YOZMA SHAKLIDA BO'LADIGAN IMTIHONLAR UCHUN SAVOLLAR

Biznesni boshqarish va tabiiy fanlar fakulteti
"Matematika va informatika" ta'lim yo'nalishi 1-kurs talabalariga 2-semestr uchun «Algebra va sonlar nazariyas» fanidan yakuniy nazorat savollari

Savolning tartib raqami	Savol matni
1.	Kompleks sonlar ustida amallar.
2.	Kompleks sonlarning geometrik ko'rinishi
3.	Matrisa tushunchasi.
4.	2- va 3-tartibli matrisa va determinantlar
5.	Matrisalar ustida chiziqli amallar
6.	Matritsalar rangi.
7.	Chiziqli tenglamalar sisitemasi va uning yechimi tushunchasi.
8.	$\Delta = \begin{vmatrix} 12314 & 16536 & 20537 \\ 6157 & 8268 & 10268 \\ 513 & 689 & 126 \end{vmatrix}$ determinantni hisoblang.
9.	$\begin{cases} x_1 + x_2 + x_3 = 4, \\ x_1 + 2x_2 + 4x_3 = 4, \\ x_1 + 3x_2 + 9x_3 = 2 \end{cases}$ tenglamalar sistemasining yechimini Kramer formulalari yordamida topng.
10.	$\left. \begin{array}{l} x_1 + 2x_2 + 3x_3 = 6, \\ 7x_2 - 8x_3 = -15, \\ -x_2 - 7x_3 = -8 \end{array} \right\}$ tenglamalar sistemasining yechimini teskari matrisa yordamida toping.
11.	. Ushbu $\left. \begin{array}{l} 4x + y = 5 \\ 3x - 2y = 12 \end{array} \right\}$ tenglamalar sistemasini Kramer usuli(qoidasi) bilan yeching.
12.	. $\begin{cases} 2x_1 + 4x_2 + x_3 = 4, \\ 3x_1 + 6x_2 + 2x_3 = 4, \\ 4x_1 - x_2 - 3x_3 = 1 \end{cases}$ tenglamalar sistemasini Kramer formulalari yordamida yeching.
13.	.Ushbu $\begin{cases} 3x_1 + 3x_2 + 4x_3 - 5x_4 = 9 \\ 5x_1 - 7x_2 + 8x_3 + 2x_4 = 18 \\ 4x_1 + 5x_2 - 7x_3 - 3x_4 = -5 \\ 7x_1 + 8x_2 + 3x_3 + 4x_4 = -2 \end{cases}$ tenglamalar sistemasini Kramer usuli(qoidasi) bilan yeching.
14.	Ushbu tenglamalar sistemasining yechimini teskari matrisa yordamida toping

	$\begin{cases} x_1 + 4x_2 - 5x_3 = 8, \\ 2x_1 + 3x_2 - 4x_3 = 9, \\ x_1 - 2x_2 - x_3 = 6 \end{cases}$
15.	Chiziqli tenglamalar sistemasining determinanti deb nimaga aytiladi?
16.	Chiziqli tenglamalar sistemasi qachon yagona yechimga yega bo'ladi?
17.	Chiziqli tenglamalar sistemasi yagona yechimga yega bo'lsa, u qanday topiladi?
18.	Kramer formulalari nimadan iborat?
19.	Teskari matrisa qanday topiladi?
20.	Tenglamalar sistemasi matrisalar yordamida qanday yechiladi?
21.	$A = \begin{pmatrix} 1 & 0 & 2 & 3 \\ 4 & -3 & 1 & 0 \\ 2 & 5 & 3 & 1 \end{pmatrix}$ va $B = \begin{pmatrix} 2 & 7 \\ 0 & 2 \\ 5 & 4 \\ 6 & 0 \end{pmatrix}$ matrisalar berilgan. A va B matrisalarni ko'paytiring.
22.	$\begin{vmatrix} 0 & 0 & 3 & 0 \\ -1 & 3 & 2 & 4 \\ -2 & 4 & 0 & 3 \\ 0 & 2 & 1 & 0 \end{vmatrix}$ determinantni hisoblang.
23.	$z_1 = 2 + 3i, z_2 = 5 + 4i.$ $\frac{z_1}{z_2}$ =?
24.	Vandermond determinanti
25.	D=$\begin{vmatrix} 1+a & 1 & 1 & 1 \\ 1 & 1+b & 1 & 1 \\ 1 & 1 & 1+c & 1 \\ 1 & 1 & 1 & 1+d \end{vmatrix}$ determinantni hisoblang.
26.	Darajaga ko'taring: $(1+i)^{20}$, $(1-i)^{21}$.
27.	Berilgan z_1 va z_2 kompleks sonlarning yig'indisi va ko'paytmasini toping: $z_1 = 5+4i$, $z_2 = -2+3i$
28.	$\begin{vmatrix} 2 & 1 & 4 \\ 3 & 1 & 2 \\ 0 & 1 & 3 \end{vmatrix}$ determinantni hisoblang
29.	$\begin{pmatrix} 3 & 1 & 2 \\ 4 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} \cdot \begin{pmatrix} 2 \\ 1 \\ 3 \end{pmatrix}$ ko'paytmani toping.
30.	$A = \begin{pmatrix} 3 & 1 \\ 0 & 2 \end{pmatrix}$, $B = \begin{pmatrix} 2 & 4 \\ 3 & 1 \end{pmatrix}$ matritsalar berilgan $A \cdot B$ ni toping.
31.	Hisoblang $\begin{vmatrix} 3 & 2 & 4 \\ 5 & 6 & 7 \\ -1 & -2 & -3 \end{vmatrix}$.
32.	Hisoblang $\begin{vmatrix} 2 & -1 & 4 \\ 3 & 0 & 4 \\ 2 & 5 & -1 \end{vmatrix}$

33.	A= $\begin{pmatrix} 1 & 0 & 2 \\ 0 & -1 & 3 \\ 4 & 0 & 5 \end{pmatrix}$ va B= $\begin{pmatrix} 2 & 7 & 1 \\ 3 & 2 & -4 \\ 1 & -3 & 5 \end{pmatrix}$ matritsalar berilgan ABvaBA matritsalarni toping
34.	Berilgan z_1 va z_2 kompleks sonlarning yig'indisi va ko'paytmasini toping: $z_1 = -8-7i$, $z_2 = -3i$;
35.	Berilgan z_1 va z_2 kompleks sonlarning yig'indisi va ko'paytmasini toping: $z_1 = 5+\sqrt{3}i$, $z_2 = 5-\sqrt{3}i$
36.	z_2-z_1 ayirmani va $\frac{z_2}{z_1}$ bo'linmani toping: $z_1 = 1+2i$, $z_2 = 5$
37.	Hisoblang $\begin{vmatrix} 3 & -1 & -2 \\ -3 & 4 & 5 \\ 2 & -1 & 4 \end{vmatrix}$
38.	Hisoblang $\begin{vmatrix} 3 & -1 & -2 \\ -3 & 4 & 5 \\ 2 & -1 & 0 \end{vmatrix}$
39.	Hisoblang $\begin{vmatrix} 2 & -3 & 2 \\ 5 & -4 & -2 \\ -2 & -2 & -5 \end{vmatrix}$
40.	Hisoblang $\begin{vmatrix} 2 & -1 & 4 \\ 5 & -3 & -4 \\ -1 & -2 & -4 \end{vmatrix}$
41.	Hisoblang $\begin{vmatrix} 3 & -5 & -1 \\ 4 & 3 & 2 \\ 1 & 4 & 5 \end{vmatrix}$
42.	Hisoblang $\begin{vmatrix} 3 & 5 & -1 \\ 4 & -2 & -1 \\ 3 & 4 & 5 \end{vmatrix}$
43.	$z = -1 - i. Argz =?$
44.	Kompleks sonlarning darajasi
45.	Determinantning xossalari.
46.	Minor va algebraik to'ldiruvchilar.
47.	Matritsalarni ko'paytirish.
48.	Matritsalar ustida bajariladigan asosiy amallarning xossalari.
49.	Teskari matrisa.
50.	Chiziqli tenglamalar sisitemasi yechishning Gauss usuli
51.	z_2-z_1 ayirmani va $\frac{z_2}{z_1}$ bo'linmani toping: $z_1 = -1 + \sqrt{3}i$, $z_2 = -\sqrt{2} + \sqrt{6}i$;

52.	$z_2 - z_1$ ayirmani va $\frac{z_2}{z_1}$ bo'linmani toping: $z_1 = a - \sqrt{b}i, \quad z_2 = a + \sqrt{b}i$.
53.	Hisoblang: $(4+i)(5+3i)-(3+i)(3-i)$
54.	Hisoblang: $(5+i)(4+3i)-(5+i)(5-i)$
55.	Hisoblang: $\frac{(5+i)(7-6i)}{3+i}$
56.	Hisoblang: $\frac{(5+i)(3+5i)}{2i}$.
57.	Hisoblang: $\frac{(1+3i)(8-i)}{(2+i)^2}$
58.	Hisoblang: $\frac{(2+i)(4+i)}{1+i}$
59.	Kompleks sonning haqiqiy qismini toping: $z = \frac{(1+2i)^3}{i} + i^{19}$
60.	Kompleks sonning haqiqiy qismini toping: $z = \frac{5+2i}{2-5i} - \frac{3-4i}{4+3i} + \frac{1}{i}$
61.	Kompleks sonning mavhum qismini toping: $z = (2-i)^3(2+11i)$
62.	Kompleks sonning mavhum qismini toping: $z = \frac{2-3i}{1+4i} + i^6$.
63.	Tenglamalar sistemasini yeching: $\begin{cases} iz_1 + (1+i)z_2 = 2+2i \\ 2iz_1 + (3+2i)z_2 = 5+3i \end{cases}$
64.	Tenglamalar sistemasini yeching: $\begin{cases} (1-i)z_1 - 3z_2 = -i \\ 2z_2 - (3+3i)z_2 = 3-i \end{cases}$
65.	Tenglamalar sistemasini yeching: $\begin{cases} 2z_1 - (2+i)z_2 = -i \\ (4-2i)z_1 - 5z_2 = -1-2i \end{cases}$
66.	Hisoblang: $i^4 + i^{14} + i^{24} + i^{34} + i^{44}$
67.	Hisoblang: $i + i^2 + i^3 + \ldots + i^n, n > 4$
68.	Kompleks sonning n-darajali ildizlari
69.	Hisoblang: $i \cdot i^2 \cdot i^3 \cdot i^4 \ldots i^{50}$
70.	Tenglamani yeching: $x^2 - (2+i)x + (-1+7i) = 0$
71.	Tenglamani yeching: $x^2 - (3-2i)x + (5-5i) = 0$;
72.	Tenglamani yeching: $(2+i)x^2 - (5-i)x + (2-2i) = 0$;

73.	Kompleks sonni trigonometrik shaklga keltiring: $1+i\sqrt{3}$;
74.	Kompleks sonni trigonometrik shaklga keltiring: $1+i\sqrt{3}$ g
75.	Kompleks sonni trigonometrik shaklga keltiring: $2+\sqrt{3}+i$;
76.	Kompleks sonni trigonometrik shaklga keltiring: $1+i\dfrac{\sqrt{3}}{3}$
77.	Kompleks sonlarni trigonometrik shaklga keltiring: $-\sqrt{3}-i$
78.	Chiziqli tenglamalar sestemasini matritsaviy usulda yeching $\begin{cases} -2x_1+x_2+x_3=1 \\ 3x_1+5x_2-x_3=-1 \\ x_1+x_2+3x_3=3 \end{cases}$
79.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} -2x_1+x_2+x_3=1 \\ 3x_1+5x_2-x_3=-1 \\ x_1+x_2+3x_3=3 \end{cases}$
80.	$\begin{pmatrix} 1 & 2 & 3 \\ 1 & 2 & 5 \end{pmatrix}$ matritsaning rangi aniqlansin.
81.	$\begin{pmatrix} 1 & 2 & 3 \\ 1 & 2 & 5 \end{pmatrix}$ matritsaning barcha elementlari algebraik to‘ldiruvchilari qiymatlari aniqlansin.
82.	Chiziqli tenglamalar sestemasini yeching matritsaviy usulda $\begin{cases} x_1+2x_2-x_3=5 \\ 2x_1+x_2-4x_3=9 \\ 5x_1-2x_2+4x_3=4 \end{cases}$
83.	Kompleks sonni algebraik shaklga keltiring: $\dfrac{i(cos\frac{5}{3}\pi+isin\frac{5}{3}\pi)}{cos\frac{\pi}{6}+isin\frac{\pi}{6}}$
84.	Chiziqli tenglamalar sestemasini Gauss usuli bilan yeching $\begin{cases} -2x_1+x_2+x_3=1 \\ 3x_1+5x_2-x_3=-1 \\ x_1+x_2+3x_3=3 \end{cases}$
85.	Chiziqli tenglamalar sestemasini Gauss usuli bilan yeching $\begin{cases} -2x_1+x_2+x_3=1 \\ 3x_1+5x_2-x_3=-1 \\ x_1+x_2+3x_3=3 \end{cases}$
86.	$A=\begin{pmatrix} 3 & 1 & -2 \\ & & \\ 2 & -4 & 5 \end{pmatrix}, B=\begin{pmatrix} 2 & -1 \\ -1 & 3 \\ 4 & -5 \end{pmatrix}$ $A\cdot B$ va $B\cdot A$ ko‘paytmalarni toping.
87.	A= $\begin{pmatrix} 1 & 0 & 2 \\ 0 & -1 & 3 \\ 4 & 0 & 5 \end{pmatrix}$ va B= $\begin{pmatrix} 2 & 7 & 1 \\ 3 & 2 & -4 \\ 1 & -3 & 5 \end{pmatrix}$ matritsalar berilgan. AB va BA matritsalarni toping.
88.	Chiziqli tenglamalar sestemasini matritsaviy usulda yeching $\begin{cases} 2x_1+3x_2+4x_3=9 \\ 4x_2+4x_3=1 \\ 7x_1-5x_2=-1 \end{cases}$
89.	$A=\begin{pmatrix} 1 & 2 & -1 \\ 3 & 0 & 2 \\ 4 & -2 & 5 \end{pmatrix}$ matritsaga teskari matritsani toping.

90.	Kompleks sonni trigonometrik shaklga keltiring: $\frac{5(cos100^0 + isin100^0)i}{3(cos40^0 - isin40^0)}$;
91.	A= $\begin{pmatrix} 1 & 2 & 2 \\ 2 & 1 & -2 \\ 2 & -2 & 1 \end{pmatrix}$ matritsaga teskari matritsani toping.
92.	Kompleks sonni trigonometrik shaklga keltiring: $\frac{sin\frac{2}{5}\pi + i(1 - cos\frac{2}{5}\pi)}{i-1}$.
93.	Hisoblang: $\left(\frac{1+i\sqrt{3}}{1-i}\right)^{20}$
94.	Hisoblang: $\left(1-\frac{\sqrt{3}-i}{2}\right)^{24}$
95.	Laplas teoremasi.
96.	Kroneker-Kapelli teoremasi.
97.	Chiziqli tenglamalar sisitemasi yechishning Kramer qoidasi
98.	Chiziqli tenglamalar sisitemasi yechishning matritsaviy usuli
99.	$\begin{cases} 3x - y + z = 12 \\ x + 2y + 4z = 6 \\ 5x + y + 2z = 3 \end{cases}$ tenglamalar sestemasining birgalikda bo‘lish bo‘lmasligini tekshiring,
100.	A= $\begin{pmatrix} 1 & 4 & -3 & 61 \\ 2 & 5 & 1 & -23 \\ 17 & -10 & 20 & 0 \end{pmatrix}$ matiritsani rangini toping
101.	A= $\begin{pmatrix} 2 & 1 & -2 & 3 \\ -3 & 0 & 1 & 1 \\ 5 & 1 & -3 & 2 \end{pmatrix}$ matritsaning rangini toping
102.	Hisoblang $\begin{vmatrix} 3 & -1 & 5 & 2 \\ 2 & 0 & 7 & 0 \\ -3 & 1 & 2 & 0 \\ 5 & -4 & 1 & 2 \end{vmatrix}$.
103.	Matritsalarning ko‘paytmasi hisoblansin: $\begin{pmatrix} -12 & 13 \end{pmatrix}\begin{pmatrix} 13547 & 13647 \\ 28423 & 28523 \end{pmatrix}\begin{pmatrix} -1 \\ 1 \end{pmatrix}\begin{pmatrix} -12 & 13 \end{pmatrix}$
104.	$\begin{cases} 2x - 5y = 1 \\ ax - 5y = -2a - 5 \end{cases}$ sistemani Kramer qoidasi bo’yicha yeching.
105.	$\begin{cases} x - 2y = 1 - i \\ 2x - 4y = 2 - 2i \end{cases}$ sistemani Gauss usulida yeching.
106.	$\begin{cases} x + 4y = -10 \\ 3x - y = 9 \end{cases}$ sistemani matrisaviy usulida yeching

107.	$\begin{cases} x_1 - x_2 + x_3 = 0 \\ 2x_1 + x_2 - x_3 = 0 \end{cases}$ sistemani fundamental yechimlar sistemasini toping.
108.	$(1+i)^{10}$ ni hisoblang.
109.	$(1-i)^{10}$ ni hisoblang.
110.	$\alpha = 7 - 5i$ mavhum qismini toping.
111.	arg(α·β) nimaga teng.
112.	$(1+2i)(3+i)+(-3+i)(2-i)$ hisoblang.
113.	i^{12} hisoblang.
114.	$\sqrt{2i}$ hisoblang.
115.	$-i$ kompleks sonni trigonometrik shaklini toping.
116.	$(2+i)(3-7i)$ amallarni bajaring
117.	$\sqrt{3-4i}$ hisoblang
118.	$(-3+i)(1-4i)$ hisoblang
119.	$(2+i)^3$ amallarni bajaring.
120.	Qo'shma kompleks sonlar. Xossalari.
121.	Algebraik va trigonometrik shakldagi kompleks sonlar orasida bog'lanish formulalari.
122.	Determinantni hisoblang $\begin{vmatrix} -1 & 4 \\ -5 & 2 \end{vmatrix}$
123.	Determinantni hisoblang $\begin{vmatrix} a+b & a-b \\ a-b & a+b \end{vmatrix}$;
124.	Determinantni hisoblang $\begin{vmatrix} 5 & 3 \\ 6 & 4 \end{vmatrix}$;
125.	Determinantni hisoblang $\begin{vmatrix} x+6 & 9 \\ 4 & x+6 \end{vmatrix}$.
126.	Determinantni hisoblang $\begin{vmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix}$;
127.	Determinantni hisoblang $\begin{vmatrix} 1 & 1 & x \\ 1 & 1 & x^2 \\ x^2 & x & 1 \end{vmatrix}$
128.	Determinantni hisoblang

	$\begin{vmatrix} 2 & -1 & 1 & 0 \\ 0 & 1 & 2 & -1 \\ 3 & -1 & 2 & 3 \\ 3 & 1 & 5 & 1 \end{vmatrix};$
129.	Determinantni hisoblang $\begin{vmatrix} 2 & 3 & -3 & 4 \\ 2 & 1 & -1 & 2 \\ 6 & 2 & 1 & 0 \\ 2 & 3 & 0 & -5 \end{vmatrix};$
130.	Determinantni hisoblang $\begin{vmatrix} 3 & -1 & 4 & 2 \\ 5 & 2 & 0 & 1 \\ 0 & 2 & 1 & -3 \\ 6 & -2 & 9 & 8 \end{vmatrix}$
131.	Tenglamani yeching $\begin{vmatrix} 2x-1 & 3 \\ 3x-4 & 2 \end{vmatrix} = 0$
132.	Tenglamani yeching $\begin{vmatrix} 4 & 1-2x \\ 3 & 5+x \end{vmatrix} = 0$
133.	Tenglamani yeching $\begin{vmatrix} \cos 8x & -\sin 5x \\ \sin 8x & \cos 5x \end{vmatrix} = 0;$
134.	Tenglamani yeching $\begin{vmatrix} \sin 4x & \cos 3x \\ -\cos 4x & \sin 3x \end{vmatrix} = 0$
135.	Tenglamani yeching $\begin{vmatrix} 3x & 6x-9 \\ 1 & x-2 \end{vmatrix} = 0;$
136.	Tenglamani yeching $\begin{vmatrix} x+1 & 1 & 2 \\ 6 & x & 1 \\ x+4 & 2 & 0 \end{vmatrix} = 0$
137.	Tenglamani yeching $\begin{vmatrix} x & x+1 & x+2 \\ x+3 & x+4 & x+5 \\ x+6 & x+7 & x+8 \end{vmatrix} = 0.$
138.	Tenglamani yeching $\begin{vmatrix} x & x+1 \\ -4 & x+1 \end{vmatrix} = 0$

139.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} 3x-4y=1, \\ 2x-7y=-8; \end{cases}$
140.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} 2ax-3by=0, \\ 3ax-6by=ab; \end{cases}$
141.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} x-y=3, \\ -2x+2y=1; \end{cases}$
142.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} 2x_1+4x_2+x_3=4, \\ 3x_1+6x_2+2x_3=4, \\ 4x_1-x_2-3x_3=1 \end{cases}$
143.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} 2x-y+3z=9, \\ 3x-5y+z=-4, \\ 4x-7y+z=5; \end{cases}$
144.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} x-y-2z=6, \\ 2x+3y-7z=16, \\ 5x+2y+z=16; \end{cases}$
145.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} 7x+2y+3z=15, \\ 5x-3y+2z=15, \\ 10x-11y+5z=36; \end{cases}$
146.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} 3x_1+2x_2+x_3=5, \\ 2x_1-x_2+x_3=6, \\ x_1+5x_2=-3; \end{cases}$
147.	Chiziqli tenglamalar sestemasini Kramer qoidasi bilan yeching $\begin{cases} x=2y+1, \\ y=\frac{x}{2}-0,5. \end{cases}$
148.	Amallarni bajaring $\begin{pmatrix} 2 & -3 \\ 4 & -6 \end{pmatrix} \cdot \begin{pmatrix} 9 & -6 \\ 6 & -4 \end{pmatrix}$
149.	Amallarni bajaring $\begin{pmatrix} 4 & 3 \\ 7 & 5 \end{pmatrix} \cdot \begin{pmatrix} -28 & 93 \\ 38 & -126 \end{pmatrix} \cdot \begin{pmatrix} 7 & 3 \\ 2 & 1 \end{pmatrix};$
150.	Amallarni bajaring $\begin{pmatrix} 1 & 1 & 2 \\ 1 & 3 & 1 \\ 4 & 1 & 1 \end{pmatrix}^2;$

151.	Amallarni bajaring $\begin{pmatrix} 1 & 2 & 1 & 0 \\ 0 & 2 & 1 & 1 \\ 1 & -2 & 2 & 1 \\ 2 & -1 & 2 & -1 \end{pmatrix} \cdot \begin{pmatrix} 1 \\ 2 \\ 1 \\ -1 \end{pmatrix}$
152.	Amallarni bajaring $\begin{pmatrix} 1 & 2 & 3 \\ 3 & 1 & 2 \\ 1 & 3 & 2 \end{pmatrix} \cdot \begin{pmatrix} 1 \\ -2 \\ 3 \end{pmatrix}$
153.	Amallarni bajaring $\begin{pmatrix} a_1 & b_1 & c_1 \\ a_2 & b_2 & c_2 \\ a_3 & b_3 & c_3 \end{pmatrix} \cdot \begin{pmatrix} x_1 \\ x_2 \\ x_3 \end{pmatrix};$
154.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} 4x_1 - x_2 + 3x_3 = 0, \\ 2x_1 + 3x_2 - 5x_3 = 0, \\ x_1 - 2x_2 + 4x_3 = 0. \end{cases}$
155.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} 2x_1 - x_2 - 2x_3 = 0, \\ 3x_1 - 5x_2 + x_3 = 0, \\ x_1 - 4x_2 + 3x_3 = 0. \end{cases}$
156.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} 3x_1 + x_2 - 2x_3 = 0, \\ x_1 + 2x_2 + x_3 = 0, \\ 4x_1 - x_2 + 3x_3 = 0; \end{cases}$
157.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} 3x_1 + 5x_2 - x_3 = 0, \\ 2x_1 - 3x_2 + 3x_3 = 0, \\ x_1 + 8x_2 - 4x_3 = 0. \end{cases}$
158.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} 5x_1 + 2x_2 - 3x_3 = 0; \\ 4x_1 - x_2 + 2x_3 = 0, \\ x_1 + 3x_2 + x_3 = 0; \end{cases}$
159.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} 4x_1 - x_2 + 5x_3 = 0, \\ 2x_1 + 3x_2 - x_3 = 0, \\ x_1 - 2x_2 + 3x_3 = 0. \end{cases}$
160.	Bir jinsli tenglamalar sistemasini yeching: $\begin{cases} x_1 - 2x_2 - 2x_3 = 0, \\ 3x_1 + 4x_2 - 2x_3 = 0, \\ 2x_1 + x_2 - 2x_3 = 0. \end{cases}$
161.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching:

	$\begin{cases} 3x_1+2x_2+\ \ x_3=5, \\ 2x_1+3x_2+\ \ x_3=1, \\ 2x_1+\ \ x_2+3x_3=11; \end{cases}$
162.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} 4x_1-3x_2+2x_3=9, \\ 2x_1+5x_2-3x_3=4, \\ 5x_1+6x_2+2x_3=18; \end{cases}$
163.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} 2x_1-\ \ x_2-\ \ x_3=4, \\ 3x_1+4x_2-2x_3=11, \\ 3x_1-2x_2+4x_3=11; \end{cases}$
164.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} 5x_1-\ \ x_2+3x_3=2, \\ -\ \ x_1+3x_2-2x_3=1, \\ 4x_1+2x_2+\ \ x_3=7. \end{cases}$
165.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} x_1+x_2+3x_3=-1, \\ 2x_1-x_2+2x_3=-4, \\ 4x_1+x_2+4x_3=-2; \end{cases}$
166.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} 3x_1+\ \ x_2-\ \ x_3=4, \\ x_1-2x_2+2x_3=1, \\ 4x_1-\ \ x_2+\ \ x_3=3. \end{cases}$
167.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} x_1+2x_2+4x_3=31, \\ 5x_1+\ \ x_2+2x_3=20, \\ 3x_1-\ \ x_2+\ \ x_3=0; \end{cases}$
168.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} 2x_1-3x_2+2x_3=-6, \\ 5x_1+8x_2-\ \ x_3=0, \\ x_1+2x_2+3x_3=6; \end{cases}$
169.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 3x_1+5x_2+\ \ x_3=2, \\ 5x_1-3x_2+3x_3=4, \\ 4x_1+\ \ x_2+2x_3=8. \end{cases}$
170.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} x_1-\ \ x_2-\ \ x_3=4, \\ x_1+3x_2-7x_3=3, \\ x_1-5x_2+5x_3=7. \end{cases}$
171.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 2x_1+\ \ x_2-5x_3=-1, \\ x_1+\ \ x_2-\ \ x_3=-2, \\ 4x_1-3x_2+\ \ x_3=13; \end{cases}$

172.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 4x_1+3x_2+2x_3=2, \\ 2x_1+2x_2-x_3=3, \\ 2x_1+x_2+3x_3=5. \end{cases}$
173.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 6x_1+4x_2-7x_3=3, \\ 7x_1+x_2-3x_3=2, \\ x_1-3x_2+4x_3=7. \end{cases}$
174.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 3x_1-x_2-x_3=-3, \\ 2x_1+3x_2-2x_3=4, \\ x_1-4x_2+x_3=8. \end{cases}$
175.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} x_1+4x_2-3x_3=-2, \\ 2x_1+5x_2+x_3=-1, \\ x_1+7x_2-10x_3=-5; \end{cases}$
176.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 5x_1+6x_2-2x_3=-9, \\ 2x_1+5x_2-3x_3=-1, \\ 4x_1-3x_2+2x_3=-15; \end{cases}$
177.	Berilgan tenglamalar sistemasini matrisaviy usul bilan yeching: $\begin{cases} 3x_1-2x_2-5x_3=-14, \\ x_1-2x_2+3x_3=0, \\ 2x_1+3x_2-4x_3=-10; \end{cases}$
178.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} x_1+2x_2-x_3=5, \\ 2x_1+x_2-4x_3=9, \\ 5x_1-2x_2+4x_3=4; \end{cases}$
179.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} -2x_1+x_2+x_3=1, \\ 3x_1+5x_2-x_3=-1, \\ x_1+x_2+3x_3=3; \end{cases}$
180.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} 2x_1+x_3+x_4=9, \\ 3x_2-2x_3+3x_4=12, \\ -2x_1+x_2-x_3+x_4=1, \\ 5x_1+2x_2-3x_4=-3. \end{cases}$
181.	Berilgan tenglamalar sistemasini Gauss usuli bilan yeching: $\begin{cases} x_1+2x_2-x_3+2x_4=4, \\ 2x_1+3x_2+4x_3-x_4=8, \\ -5x_1+x_2-3x_3=-7, \\ x_2+x_3-7x_4=-5; \end{cases}$
182.	Quyidagi tenglamalar sistemasini yeching:

	$\begin{cases} 2x_1 + 2x_2 - x_3 + x_4 = 4, \\ 4x_1 + 3x_2 - x_3 + 2x_4 = 6, \\ 8x_1 + 5x_2 - 3x_3 + 4x_4 = 12, \\ 3x_1 + 3x_2 - 2x_3 + 2x_4 = 6 \end{cases}$
183.	Quyidagi tenglamalar sistemasini yeching: $\begin{cases} 3x_1 + 4x_2 + x_3 + 2x_4 + 3 = 0, \\ 3x_1 + 5x_2 + 3x_3 + 5x_4 + 6 = 0, \\ 6x_1 + 8x_2 + x_3 + 5x_4 + 8 = 0, \\ 3x_1 + 5x_2 + 3x_3 + 7x_4 + 8 = 0. \end{cases}$
184.	Quyidagi tenglamalar sistemasini yeching : $\begin{cases} x_1 + 2x_2 - x_3 = 3, \\ 3x_1 - x_2 + 4x_3 = 6, \\ 5x_1 + 5x_2 + 2x_3 = 8. \end{cases}$
185.	Quyidagi tenglamalar sistemasini yeching: $\begin{cases} x_1 + 2x_2 - x_3 = 3, \\ 3x_1 - x_2 + 4x_3 = 6, \\ 5x_1 + 3x_2 + 2x_3 = 12. \end{cases}$
186.	Muavr formulasi bilan hisoblang: $(1+i)^{10}$
187.	Muavr formulasi bilan hisoblang: $(1-i\sqrt{3})^6$
188.	Muavr formulasi bilan hisoblang: $(-1+i)^5$
189.	Muavr formulasi bilan hisoblang: $(\sqrt{3}+i)^3$
190.	Muavr formulasi bilan hisoblang: $\sqrt[3]{-1}$
191.	Muavr formulasi bilan hisoblang: $\sqrt[3]{i}$
192.	Muavr formulasi bilan hisoblang: $\sqrt[6]{-1}$
193.	Muavr formulasi bilan hisoblang: $\sqrt[3]{-2+2i}$
194.	Amallarni bajaring: $(2+3i)\cdot(3-2i)$
195.	Amallarni bajaring: $(3-2i)^2$
196.	Amallarni bajaring: $(a+bi)\cdot(a-bi)$
197.	Amallarni bajaring: $(1+i)^3$
198.	Amallarni bajaring: $\frac{1+i}{1-i}$
199.	Amallarni bajaring: $\frac{2i}{1+i}$

200.	Ushbu $A=\begin{pmatrix} 2 & 1 \\ 3 & -3 \\ 5 & 2 \end{pmatrix}$ va $B=\begin{pmatrix} 1 & -1 & 1 \\ 2 & 4 & 3 \end{pmatrix}$ matrisalarni ko'paytiring
201.	Ushbu $A=\begin{pmatrix} 1 & -1 & 1 \\ 2 & 1 & 0 \\ 5 & 7 & 1 \\ 1 & 4 & 3 \end{pmatrix}$, $B=\begin{pmatrix} 5 & -1 & 2 & 1 & -1 \\ 2 & 2 & 0 & 1 & 1 \\ 1 & -1 & 5 & 4 & 4 \end{pmatrix}$ matrisalarni ko'paytiring.
202.	Ushbu $A=\begin{pmatrix} 3 & 5 \\ 7 & -9 \end{pmatrix}$ matrisaga teskari matrisalarni toping.
203.	Ushbu $B=\begin{pmatrix} 1 & 2 & 1 \\ 4 & 3 & -2 \\ -5 & -4 & -1 \end{pmatrix}$ matrisaga teskari matrisalarni toping.
204.	Ushbu $A=\begin{pmatrix} 1 & 1 & 1 \\ 1 & 2 & 4 \\ 1 & 3 & 9 \end{pmatrix}$ matrisaga teskari matrisani toping.
205.	Determinant birinchi ustun elementlari bo'yicha yoyib hisoblansin: $\begin{vmatrix} 2 & 3 & 4 \\ 5 & -2 & 1 \\ 1 & 2 & 3 \end{vmatrix}$;
206.	Determinantni birinchi ustun elementlari bo'yicha yoyib hisoblansin: $\begin{vmatrix} a & 1 & a \\ -1 & a & 1 \\ a & -1 & a \end{vmatrix}$
207.	Determinantni birinchi ustun elementlari bo'yicha yoyib hisoblansin: $\begin{vmatrix} 1 & 2 & 5 \\ 0 & 5 & 7 \\ 0 & -4 & 8 \end{vmatrix}$.
208.	Determinant nollar eng ko'p bo'lgan satr elementlari bo'yicha yoyib hisoblansin: $\begin{vmatrix} 1 & b & 1 \\ 0 & b & 0 \\ b & 0 & -b \end{vmatrix}$
209.	Determinant nollar eng ko'p bo'lgan ustun elementlari bo'yicha yoyib hisoblansin:

	$\begin{vmatrix} 1 & 2 & 5 \\ 0 & 5 & 7 \\ 0 & -4 & 8 \end{vmatrix}$
210.	Determinant nollar eng ko'p bo'lgan satr elementlari bo'yicha yoyib hisoblansin: $\begin{vmatrix} 0 & 0 & 1 \\ 2 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix}.$
211.	Ushbu determinantni tartibini pasaytirish usulidan foydalanib hisoblang: $\begin{vmatrix} 1 & -4 & 0 & 3 \\ -4 & 3 & 2 & -3 \\ -2 & 3 & -1 & 4 \\ 3 & 2 & 5 & 0 \end{vmatrix}$
212.	Ushbu determinantni tartibini pasaytirish usulidan foydalanib hisoblang: $\begin{vmatrix} 2 & -1 & 0 & 5 \\ -1 & -3 & 2 & -4 \\ 4 & 2 & -1 & 3 \\ 3 & 0 & -4 & -2 \end{vmatrix}$
213.	Ushbu determinantni tartibini pasaytirish usulidan foydalanib hisoblang: $\begin{vmatrix} 3 & -1 & 0 & 3 \\ 5 & 1 & 4 & -7 \\ 5 & -1 & 0 & 2 \\ 1 & -8 & 5 & 3 \end{vmatrix}$
214.	Ushbu determinantni tartibini pasaytirish usulidan foydalanib hisoblang: $\begin{vmatrix} 6 & -3 & 4 & 2 \\ -1 & 0 & 4 & 5 \\ 2 & 7 & 3 & 4 \\ 0 & -5 & -1 & 3 \end{vmatrix}.$
215.	2-tartibli determinant
216.	3-tartibli determinant
217.	Determinantlarning xossalari
218.	4-tartibli determinant
219.	n-tartibli determinantlar
220.	Matrisa tushunchasi
221.	Matrisaning o'lchovi
222.	Kvadrat matrisa

223.	Maxsus va maxsusmas matrisalar
224.	Diagonal matrisa
225.	Birlik matrisa
226.	Transponirlangan matrisa
227.	Matrisalar yig'indisi
228.	Matrisalar qanday ko'paytiriladi?
229.	Hisoblang: $\frac{\left(-1+i\sqrt{3}\right)^{15}}{(1-i)^{20}}+\frac{\left(-1-i\sqrt{3}\right)^{15}}{(1+i)^{20}}$
230.	Birning 6-darajali ildizlarini toping
231.	Ko'phadlar va ular ustida amallar.
232.	$f(x)=2x^4+x^3+x^2-x-3$ ko'phadni $g(x)=x^3+2x^2-1.$ ko'phadga bo'lgandagi $q(x)$ bo'linma va $r(x)$ qoldiqni toping.
233.	$f(x)=2x^4+x^3+x^2+6x+4$ ko'phadni $g(x)=x^3+2x^2+6.$ ko'phadga bo'lgandagi bo'linma $q(x)$ va qoldiq $r(x)$ ni toping.
234.	$f(x)=2x^4+x^3+x^2-x-3$ va $g(x)=x^3+2x^2-1.$ ko'phadlarning EKUBini toping
235.	$x^4-4x^3+5x^2+x-1$ ko'phadni x^2-2x-3 ko'phadga;bo'lishdan hosil bo'lgan $q(x)$ bo'linmani va $r(x)$ qoldiqni toping:
236.	$5x^4-x^2+6$ ko'phadni $x^2+3x+2;$ ko'phadga bo'lishdan hosil bo'lgan $q(x)$ bo'linmani va $r(x)$ qoldiqni toping:
237.	$2x^4-3x^3+4x^2-5x+6$ на ko'phadni $x^2-3x+1.$ ko'phadga bo'lishdan hosil bo'lgan $q(x)$ bo'linmani va $r(x)$ qoldiqni toping:
238.	x^5+x^2-x-1 *ni* ko'phadni $x^3-2x+1;$ ko'phadga bo'lishdan hosil bo'lgan $q(x)$ bo'linmani va $r(x)$ qoldiqni toping
239.	$2x^4+x^2+2x$ *ni* ko'phadni $x^2-2.$ ko'phadga bo'lishdan hosil bo'lgan $q(x)$ bo'linmani va $r(x)$ qoldiqni toping
240.	$f(x)$ ва $g(x)$ ko'phadlarning EKUBi va EKUK ini toping: $f(x)=x^4+x^3-3x^2-4x-1,\quad g(x)=x^3+x^2-x-1;$
241.	$f(x)$ ва $g(x)$ ko'phadlarning EKUBi va EKUK ini toping: $f(x)=x^4+2x^3+2x+2,\quad g(x)=x^3+3x+2.$
242.	$f(x)$ ва $g(x)$ ko'phadlarning EKUBi va EKUK ini toping: $f(x)=x^4-4x^3+1,\quad g(x)=x^3-3x^2+1;$
243.	$f(x)$ ва $g(x)$ ko'phadlarning EKUBi va EKUK ini toping: $f(x)=x^6-7x^4+8x^3-7x+7,\quad g(x)=3x^5-7x^3+3x^2-7;$

244.	$f(x)$ ва $g(x)$ ko'phadlarning EKUBi va EKUK ini toping: $f(x)=x^5+x^4-x^3-2x-1, \quad g(x)=3x^4+2x^3+x^2+2x-2;$
245.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=x^4+2x^3-x^2-4x-2, \quad g(x)=x^4+x^3-x^2-2x-2;$
246.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=x^5+3x^4+x^3+x^2+3x+1, \quad g(x)=x^4+2x^3+x+2;$
247.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=4x^4-2x^3-16x^2+5x+9, \quad g(x)=2x^3-x^2-5x+4;$
248.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=3x^3-2x^2+x+2, \quad g(x)=x^2-x+1;$
249.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=x^4-x^3-4x^2+4x+1, \quad g(x)=x^2-x-1;$
	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=x^5-5x^4-2x^3+12x^2-2x+12, \quad g(x)=x^3-5x^2-3x+17.$
250.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=x^4+2x^3-x^2-4x-2, \quad g(x)=x^4+x^3-x^2-2x-2;$
251.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=x^5+3x^4+x^3+x^2+3x+1, \quad g(x)=x^4+2x^3+x+2;$
252.	Yevklid algoritmidan foydalanib, $f(x)$ va $g(x)$ ko'phadlar uchun shunday $\varphi(x)$ va $\psi(x)$, ko'phadlarni topingki, $(f(x),g(x))=f(x)\varphi(x)+g(x)\psi(x):$ tenglik o'rinli bo'lsin. $f(x)=4x^4-2x^3-16x^2+5x+9, \quad g(x)=2x^3-x^2-5x+4;$
253.	Aniqmas koeffisiyentlar usuli bilan shunday $\varphi(x)$ va $\psi(x)$ ko'phadlarni tanlab olingki, $f(x)\varphi(x)+g(x)\psi(x)=1:$ tenglik o'rinli bo'lsin: $f(x)=x^3, \qquad g(x)=(1-x)^2;$
254.	Aniqmas koeffisiyentlar usuli bilan shunday $\varphi(x)$ va $\psi(x)$ ko'phadlarni tanlab olingki, $f(x)\varphi(x)+g(x)\psi(x)=1:$ tenglik o'rinli bo'lsin: $f(x)=x^4-4x^3+1, \quad g(x)=x^3-3x^2+1.$

255.	Aniqmas koeffisiyentlar usuli bilan shunday $\varphi(x)$ va $\psi(x)$ ko'phadlarni tanlab olingki, $f(x)\,\varphi(x)+g(x)\,\psi(x)=1$: tenglik o'rinli bo'lsin: $f(x)=x^4$, $g(x)=x^3-3x^2+4;$
256.	Aniqmas koeffisiyentlar usuli bilan shunday $\varphi(x)$ va $\psi(x)$ ko'phadlarni tanlab olingki, $f(x)\,\varphi(x)+g(x)\,\psi(x)=1$: tenglik o'rinli bo'lsin: $f(x)=x^3+3x+3,\quad g(x)=x^2-x-2;$
257.	Ko'phadning ildizi.
258.	Bezu teoremasi. Gorner sxemasi.
259.	Karrali ildizlar.
260.	Gorner sxemasidan foydalanib $f(\alpha)$, ni hisoblang: $f(x)=x^4-3x^3+6x^2-10x+16,\quad \alpha=4$;
261.	Gorner sxemasidan foydalanib $f(\alpha)$, ni hisoblang: $f(x)=5x^4-7x^3+8x^2-3x+7,\quad \alpha=3$
262.	Gorner sxemasidan foydalanib $f(\alpha)$, ni hisoblang: $f(x)=2x^5+2x^4-3x^3+4x^2-6x+5,\quad \alpha=-\frac{1}{2};$
263.	Gorner sxemasidan foydalanib $f(\alpha)$, ni hisoblang: $f(x)=x^5+(1+2i)x^4-(1+3i)x^2+7,\quad \alpha=-2-i;$
264.	Gorner sxemasidan foydalanib $f(\alpha)$, ni hisoblang: $f(x)=x^5+(1-2i)x^4-(3+i)x^2+7,\quad \alpha=-1+2i.$
265.	Gorner sxemasidan foydalanib $f(x)$ ko'phadni $x-\alpha$ ning darajalari bo'yicha yoying: a) $f(x)=x^4+2x^3-3x^2-4x+1,\quad \alpha=-1$;
266.	Gorner sxemasidan foydalanib $f(x)$ ko'phadni $x-\alpha$ ning darajalari bo'yicha yoying: $f(x)=x^5,\quad \alpha=1$
267.	Gorner sxemasidan foydalanib $f(x)$ ko'phadni $x-\alpha$ ning darajalari bo'yicha yoying: $f(x)=x^4-8x^3+24x^2-50x+90,\quad \alpha=2;$
268.	Gorner sxemasidan foydalanib $f(x)$ ko'phadni $x-\alpha$ ning darajalari bo'yicha yoying: $f(x)=x^4+2ix^3-(1+i)x^2-3x+7+i,\quad \alpha=-i;$
269.	Gorner sxemasidan foydalanib $f(x)$ ko'phadni $x-\alpha$ ning darajalari bo'yicha yoying: $f(x)=x^4+(3-8i)x^3-(21+18i)x^2-(33-20i)x+7+18i,\quad \alpha=-1+2i.$
270.	Gorner sxemasidan foydalanib *x* ning darajalari bo'yicha yoying: $f(x+3),\quad f(x)=x^4-x^3+1$;
271.	Gorner sxemasidan foydalanib *x* ning darajalari bo'yicha yoying: $f(x+2),\quad f(x)=2x^4-3x^3+5x^2+6x-1;$
272.	Gorner sxemasidan foydalanib *x* ning darajalari bo'yicha yoying: $f(x)=(x-2)^4+4(x-2)^3+6(x-2)^2+10(x-2)+20;$

273.	Gorner sxemasidan foydalanib *x* ning darajalari bo'yicha yoying: $f(x)=(x+3)^5-2(x+3)^3+3(x+3)^2+7(x+3)-8.$
274.	Quyida berilgan A to'plamning elementlarini aniqlang. $A=\{x\in Z:(x-6)(x^2-4)=0,\quad x\geq 0\}$
275.	Quyida berilgan A to'plamning elementlarini aniqlang. $A=\{x\in R:x^3-5x^2+6x=0\}$
276.	Quyida berilgan A to'plamning elementlarini aniqlang. $A=\{x\in R:x+\frac{1}{x}\leq 2,\quad x>0\}$
277.	Quyida berilgan A to'plamning elementlarini aniqlang. $A=\{x\in N:x^2-5x-6\leq 0$
278.	Quyida berilgan A to'plamning elementlarini aniqlang. $A=\{x\in R:\cos^2 2x=1,\quad 0<x\leq 2\pi\}$
279.	Quyida berilgan to'plamlarni koordinatalar tekisligida tasvirlang. $\{(x,y)\in R^2:\ x+3y-6=0\}.$
280.	Quyida berilgan to'plamlarni koordinatalar tekisligida tasvirlang. $\{(x,y)\in R^2:x^2+y^2\leq 4\}.$
281.	Quyida berilgan to'plamlarni koordinatalar tekisligida tasvirlang. $\{(x,y)\in R^2:(x^2-1)\cdot(y+2)=0\}.$
282.	Quyida berilgan to'plamlarni koordinatalar tekisligida tasvirlang. $\{(x,y)\in R^2:\ y>\sqrt{2x+1},\ \ 2x+1\geq 0\}.$
283.	Quyida berilgan to'plamlarni koordinatalar tekisligida tasvirlang. $\left\{(x,y)\in R^2:\ \frac{1}{x}>\frac{1}{y},\ \ x\neq 0,\ \ y\neq 0\right\}.$
284.	Quyida berilgan to'plamlarni koorrdinatalar tekisligida tasvirlang. $\{(x,y)\in R^2:\ y^2>2x+1\}.$
285.	Quyidagi berilgan A va B to'plamlarga ko'ra $A\cup B$, $A\cap B$, $A\setminus B$, $B\setminus A$ to'plamlarni toping.) $A=\{x\in R:x^2+x-20=0\},\qquad B=\{x\in R:x^2-7x+12=0\}$
286.	Quyidagi berilgan A va B to'plamlarga ko'ra $A\cup B$, $A\cap B$, $A\setminus B$, $B\setminus A$ to'plamlarni toping. $A=\{x\in R:-2\leq x\leq 3\}=[-2;3]$, $B=\{x\in R:1\leq x\leq 4\}=[1;4]$.
287.	Quyidagi berilgan A va B to'plamlarga ko'ra $A\cup B$, $A\cap B$, $A\setminus B$, $B\setminus A$ to'plamlarni toping. $A=\{x\in N:\ x^2-4x\leq 0\},\quad B=\{x\in Z:x^2-x-6\leq 0\}.$
288.	To'plamlar ustida amallar
289.	To'plam tushunchasi.
290.	Qism to'plamlar.
291.	Venn diagrammasi