6, y=15$; C) $x=-7, y=-1$;
D) $x=7, y=1$.

17. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x+y}{4} = 5, \\ \frac{3x-y}{3} = 4. \end{cases}$$

A) $x=8, y=10$; B) $x=10, y=10$; C) $x=8, y=12$; D) $x=12, y=8$.

18. Tenglamalar sistemasini yeching:
$$\begin{cases} 3x + 9y = -15, \\ x - 9y = 7. \end{cases}$$

A) $x=-2, y=-1$; B) $x=2, y=1$; C) $x=-1, y=-3$;
D) $x=1, y=2$.

19. Shunday ikki son topingki, ularniung yig'indisi ayirmasidan 3 marta katta, ko'paytmasidan ikki marta kichik bo'lsin.

A) 2 va 7; B) 5 va 4; C) 6 va 3; D) 8 va 1.

20. Ikki sonning yig'indisi 7 ga teng. Ulardan biri ikkinchisidan 4 marta kichik bo'lsa, shu sonlarning kattasini toping.

A) 5,4; B) 6,2; C) 5,6; D) 6,6.

2-variant

1. Tenglamalar sistemasini yeching:
$$\begin{cases} x + y = 5, \\ x - y = 1. \end{cases}$$

A) $x=3, y=1$; B) $x=4, y=1$; C) $x=3, y=2$; D) $x=2, y=3$.

2. Tenglamalar sistemasi berilgan:
$$\begin{cases} kx - 2y = 7, \\ 9x + my = 21. \end{cases}$$

$x = 1$ va $y = 3$ sonlari juftligi uning yechimi ekanligi ma'lum. k va m qiymatlarini toping.

A) $k = 13, m = 4$; B) $k = 4, m = 13$; C) $k = 11, m = 6$;
D) $k = 6, m = 11$.

3. Tenglamalar sistemasini yeching:
$$\begin{cases} x - 3y = -1, \\ 4x + 3y = 11. \end{cases}$$

- A) $x = 1, y = 2$; B) $x = 0, y = 3$; C) $x = 4, y = 0$;
D) $x = 2, y = 1$.

4. Tenglamalar sistemasini yeching:
$$\begin{cases} 2x = 0, \\ x + y = 5. \end{cases}$$

- A) $x = 5, y = 0$; B) $x = 0, y = 5$; C) $x = 2, y = 3$;
D) $x = 2, y = 1$.

5. Tenglamalar sistemasini yeching:
$$\begin{cases} 3x - y = -10, \\ 2x + y = 0. \end{cases}$$

- A) $x = -1, y = 5$; B) $x = -4, y = 2$; C) $x = -2, y = 4$;
D) $x = 5, y = 4$.

6. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x}{3} - \frac{y}{2} = 0, \\ \frac{x}{3} + \frac{y}{4} = 3. \end{cases}$$

- A) $x = 6, y = 4$; B) $x = 3, y = 2$; C) $x = 3, y = 4$;
D) $x = 4, y = 6$.

7. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x}{2} + \frac{y}{5} = 5, \\ \frac{x}{6} - \frac{y}{2} = -4. \end{cases}$$

- A) $x = 4, y = 5$; B) $x = 6, y = 2$; C) $x = 6, y = 10$;
D) $x = 10, y = 5$.

8. $(x; y)$ sonlar juftligi $\begin{cases} x + y = 19, \\ x - y = 7. \end{cases}$ sistemaning yechimi

bo'lsa, $x - y$ ni toping.

- A) 19; B) 7; C) 15; D) 6.

9. $(x; y)$ sonlar juftligi $\begin{cases} 5x - 4y = 22, \\ 3x + 4y = 26. \end{cases}$ sistemaning yechimi

bo'lsa, $\frac{x}{y}$ ni toping.

- A) 2; B) 6; C) 3; D) 4.

10. Ikki sonning yig'indisi 8 ga teng, ularning ayirmasi esa 2 ga teng. Shu sonlarni toping.

- A) $x = 6, y = 4$; B) $x = 6, y = 2$; C) $x = 3, y = 5$;
D) $x = 5, y = 3$.

11. To'g'ri to'rtburchakning perimetri 36 sm ga teng. Qo'shni tomonlarning ayirmasi 6 sm ga teng. To'g'ri to'rtburchakning tomonlarini toping.

- A) 6 sm va 10 sm; B) 12 sm va 6 sm;
C) 7 sm va 10 sm; D) 12 sm va 4 sm.

12. Opasi ukasidan 6 yosh katta, bir yildan keyin esa opasi ukasidan 2 marta katta bo'ladi. Ularning har biri necha yoshda?

- A) 10 yosh va 6 yosh; B) 12 yosh va 5 yosh;
C) 11 yosh va 5 yosh; D) 10 yosh va 7 yosh.

13. $2x - 5y = 10$ to'g'ri chiziqning koordinata o'qlari bilan kesishish nuqtalarining koordinatalarini toping.

- A) $(0; -2), (5; 0)$; B) $(2; 0), (0; 5)$;
C) $(0; 2), (-5; 0)$; D) $(0; 0), (-2; 5)$.

14. $3x + 4y = -12$ to'g'ri chiziqning koordinata o'qlari bilan kesishish nuqtalarining koordinatalarini toping.

- A) $(0; -3), (-4; 0)$; B) $(-3; 0), (0; -4)$;
C) $(0; 3), (4; 0)$; D) $(3; 0), (0; 4)$.

15. Tenglamalar sistemasini yeching:
$$\begin{cases} x = -y, \\ 2x - y = -21. \end{cases}$$

- A) $x = 7, y = 7$; B) $x = -7, y = 7$; C) $x = 2, y = -2$;
D) $x = -21, y = 2$.

16. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x+y}{2} = 7, \\ \frac{x-5y}{4} = 11. \end{cases}$$

- A) $x = 19, y = -5$; B) $x = -19, y = 5$; C) $x = -16, y = -4$;
D) $x = 4, y = 16$.

17. Tenglamalar sistemasini yeching:
$$\begin{cases} \frac{x-y}{4} = 1, \\ \frac{x+2y}{5} = -1. \end{cases}$$

- A) $x = 1, y = 1$; B) $x = 1, y = -2$; C) $x = -1, y = 3$;
D) $x = 1, y = -3$.

18. Tenglamalar sistemasini yeching:
$$\begin{cases} 4x - 10y = -2, \\ x + 10y = -13. \end{cases}$$

- A) $x = 1, y = 3$; B) $x = 1, y = -3$; C) $x = 3, y = 1$;
D) $x = -3, y = -1$.

19. Ikki son yig'indisi 180. Bu sonlarning kattasini kichigiga bo'lganda 5 hosil bo'ladi. Shu sonlarni toping.

- A) 30 va 150; B) 25 va 150; C) 20 va 160; D) 15 va 105.

20. Ikki sonning yig'indisi 7,5 ga teng. Ulardan biri ikkinchisidan 4 marta kichik. Shu sonlarning kattasini toping.

- A) 5; B) 4; C) 6; D) 7.

3-§. TENGSIZLIKLAR

3-TEST ISHI

1-variant

1. $23 > -8$ tengsizlikning ikkala qismiga 9 soni qo'shilganda hosil bo'ladigan tengsizlikni aniqlang.

- A) $32 > 17$; B) $32 > 1$; C) $32 > -17$; D) $32 > -1$.

2. Tengsizliklarni qo'shing: $13 > -8$ va $11 > 5$.

- A) $24 > -3$; B) $24 > 13$; C) $24 > 3$; D) $42 > -13$.

3. Tengsizliklarni ko'paytiring: $x - 3 > 2$ va $x + 3 > 5$.

- A) $x^2 - 3 > 10$; B) $x^2 - 9 > 7$;
C) $x^2 + 9 > 10$; D) $x^2 - 9 > 10$.

4. n sonining tengsizlikni qanoatlantiruvchi eng katta butun qiymatini toping: $n < -9$.

- A) -11 ; B) -8 ; C) -10 ; D) -9 .

5. Tengsizlikni yeching: $3x > 21$.

- A) $x > 4$; B) $x > 5$; C) $x > 7$; D) $x > 3$.

6. Tengsizlikni yeching: $-13x \leq 39$.

- A) $x \leq -3$; B) $x \geq -3$; C) $x \leq 3$; D) $x \geq 3$.

7. Tengsizlikni yeching: $3(x + 4) > 2x - 8$;

- A) $x > -20$; B) $x < 20$; C) $x > 20$; D) $x < -20$.

8. x ning qanday qiymatlarida $2(x - 3) + x$ ifoda musbat bo'lishini aniqlang.

- A) $x > 3$; B) $x > 1$; C) $x > 2$; D) $x < 4$.

9. $5x - 12 > 4(x - 2)$ tengsizlikning yechimi bo'ladigan eng kichik butun sonni toping.

- A) 2; B) 4; C) 3; D) 5.

10. m ning qanday qiymatlarida $\frac{m}{3}$ kasr $\frac{m-2}{4}$ kasrdan

katta bo'ladi?

- A) $m > -5$; B) $m > -6$; C) $m > 5$; D) $m < 6$.

11. x ning qanday qiymatlarida $y = 0,5x - 2$ funksiyaning qiymati -3 dan kichik?

- A) $x > -2$; B) $x < -1$; C) $x < -2$; D) $x > 1$.

12. Tengsizlikni yeching: $30 + 5x \leq 18 - 7x$

- A) $x \geq 1$; B) $x \leq -2$; C) $x \leq -1$; D) $x \geq 2$.

13. Tengsizlikni yeching: $5(x-1) + 7 \leq 1 - 3(x+2)$.

- A) $x \leq -1$; B) $x \leq -\frac{6}{8}$; C) $x \leq -\frac{5}{8}$; D) $x \leq -\frac{7}{8}$.

14. Tengsizliklar sistemasini yeching: $\begin{cases} 2x - 16 > 0, \\ 5x > 15. \end{cases}$

- A) $x > 8$; B) $x > 5$; C) $x > 7$; D) $x > 6$.

15. Tengsizliklar sistemasini yeching: $\begin{cases} 7x - 4 \leq 5x + 2, \\ 3x + 1 > 2x - 3. \end{cases}$

- A) $4 < x \leq 3$; B) $-4 < x \leq 3$;
C) $-4 \leq x \leq 3$; D) $-4 \leq x \leq -3$.

16. Tengsizlikni yeching: $|3x - 4| \leq 2$.

- A) $\frac{2}{3} \leq x \leq 3$; B) $\frac{2}{3} \leq x \leq 2$;
C) $-\frac{2}{3} \leq x \leq 3$; D) $-\frac{2}{3} \leq x \leq 0$.

17. Tengsizlikni yeching: $x - \frac{x-3}{5} + \frac{2x-1}{10} \leq 4$.

- A) $x \geq 3,5$; B) $x \leq 4,5$; C) $x \leq 3,5$; D) $x \geq 4,5$.

18. Qo'sh tengsizlikning yechimini son oraliqda aniqlang.

$$-3 \leq 2x - 1 < 3.$$

- A) (1; 2]; B) [-1; 2); C) [-1; 2]; D) (1; 2).

19. Tengsizliklar sistemasini yeching:
$$\begin{cases} -9x > 27, \\ 7x < -28. \end{cases}$$

- A) $x < -3$; B) $x < -4$; C) $x > -3$; D) $x > -4$.

20. Tengsizliklar sistemasini yeching:
$$\begin{cases} \frac{x-4}{5} \leq \frac{x+1}{3}, \\ \frac{x+2}{4} \geq \frac{x-1}{2}. \end{cases}$$

- A) $-8,5 \leq x \leq -4$; B) $-8,5 \leq x \leq 4$;
C) $-8,5 < x < -4$; D) $-7,5 \leq x \leq -3$.

2-variant

1. $-11 < 26$ tengsizlikning ikkala qismiga 13 soni qo'shilganda hosil bo'ladigan tengsizlikni aniqlang.

- A) $-24 < 39$; B) $-3 < 39$; C) $2 < 39$; D) $3 < 39$.

2. Tengsizliklarni qo'shing: $17 > 13$ va $15 > -7$.

- A) $32 > -6$; B) $32 > -20$; C) $32 > 20$; D) $32 > 6$.

3. Tengsizliklarni ko'paytiring: $7 < x - 4$ va $7 < x + 4$.

- A) $49 < x^2 - 4$; B) $49 < x^2 - 8$;
C) $49 < x^2 - 16$; D) $49 < x - 16$.

4. n sonning tengsizlikni qanoatlantiruvchi eng kichik butun qiymatini toping: $n > -12$.

- A) -12; B) -11; C) -13; D) -10.

5. Tengsizlikni yeching: $4x < 28$.

- A) $x < 7$; B) $x < 6$; C) $x < 9$; D) $x < 8$.

6. Tengsizlikni yeching: $-14x \geq 56$.

- A) $x \geq 4$; B) $x \leq -4$; C) $x \geq -3$; D) $x \geq -4$.

7. Tengsizlikni yeching: $5(x - 3) < 4x + 13$.

- A) $x > 28$; B) $x < 3$; C) $x > 3$; D) $x < 28$.

8. x ning qanday qiymatlarida $4(x + 3) - x$ ifoda manfiy bo'lishini aniqlang.

- A) $x < -4$; B) $x < -3$; C) $x < -5$; D) $x < -1$.

9. $6x - 13 < 5(x - 2)$ tengsizlikning yechimi bo'ladigan eng katta butun sonni toping.

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

10. n ning qanday qiymatlarida $\frac{n}{4}$ kasr $\frac{n+3}{2}$ kasrdan kichik bo'ladi?

- A) $n < -6$; B) $n \geq -6$; C) $n > -5$; D) $n > -6$.

11. x ning qanday qiymatlarida $y = 0,2x + 1$ funksiyaning qiymati 2 dan katta?

- A) $x > 5$; B) $x \geq 5$; C) $x > 4$; D) $x > 3$.

12. Tengsizlikni yeching: $27 - 2x \geq 19 - 6x$.

- A) $x \geq -1$; B) $x \geq -2$; C) $x \leq -2$; D) $x \leq -1$.

13. Tengsizlikni yeching: $4(2 - 3x) - (5 - x) \geq 13 - x$.

- A) $x \geq 1$; B) $x \leq -2$; C) $x \leq -1$; D) $x \geq 2$.

14. Tengsizliklar sistemasini yeching:
$$\begin{cases} 3x - 15 > 0, \\ 6x > 12. \end{cases}$$

- A) $x > 5$; B) $x > 2$; C) $x < 5$; D) $x < 2$.

15. Tengsizliklar sistemasini yeching:
$$\begin{cases} 8x + 3 \geq 6x + 7, \\ 4x - 1 < 3x + 2. \end{cases}$$

- A) $1 \leq x < 3$; B) $2 < x < 3$; C) $2 < x < 4$;
D) $2 \leq x < 3$.

16. Tengsizlikni yeching: $|2x - 3| \leq 1$.

- A) $0 \leq x \leq 2$; B) $1 \leq x \leq 2$; C) $1 < x < 2$;
D) $-1 \leq x \leq 2$.

17. Tengsizlikni yeching: $x - \frac{x-1}{2} - \frac{4x+3}{4} \geq 2$.

- A) $x \geq -3,5$; B) $x > 4,5$; C) $x \leq -4,5$;
D) $x \leq -3,5$.

18. Qo'sh tengsizlik yechimini son oraliqda aniqlang:
 $-5 < 1 + 2x \leq 5$.

- A) $(-3; 2]$; B) $[-5; 5]$; C) $(-3; 2)$; D) $[-3; 2)$.

19. Tengsizliklar sistemasini yeching:
$$\begin{cases} -8x < 24, \\ 7x > -14. \end{cases}$$

- A) $x > -3$; B) $-3 < x < -2$; C) $x > -2$; D) $x < -2$.

20. Tengsizliklar sistemasini yeching:
$$\begin{cases} \frac{x+3}{6} \geq \frac{x-2}{3}, \\ \frac{x-4}{2} \leq \frac{3x-1}{4}. \end{cases}$$

- A) $-7 \leq x \leq 7$; B) $-7 \leq x \leq 6$; C) $x \geq -7$; D) $x \leq 7$.

4-§. KVADRAT ILDIZLAR

4-TEST ISHI

1-variant

1. Kvadrat shaklidagi yer maydonining tomoni 17 m ga teng.

Uning yuzini toping.

- A) 296 m^2 ; B) 289 m^2 ; C) 286 m^2 ; D) 279 m^2 .

2. Kvadrat yuzi $0,49 \text{ dm}^2$ ga teng. Uning tomonini toping.

- A) $0,7 \text{ dm}$; B) $0,07 \text{ dm}$; C) 7 dm ; D) $0,8 \text{ dm}$.

3. Hisoblang: $31 - \sqrt{400}$;

- A) 9; B) 12; C) 11; D) 10.

4. Hisoblang: $\frac{1}{2}\sqrt{2^{10}}$;

- A) 64; B) 25; C) 16; D) 32.

5. Hisoblang: $\sqrt{36 \cdot 169}$.

- A) 79; B) 78; C) 76; D) 77.

6. Hisoblang: $2\sqrt{0,16} - 0,1\sqrt{25}$.

- A) 0,3; B) 0,4; C) 0,2; D) 0,01.

7. Agar $m=2$ bo'lsa, $3\sqrt{20-2m}$ ifodaning qiymatini toping.

- A) 14; B) 16; C) 12; D) 16.

8. Hisoblang: $\sqrt{122^2 - 22^2}$.

- A) 122; B) 120; C) 110; D) 112.

9. Hisoblang: $(2\sqrt{11} + \sqrt{8})(2\sqrt{11} - \sqrt{8})$.

- A) 38; B) 9; C) 52; D) 36.

10. Ifodani soddalashtiring: $\sqrt{m^{16}}$.

- A) m^8 ; B) m^6 ; C) m^4 ; D) m^{10} .

11. Ifodani soddalashtiring: $2\sqrt{20} + \sqrt{5}$.

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

12. Hisoblang: $\sqrt{2\frac{7}{9}}$.

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

13. Hisoblang: $\sqrt{\frac{9}{16}} + \sqrt{\frac{1}{9}}$.

- A) $1\frac{2}{9}$; B) $1\frac{1}{16}$; C) $1\frac{5}{12}$; D) $1\frac{1}{12}$.

14. Kasrni qisqartiring: $\frac{m^2 - 3}{m - \sqrt{3}}$.

- A) $m + \sqrt{3}$; B) $m - 3$; C) $m + 3$; D) $m - \sqrt{3}$.

15. Hisoblang: $\sqrt{144 \cdot 0,04 \cdot 25}$.

- A) 13; B) 12; C) 14; D) 15.

16. Hisoblang: $\sqrt{7 + 4\sqrt{3}}$.

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

17. Ifodani soddalashtiring: $\sqrt{20} + 3\sqrt{45} - 2\sqrt{5}$.

- A) $5\sqrt{5}$; B) $7\sqrt{5}$; C) $9\sqrt{5}$; D) $3\sqrt{5}$.

18. Tenglamani yeching: $\sqrt{7x-5} = 4$.

- A) $x = 2$; B) $x = 4$; C) $x = 3$; D) $x = 5$.

19. Hisoblang: $\frac{\sqrt{3} + \sqrt{5}}{\sqrt{5} - \sqrt{3}}$.

- A) $5 + \sqrt{25}$; B) $5 - \sqrt{5}$; C) $3 - \sqrt{5}$; D) $4 + \sqrt{15}$.

20. Ifodani soddalashtiring: $\frac{8}{\sqrt{10} + \sqrt{2}} + \frac{8}{\sqrt{10} - \sqrt{2}}$.

- A) $2\sqrt{2}$; B) $2\sqrt{10}$; C) $2\sqrt{8}$; D) $2\sqrt{5}$.

2-variant

1. Kvadrat shaklidagi yer maydonining tomoni 19 m ga teng. Uning yuzini toping.

- A) 391 m^2 ; B) 414 m^2 ; C) 381 m^2 ; D) 361 m^2 .

2. Kvadrat yuzi $0,36 \text{ dm}^2$ ga teng. Uning tomonini toping.

- A) $0,6 \text{ dm}$; B) $0,06 \text{ dm}$; C) $3,6 \text{ dm}$; D) 6 dm .

3. Hisoblang: $28 - \sqrt{625}$.

- A) 2; B) 3; C) 1; D) 4.

4. Hisoblang: $\frac{1}{3}\sqrt{3^8}$.

- A) 28; B) 81; C) 27; D) 64.

5. Hisoblang: $\sqrt{16 \cdot 225}$.

- A) 50; B) 60; C) 40; D) 70.

6. Hisoblang: $3\sqrt{0,49} + 0,2\sqrt{25}$.

- A) 3,1; B) 2,1; C) 3,2; D) 2,3.

7. Agar $n = 4$ bo'lsa, $2\sqrt{3n+13}$ ifodaning qiymatini toping.

- A) 12; B) 10; C) 13; D) 11.

8. Hisoblang: $\sqrt{148^2 - 48^2}$.

- A) 130; B) 150; C) 120; D) 140.

9. Hisoblang: $(2\sqrt{13} + \sqrt{7})(2\sqrt{13} - \sqrt{7})$.

- A) 50; B) 55; C) 45; D) 40.

10. Ifodani soddalashtiring: $\sqrt{n^{18}}$.

- A) n^7 ; B) n^9 ; C) n^8 ; D) n^{10} .

11. Ifodani soddalashtiring: $3\sqrt{18} - \sqrt{2}$;

- A) 8; B) $9\sqrt{2}$; C) 7; D) $8\sqrt{2}$.

12. Hisoblang: $\sqrt{1\frac{11}{25}}$.

- A) $1\frac{2}{5}$; B) $1\frac{4}{5}$; C) $1\frac{1}{5}$; D) $1\frac{3}{5}$.

13. Hisoblang: $\sqrt{\frac{9}{16}} - \sqrt{\frac{1}{9}}$.

- A) $\frac{3}{4}$; B) $\frac{5}{12}$; C) $\frac{3}{12}$; D) $\frac{5}{9}$.

14. Kasrni qisqartiring: $\frac{n^2 - 2}{n + \sqrt{2}}$.

- A) $\sqrt{2}n$; B) $n + \sqrt{2}$; C) $n - 2$; D) $n - \sqrt{2}$.

15. Hisoblang: $\sqrt{121 \cdot 0,25 \cdot 16}$.

- A) 21; B) 22; C) 20; D) 24.

16. Hisoblang: $\sqrt{6 + 4\sqrt{2}}$.

- A) $2 + \sqrt{2}$; B) $2 + 4\sqrt{2}$; C) $2\sqrt{2}$;
D) $2 - \sqrt{2}$.

17. Ifodani soddalashtiring: $\sqrt{12} + 4\sqrt{27} - 2\sqrt{3}$.

- A) $6\sqrt{2}$; B) $12\sqrt{2}$; C) $12\sqrt{3}$; D) $6\sqrt{3}$.

18. Tenglamani yeching: $\sqrt{8x + 12} = 6$.

- A) 6; B) 3; C) 2; D) 4;

19. Hisoblang: $\frac{\sqrt{7} + \sqrt{5}}{\sqrt{7} - \sqrt{5}}$.

- A) $6 - \sqrt{35}$; B) $4 + \sqrt{35}$; C) $7 - \sqrt{5}$;
D) $6 + \sqrt{35}$.

20. Ifodani soddalashtiring: $\frac{4}{\sqrt{5 + \sqrt{3}}} - \frac{4}{\sqrt{5 - \sqrt{3}}}$.

- A) $-4\sqrt{3}$; B) $5\sqrt{3}$; C) $4\sqrt{5}$; D) $-5\sqrt{3}$.

5-§. KVADRAT TENGLAMALAR
5-TEST ISHI
1-variant

1. Tenglamani yeching: $x^2 = 49$.

- A) $x = 7$; B) $x = 8$; C) $x_{1,2} = \pm 6$; D) $x_{1,2} = \pm 7$.

2. Tenglamani yeching: $2x^2 = 8$.

- A) $x_{1,2} = \pm 2$; B) $x = -2$; C) $x = -4$;
D) $x_{1,2} = \pm 1$.

3. Agar $ax^2 + bx + c = 0$ kvadrat tenglamaning $a = 3$; $b = -2$; $c = 5$ ko'effitsiyentlari ma'lum bo'lsa, shu kvadrat tenglamani toping.

- A) $3x^2 + 2x + 5 = 0$; B) $3x^2 - 2x - 5 = 0$;
C) $3x^2 - 2x + 5 = 0$; D) $3x^2 + 2x - 5 = 0$.

4. Tenglamani yeching: $x^2 - 7x = 0$;

- A) $x_1 = 0$; $x_2 = 7$; B) $x_{1,2} = \pm 7$; C) $x_{1,2} = \pm \sqrt{7}$; D) $x = 7$.

5. Tenglamani yeching: $16 - 4x^2 = 0$.

- A) $x_{1,2} = \pm 4$; B) $x = 2$; C) $x_{1,2} = \pm 2$; D) $x = 4$.

6. Ildizlari $x_1 = 3$ va $x_2 = 5$ bo'lgan keltirilgan kvadrat tenglamani aniqlang.

- A) $x^2 + 8x + 15 = 0$; B) $x^2 + 3x + 5 = 0$;
C) $x^2 - 3x - 5 = 0$; D) $x^2 - 8x + 15 = 0$.

7. Ildizlari $x_1 = -1$ va $x_2 = -3$ bo'lgan keltirilgan kvadrat tenglamani aniqlang.

- A) $x^2 - x - 3 = 0$; B) $x^2 + 4x + 3 = 0$;
C) $x^2 - 4x - 3 = 0$; D) $x^2 + x + 3 = 0$.

8. Tenglamani yeching: $\frac{x^2 + 5}{3} = 7$.

- A) $x_{1,2} = \pm 4$; B) $x_{1,2} = \pm 3$; C) $x_{1,2} = \pm 5$; D) $x_{1,2} = \pm 7$.

9. Tenglamani yeching: $x^2 - 2x - 8 = 0$.

- A) $x_1 = 4, x_2 = -2$; B) $x_1 = 2, x_2 = -4$;
C) $x_1 = -2, x_2 = -8$; D) $x_1 = -4, x_2 = 0$.

10. Kvadrat tenglamani yeching: $2x^2 - 9x + 10 = 0$.

- A) $x_1 = 2, x_2 = 1,5$; B) $x_1 = 1, x_2 = 0$;
C) $x_1 = 2,5, x_2 = 2$; D) $x_1 = 3, x_2 = 4$.

11. Kvadrat tenglamani yeching: $3x^2 + x - 2 = 0$.

- A) $x_1 = \frac{1}{3}; x_2 = 1$; B) $x_1 = 3; x_2 = 4$;
C) $x_1 = -1; x_2 = 2$; D) $x_1 = \frac{2}{3}; x_2 = -1$.

12. Tenglamani yeching: $11x^2 + 22x = 0$.

- A) $x_1 = 0, x_2 = -2$; B) $x_1 = 1, x_2 = 2$;
C) $x_1 = 11, x_2 = 0$; D) $x_1 = -1, x_2 = -11$.

13. $(3x - 1)(3x + 1) = x(2x + 5)$ tenglamani kvadrat tenglamaga keltiring.

- A) $9x^2 - 3x + 1 = 0$; B) $7x^2 - 5x - 1 = 0$;
C) $11x^2 + 5x + 1 = 0$; D) $7x^2 + 5x + 1 = 0$.

14. Tenglamani yeching: $3x^2 = \frac{12}{25}$.

- A) $x_{1,2} = \pm \frac{3}{5}$; B) $x = \frac{3}{5}$; C) $x = \frac{2}{5}$;
D) $x_{1,2} = \pm \frac{2}{5}$.

15. Tenglamani yeching: $x^4 + 3x^2 - 4 = 0$.

A) $x_{1,2} = \pm 3$;

B) $x_{1,2} = 1, x_{3,4} = 2$;

C) $x_{1,2} = \pm 1$;

D) $x_{1,2} = \pm 2$.

16. Tenglamalar sistemasini yeching:
$$\begin{cases} x + y = 7, \\ xy = 12. \end{cases}$$

A) (3;4), (4;3);

B) $x = -3, y = 4$;

C) $x = 3, y = -4$;

D) (2;6), (6;2).

17. Ikki sonning ayirmasi 9 ga, ularning ko'paytmasi 10 ga teng. Shu sonlarni toping.

A) 9 va 2;

B) 10 va 1;

C) 8 va 4;

D) 7 va 4.

18. Tenglamalar sistemasini yeching:
$$\begin{cases} x + y = 3, \\ x^2 - y^2 = 9. \end{cases}$$

A) $x = 0, y = 3$;

B) $x = 9, y = 3$;

C) $x = 3, y = 1$;

D) $x = 3, y = 0$.

19. To'g'ri to'rtburchakning perimetri 22 sm ga, yuzi esa 28 sm^2 ga teng. Uning tomonlarini toping.

A) 6 sm va 8 sm;

B) 4 sm va 6 sm;

C) 4 sm va 7 sm;

D) 5 sm va 7 sm.

20. Ko'paytmasi 195 ga teng bo'lgan ikkita ketma-ket toq sonni toping.

A) 11 va 13;

B) 17 va 19;

C) 13 va 15;

D) 15 va 17.

21. Ikkita ketma-ket natural sonning ko'paytmasi ularning yig'indisidan 109 ta ortiq. Shu sonlarni toping.

A) 10 va 11;

B) 9 va 10;

C) 11 va 12;

D) 12 va 13.

2-variant

1. Tenglamani yeching: $x^2 = 81$.

- A) $x = 3$; B) $x_{1,2} = \pm 9$; C) $x_{1,2} = \pm 3$; D) $x = 9$.

2. Tenglamani yeching: $2x^2 = 18$.

- A) $x_{1,2} = \pm 2$; B) $x = 3$; C) $x = 9$; D) $x_{1,2} = \pm 3$.

3. Agar $ax^2 + bx + c$ kvadrat tenglamaning $a = 3$, $b = -1$, $c = -5$ koeffitsiyentlari ma'lum bo'lsa, shu kvadrat tenglamani toping.

- A) $3x^2 - 2x + 5 = 0$; B) $3x^2 + x + 5 = 0$;
C) $3x^2 - 2x - 5 = 0$; D) $3x^2 - x - 5 = 0$.

4. Tenglamani yeching: $x^2 + 8x = 0$.

- A) $x_{1,2} = \pm 8$; B) $x_1 = 0, x_2 = -8$;
C) $x = -8$; D) $x_1 = 0, x_2 = -4$;

5. Tenglamani yeching: $25 - 5x^2 = 0$.

- A) $x = \sqrt{5}$; B) $x_{1,2} = \pm 5$; C) $x_{1,2} = \pm \sqrt{5}$;
D) $x = 5$.

6. Ildizlari $x_1 = 2$ va $x_2 = 3$ bo'lgan keltirilgan kvadrat tenglamani aniqlang.

- A) $x^2 + 5x - 6 = 0$; B) $x^2 + 2x + 3 = 0$;
C) $x^2 - 2x - 3 = 0$; D) $x^2 - 5x + 6 = 0$.

7. Ildizlari $x_1 = -2$ va $x_2 = -5$ bo'lgan keltirilgan kvadrat tenglamani aniqlang.

- A) $x^2 - 7x - 10 = 0$; B) $x^2 + 7x + 10 = 0$;
C) $x^2 - 3x - 7 = 0$; D) $x^2 - 3x + 7 = 0$.

8. Tenglamani yeching: $\frac{x^2 - 12}{4} = 6$.

- A) $x_{1,2} = \pm 3$; B) $x_{1,2} = \pm 4$; C) $x_{1,2} = \pm 2$;

D) $x_{1,2} = \pm 6$.

9. Tenglamani yeching: $x^2 - 4x - 32 = 0$.

A) $x_1 = -8, x_2 = -4$;

B) $x_1 = 0, x_2 = 4$;

C) $x_1 = 8, x_2 = -4$;

D) $x_1 = -8, x_2 = 3$.

10. Kvadrat tenglamani yeching: $5x^2 + 3x - 8 = 0$.

A) $x_1 = 1, x_2 = -1$;

B) $x_1 = 1, x_2 = -1,6$;

C) $x_1 = 3, x_2 = 1,2$;

D) $x_1 = 1,5, x_2 = 2$.

11. Kvadrat tenglamani yeching: $2x^2 + x - 1 = 0$.

A) $x_1 = -\frac{1}{3}, x_2 = 2$;

B) $x_1 = 0, x_2 = \frac{1}{3}$;

C) $x_1 = 1, x_2 = \frac{1}{2}$;

D) $x_1 = \frac{1}{2}, x_2 = -1$.

12. Tenglamani yeching: $13x^2 + 26x = 0$.

A) $x_1 = 1, x_2 = 3$;

B) $x_1 = 0, x_2 = 1$;

C) $x_1 = -1, x_2 = 2$;

D) $x_1 = 0, x_2 = -2$.

13. $(2x - 3)(2x + 3) = x(x - 4)$ tenglamani kvadrat tenglamaga keltiring.

A) $3x^2 - 4x + 9 = 0$;

B) $3x^2 + 4x - 9 = 0$;

C) $2x^2 + 3x - 9 = 0$;

D) $4x^2 - 3x + 9 = 0$.

14. Tenglamani yeching: $2x^2 = \frac{8}{9}$.

A) $x_{1,2} = \pm \frac{1}{3}$;

B) $x = \frac{1}{3}$;

C) $x_{1,2} = \pm \frac{2}{3}$;

D) $x = \frac{2}{3}$.

15. Tenglamani yeching: $x^4 - 4x^2 - 5 = 0$.

A) $x_{1,2} = \pm 5$;

B) $x_{1,2} = \pm 2$;

C) $x_{1,2} = \pm \sqrt{3}$;

D) $x_{1,2} = \pm \sqrt{5}$.

16. Tenglamalar sistemasini yeching: $\begin{cases} x - y = 2, \\ xy = 15. \end{cases}$

A) (5; 3), (-3; -5);

B) $x = 4, y = 2;$

C) $x = -5, y = 3;$

D) (5; -3), (-3; 5).

17. Ikki sonning ayirmasi 11 ga, ularning ko'paytmasi 12 ga teng. Shu sonlarni toping.

A) 11 va 2;

B) 12 va 1;

C) 9 va 3;

D) 10 va 2.

18. Tenglamalar sistemasini yeching: $\begin{cases} x + y = 4, \\ x^2 - y^2 = 16. \end{cases}$

A) $x = 4, y = 2;$

B) $x = 2, y = 4;$

C) $x = 4, y = 0;$

D) $x = 0, y = 4.$

19. To'g'ri to'rtburchakning perimetri 24 sm ga, yuzi esa 32 sm^2 ga teng. Uning tomonlarini toping.

A) 4 sm va 8 sm;

B) 6 sm va 9 sm;

C) 4 sm va 9 sm;

D) 5 sm va 8 sm.

20. Ko'paytmasi 168 ga teng bo'lgan ikkita ketma-ket juft sonni toping.

A) 10 va 12;

B) 16 va 18;

C) 14 va 16;

D) 12 va 14.

21. Ikkita ketma-ket natural son yig'indisining kvadrati bu sonlar kvadratlari yig'indisidan 112 ta ortiq. Shu sonlarni toping.

A) 6 va 7;

B) 7 va 8;

C) 8 va 9;

D) 5 va 6.

6-§. TAQRIBIY HISOBLASHLAR

6-TEST ISHI

1-variant

1. 3,04257 sonini mingdan birgacha yaxlitlang.

- A) 3,04; B) 3,042; C) 3,043; D) 3,05.

2. 0,075469 sonini o'n mingdan birgacha yaxlitlang.

- A) 0,0755; B) 0,076; C) 0,754; D) 0,075.

3. Sonning aniq qiymati 2,372, taqribiy qiymati 2,37 bo'lsa, yaqinlashish xatoligini toping.

- A) 0,001; B) 0,002; C) 0,02; D) 0,01.

4. 0,3781 sonining 0,378 soni bilan yaqinlashish xatoligini toping.

- A) 0,002; B) 0,0002; C) 0,0001; D) 0,001.

5. $-5,384$ sonining $-5,38$ soni bilan yaqinlashish xatoligini toping.

- A) 0,0004; B) 0,04; C) 0,003; D) 0,004.

6. Qo'sh tengsizlik ko'rinishida yozing: $x = 3,4 \pm 0,1$.

- A) $3,41 < x < 3,51$; B) $3,3 \leq x \leq 3,5$;
C) $3,3 < x < 3,5$; D) $3,2 \leq x \leq 3,4$.

7. Qo'sh tengsizlik ko'rinishida yozing: $m = -4,7 \pm 0,2$.

- A) $-4,7 < m < -4,4$; B) $-4,9 < m < -4,5$;
C) $-4,9 \leq m \leq -4,5$; D) $-4,7 \leq m \leq -4,3$.

8. $\frac{6}{7}$ ni 0,01 gacha aniqlikda o'nli kasr ko'rinishida yozing.

- A) 0,79; B) 0,86; C) 0,78; D) 0,87.

9. $\frac{9}{14}$ ni 0,001 gacha aniqlikda o'nli kasr ko'rinishida yozing.

- A) 0,643; B) 0,644; C) 0,642; D) 0,641.

10. Sonni standart shaklda yozing: 142,065.

- A) $1,4 \cdot 10^2$; B) $15 \cdot 10^2$;
C) $14,2065 \cdot 10$; D) $1,42065 \cdot 10^2$.

11. Sonni standart shaklda yozing: 0,0018.

- A) $1,8 \cdot 10^3$; B) $1,8 \cdot 10^{-2}$; C) $1,8 \cdot 10^{-3}$;
D) $18 \cdot 10^{-2}$.

12. $\frac{1}{7}$ sonining 0,14 soni bilan yaqinlashishining nisbiy xatoligini toping.

- A) $\approx 0,2\%$; B) $\approx 2\%$; C) $\approx 3\%$; D) $\approx 1\%$.

13. Bo'linmani 0,01 gacha aniqlik bilan hisoblang: $87 : 124$.

- A) 0,702; B) 0,71; C) 0,70; D) 0,72.

14. Bo'linmani 0,001 gacha aniqlik bilan hisoblang: $16 : 109$.

- A) 0,148; B) 0,147; C) 0,146; D) 0,145.

15. Ikki qishloq orasidagi masofa (200 ± 2) km ga teng. O'lchashning nisbiy xatoligini aniqlang.

- A) 2%; B) 1%; C) 2,5%; D) 1,5%.

16. $\frac{3}{5}$ sonining 0,62 o'nli kasrga yaqinlashish xatoligini toping.

- A) 0,0002; B) 0,2; C) 0,02; D) 0,002.

17. Sonni standart shaklda yozing: 6548,72.

- A) $65,4872 \cdot 10^2$; B) $6,54872 \cdot 10^3$;
C) $6,548 \cdot 10^3$; D) $6,54872 \cdot 10^4$.

18. Sonni standart shaklda yozing: 0,0000027.

- A) $2,7 \cdot 10^6$; B) $2,7 \cdot 10^{-7}$;
C) $2,7 \cdot 10^{-6}$; D) $2,7 \cdot 10^7$.

19. Sonni birliklarga yaxlitlab, yaxlitlashning nisbiy xatosini toping: 10,59.

- A) $\approx 3,7\%$; B) $\approx 3,9\%$; C) $\approx 3\%$; D) $\approx 4\%$.

20. $x = -6,9 \pm 0,2$ ekani ma'lum. x ning kami bilan va ortig'i bilan olingan taqribiy qiymatlarini toping.

- A) $-7,1$ va $-6,7$; B) $-7,2$ va $-6,8$;
C) $6,7$ va $7,1$; D) $6,8$ va $7,1$.

2-variant

1. 4,06457 sonini mingdan birlarga yaxlitlang.

- A) 4,06; B) 4,065; C) 4,07; D) 4,064.

2. 0,087658 sonini o'n mingdan birlarga yaxlitlang.

- A) 0,088; B) 0,0876; C) 0,087; D) 0,0877.

3. Sonning aniq qiymati 2,861, taqribiy qiymati 2,86 bo'lsa, yaqinlashish xatoligini toping.

- A) 0,001; B) 0,002; C) 0,01; D) 0,02.

4. 0,5432 sonining 0,543 soni bilan yaqinlashish xatoligini toping.

- A) 0,0002; B) 0,0001; C) 0,002; D) 0,001.

5. $-3,763$ sonining $-3,76$ soni bilan yaqinlashish xatoligini toping.

- A) 0,0002; B) 0,001; C) 0,003; D) 0,03.

6. Qo'sh tengsizlik ko'rinishida yozing: $y = 3,7 \pm 0,1$.

- A) $3,6 < y < 3,8$; B) $3,6 \leq y \leq 3,8$;
C) $3,7 \leq y \leq 3,8$; D) $3,5 < y < 3,6$.

7. Qo'sh tengsizlik ko'rinishida yozing: $n = -5,6 \pm 0,2$.

- A) $-5,5 \leq n \leq 5,4$; B) $5,2 < n < 5,4$;
C) $-5,8 \leq n \leq -5,4$; D) $5,4 < n < 5,8$.

8. $\frac{7}{8}$ ni 0,01 gacha aniqlikda o'nli kasr ko'rinishida yozing.

- A) 0,89; B) 0,87; C) 0,88; D) 0,86.

9. $\frac{8}{17}$ ni 0,001 gacha aniqlikda o'nli kasr ko'rinishida yozing.

- A) 0,470; B) 0,471; C) 0,473; D) 0,472.

10. Sonni standart shaklda yozing: 156,073.

- A) $1,6 \cdot 10^2$; B) $16 \cdot 10^3$;
C) $1,5073 \cdot 10$; D) $1,56073 \cdot 10^2$.

11. Sonni standart shaklda yozing: 0,0017.

- A) $1,7 \cdot 10^{-3}$; B) $1,7 \cdot 10^{-4}$; C) $1,7 \cdot 10^{-2}$;
D) $17 \cdot 10^{-3}$.

12. $\frac{1}{6}$ sonining 0,12 soni bilan yaqinlashishining nisbiy xatoligini toping.

- A) $\approx 1\%$; B) $\approx 2\%$; C) $\approx 0,3\%$; D) $\approx 0,2\%$.

13. Bo'linmani 0,01 gacha aniqlik bilan hisoblang: 79:105.

- A) 0,75; B) 0,74; C) 0,049; D) 0,06.

14. Bo'linmani 0,001 gacha aniqlik bilan hisoblang: 18:107.

- A) 0,169; B) 0,174; C) 0,176; D) 0,168.

15. Ikki qishloq orasidagi masofa (300 ± 3) km ga teng. O'lchashning nisbiy xatoligini aniqlang.

- A) 3,5%; B) 3%; C) 2,5%; D) 0,3%.

16. $\frac{4}{5}$ sonining 0,79 soni bilan kasrga yaqinlashish xatoligini toping.

- A) 1; B) 0,01; C) 0,01; D) 0,1.

17. Sonni standart shaklda yozing: 7394,67.

- A) $7,39467 \cdot 10^3$; B) $7,394 \cdot 10^3$;
C) $73,9467 \cdot 10^2$; D) $7,39467 \cdot 10^4$.

18. Sonni standart shaklda yozing: 0,0000097.

- A) $9,7 \cdot 10^6$; B) $97 \cdot 10^{-6}$; C) $9,7 \cdot 10^{-6}$; D) $0,97 \cdot 10^{-5}$.

19. Sonni birliklargacha yaxlitlab, yaxlitlashning nisbiy xatoligini toping: 0,892.

- A) $\approx 10\%$; B) $\approx 10,8\%$; C) $\approx 10,9\%$; D) $\approx 9\%$.

20. $x = -7,5 \pm 0,2$ ekani ma'lum. x sonining kami bilan va ortig'i bilan olingan taqribiy qiymatlarini toping.

- A) 7,3 va 7,7; B) -7,7 va -7,2;
C) -7,7 va -7,3; D) -7,8 va -7,3.

7-§. 8-SINF AJGEBRA KURSINI TAKRORLASH

7-TEST ISHI

1-variant

1. Hisoblang: $\frac{14}{121} \cdot \frac{22}{32} \cdot \frac{11}{21}$.

A) $\frac{1}{16}$;

B) $\frac{1}{12}$;

C) $\frac{1}{24}$;

D) $-\frac{1}{3}$.

2. Hisoblang: $\frac{(3\frac{2}{7} + 2\frac{1}{3}) \cdot 2,1}{14,1 - 2,3}$.

A) 1;

B) 4;

C) 3;

D) 2.

3. $y = kx$ funksiyaning grafigi $(-4; 8)$ nuqtadan o'tadi. k ni toping.

A) 4;

B) -2;

C) -4;

D) 2.

4. Funktsiyalar grafiklarining kesishish nuqtasi

koordinatalarini toping: $y = 7x - 3$ va $y = 5x + 1$.

A) (11; 2);

B) (2; 10);

C) (1; 10);

D) (2; 11).

5. $y = -4x + 5$ funksiya grafigining koordinata o'qlari bilan kesishish nuqtalari koordinatalarini toping.

A) $(0; 5), (\frac{5}{4}; 0)$;

B) $(5; 0), (0; \frac{5}{4})$;

C) $(0; 4), (5; 0)$;

D) $(4; 0), (0; 4)$;

6. Tenglamani yeching: $-3x = 285$.

A) 95;

B) 85;

C) -95;

D) -85.

7. Tenglamani yeching: $(x + 15)(x - 4) = 0$.

A) $x_1 = 15, x_2 = 4$;

B) $x_1 = 11, x_2 = -4$;

C) $x_1 = -11, x_2 = 4$;

D) $x_1 = -15, x_2 = 4$.

8. Tenglamalar sistemasini yeching: $\begin{cases} x + y = 30, \\ x - y = 20. \end{cases}$

A) $x = 25, y = 5;$

B) $x = 20, y = 10;$

C) $x = 10, y = 20;$

D) $x = 5, y = 25.$

9. Tenglamalar sistemasini yeching: $\begin{cases} 6x - 7y = 4, \\ 5x + 7y = 29. \end{cases}$

A) $x = 1, y = 4;$

B) $x = 3, y = 2;$

C) $x = -3, y = -2;$

D) $x = 2, y = 3.$

10. Tengsizlikni yeching: $-8x > 72.$

A) $x < 9;$

B) $x > -9;$

C) $x > 9;$

D) $x < -9.$

11. Tengsizlikni yeching: $6y - (y + 8) - 3(2 - y) \leq 2.$

A) $y \leq 2;$

B) $y \geq 2;$

C) $y \leq 1;$

D) $y \geq 1.$

12. Hisoblang: $\sqrt{5} \cdot \sqrt{3} \cdot \sqrt{15}.$

A) 5;

B) 15;

C) 3;

D) 10.

13. Hisoblang: $(2\sqrt{7} - 3\sqrt{2})(2\sqrt{7} + 3\sqrt{2})$

A) 14;

B) 7;

C) 10;

D) 6.

14. Ifodani soddalashtiring: $3\sqrt{75} + \sqrt{48} - \sqrt{300}.$

A) $15\sqrt{3};$

B) $10\sqrt{3};$

C) $4\sqrt{3};$

D) $9\sqrt{3}.$

15. Kasrni qisqartiring: $\frac{b-36}{6+\sqrt{b}}, b \geq 0.$

A) $6 + \sqrt{b};$

B) $\sqrt{b} - 6;$

C) $b + 6;$

D) $6\sqrt{b}.$

16. Tenglamani yeching: $16x^2 = 256.$

A) $x_{1,2} = \pm 2;$

B) $x = 4;$

C) $x_{1,2} = \pm 4;$

D) $x = 3.$

17. Tenglamani yeching: $x^2 - 28x + 27 = 0.$

A) $x_1 = 27, x_2 = 1$;

B) $x_1 = 1, x_2 = 28$;

C) $x_1 = 27, x_2 = 3$;

D) $x_1 = 3, x_2 = 28$.

18. Kvadrat tenglamani yeching: $3x^2 - 14x + 16 = 0$.

A) $x_1 = 2\frac{1}{3}, x_2 = 2$;

B) $x_1 = 2\frac{2}{3}, x_2 = 2$;

C) $x_1 = -2\frac{2}{3}, x_2 = -2$;

D) $x_1 = -2, x_2 = 2\frac{1}{3}$.

19. Qo'sh tengsizlik ko'rinishida yozing: $x = 3,273 \pm 0,002$.

A) $3,27 < x < 3,275$;

B) $3,271 \leq x \leq 3,275$;

C) $3,251 < x < 3,253$;

D) $3,073 \leq x \leq 3,473$.

20. Qo'sh tengsizlikni yeching: $-6 < 5x + 4 < 19$.

A) $-4 < x < 4$;

B) $2 < x < 3$;

C) $-6 < x < 19$;

D) $-2 < x < 3$.

21. Tengsizliklar sistemasini yeching:
$$\begin{cases} 2x - (x - 4) < 6, \\ x > 3(2x - 1) + 18. \end{cases}$$

A) $x < 2$;

B) $x > -3$;

C) $x < -3$;

D) $x > 2$.

22. Tenglamalar sistemasini yeching:
$$\begin{cases} 3x + 2y = 8, \\ x - 3y = 21. \end{cases}$$

A) $x = 6, y = -5$;

B) $x = 5, y = -6$;

C) $x = -5, y = 6$;

D) $x = 4, y = 5$.

23. Ikkita ketma-ket kelgan toq sonlar yig'indisi 4028 ga teng. Shu sonlarni toping.

A) 2009, 2011;

B) 2011, 2013;

C) 2013, 2015;

D) 2007, 2015.

24. Ikkita sonning yig'indisi 138. Birinchisining 80% i ikkinchisining $\frac{2}{9}$ qismiga teng bo'lsa, shu sonlarni toping.

- A) 30 va 108; B) 32 va 107;
C) 36 va 102; D) 33 va 105.

25. m ning qanday qiymatlarida tenglik to'g'ri bo'ladi:

$$2\sqrt{8m+9} = 10.$$

- A) 3; B) 0; C) 1; D) 2.

2-variant

1. Hisoblang: $\frac{17}{92} \cdot \frac{32}{36} \cdot \frac{23}{34}$.

- A) $\frac{5}{21}$; B) $\frac{1}{13}$; C) $\frac{4}{27}$; D) $\frac{1}{9}$;

2. Hisoblang: $\frac{\left(3\frac{3}{7} - 1\frac{1}{4}\right) \cdot 2,8}{3,8 + 2,3}$;

- A) 3; B) 1; C) 4; D) 5.

3. $y = kx$ funksiyaning grafigi (2; -10) nuqtadan o'tadi, k ni toping.

- A) 5; B) -4; C) -5; D) 4.

4. Funksiyalar grafiklarining kesishish nuqtasi

koordinatalarini toping: $y = 6x + 7$ va $y = 3x - 2$.

- A) (-3; -11); B) (-2; -10); C) (3; 11);
D) (2; 10).

5. $y = -3x - 2$ funksiya grafigining koordinata o'qlari bilan kesishish nuqtalari koordinatalarini toping.

- A) $(0; 2), \left(-\frac{2}{3}; 0\right)$; B) $(2; 0), \left(0; \frac{2}{3}\right)$;

C) $(0; -3), \left(\frac{3}{2}; 0\right)$; D) $(0; -2), \left(-\frac{2}{3}; 0\right)$.

6. Tenglamani yeching: $-4x = 248$.

A) -60 ; B) -62 ; C) 60 ; D) 62 .

7. Tenglamani yeching: $(x - 13)(x + 6) = 0$.

A) $x_1 = -13, x_2 = 6$; B) $x_1 = 0, x_2 = 7$;
C) $x_1 = 19, x_2 = -7$; D) $x_1 = 13, x_2 = -6$.

8. Tenglamalar sistemasini yeching: $\begin{cases} x + y = 50, \\ x - y = 30. \end{cases}$

A) $x = 30; y = 20$; B) $x = 50; y = 20$;
C) $x = 40; y = 10$; D) $x = 20; y = 30$.

9. Tenglamalar sistemasini yeching: $\begin{cases} 5x - 7y = -6, \\ 2x + 7y = 76. \end{cases}$

A) $x = -10; y = -8$; B) $x = 10; y = 8$;
C) $x = -7; y = -9$; D) $x = -10; y = 7$.

10. Tengsizlikni yeching: $-10x < 180$.

A) $x > -18$; B) $x < -10$; C) $x > -10$;
D) $x < -18$.

11. Tengsizlikni yeching: $7x - (x - 9) - 4(3 - x) \geq 2$.

A) $x \leq \frac{1}{2}$; B) $x \geq 1$; C) $x \geq \frac{1}{2}$;
D) $x \leq 0$.

12. Hisoblang: $\sqrt{3} \cdot \sqrt{8} \cdot \sqrt{24}$.

A) 3 ; B) 24 ; C) 8 ; D) 11 .

13. Hisoblang: $(2\sqrt{3} + 3\sqrt{2})(2\sqrt{3} - 3\sqrt{2})$.

- A) -30 ; B) 6 ; C) 30 ; D) -6 .

14. Ifodani soddalashtiring: $2\sqrt{54} - \sqrt{24} + \sqrt{150}$.

- A) $5\sqrt{6}$; B) $9\sqrt{6}$; C) $6\sqrt{6}$; D) $7\sqrt{6}$.

15. Kasrni qisqartiring: $\frac{a-16}{4+\sqrt{a}}, a \geq 0$.

- A) $\sqrt{a} - 4$; B) $4 + \sqrt{a}$; C) $4 - \sqrt{a}$;
D) $4\sqrt{a}$.

16. Tenglamani yeching: $25x^2 = 625$.

- A) $x_{1,2} = \pm 5$; B) $x_{1,2} = 25$; C) $x = 5$; D) $x_{1,2} = \pm 4$.

17. Tenglamani yeching: $x^2 - 36x + 35 = 0$.

- A) $x_1 = 2, x_2 = 34$; B) $x_1 = 36, x_2 = 1$;
C) $x_1 = 35, x_2 = 1$; D) $x_1 = 1, x_2 = 34$.

18. Kvadrat tenglamani yeching: $3x^2 - 7x + 4 = 0$.

- A) $x_1 = 1, x_2 = 2$; B) $x_1 = 1\frac{1}{3}, x_2 = 1$;
C) $x_1 = 1\frac{2}{3}, x_2 = -1$; D) $x_1 = 2, x_2 = -1$.

19. Qo'sh tengsizlik ko'rinishida yozing: $y = 4,538 \pm 0,003$.

- A) $4,535 \leq y \leq 4,541$; B) $4,535 < y < 4,540$;
C) $4,525 < y < 4,542$; D) $4,534 \leq y \leq 4,540$.

20. Qosh tengsizlikni yeching: $-2 < 7x + 5 < 19$.

- A) $-2 < x < 3$; B) $1 < x < 2$;
C) $-2 < x < -1$; D) $-1 < x < 2$.

21. Tengsizliklar sistemasini yeching: $\begin{cases} 5(x-2) - x > 2, \\ 1 - 3(x-1) < -2. \end{cases}$

- A) $x < 3$; B) $x < 2$; C) $x > 3$; D) $x > 2$.

22. Tenglamalar sistemasini yeching:
$$\begin{cases} 5x + y = 24, \\ 7x + 3y = 8. \end{cases}$$

- A) $x = 24$; $y = 8$; B) $x = 8$; $y = -16$;
C) $x = 16$; $y = -8$; D) $x = -8$; $y = 16$.

23. Ikkita ketma-ket kelgan juft sonlar yig'indisi 4026 ga teng. Shu sonlarni toping.

- A) 2014, 2016; B) 2012, 2014; C) 2010, 2012;
D) 2010, 2014.

24. Ikki sonning ayirmasi 33. Agar kattasining 30% i kichigining $\frac{2}{3}$ qismiga teng bo'lsa, shu sonlarni toping.

- A) 62 va 30; B) 61 va 28; C) 58 va 25;
D) 60 va 27.

25. n ning qanday qiymatlarida tenglik to'g'ri bo'ladi:

$$\frac{1}{5}\sqrt{6n+1} = 1$$

- A) 4; B) 5; C) 1; D) 3.

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Ilmiy-uslubiy nashr

Sirojiddin Turdaliyev

**8-SINF UCHUN
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Tex. muharrir:

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