# Matematika fanidan bilim darajasini tekshirish uchun MAXSUS TEST

**Haqiqiy sonlar :**
1. **EKUB-EKUK**
2. **Kasrlar**

**Algebraik ifodalar:**
3. Ko'phadni ko'paytuvchilarga ajratish
4. Ratsional ifodalar

**5. Ildizlar**

**Tenglamalar :**
6. Chiziqli tenglama
7. Kvadrat tenglama
8. Sistema

**Tengsizliklar:**
9. Chiziqli
10. Oraliqlar usuli

**Modul:**
11. Tenglama
12. Tengsizlik

**Progressiya:**
13. Arifmetik
14. Geometrik

15. **Matnli masala**
16. **Funksiya**
17. **Ko'rsatkichli tenglama & tengsizlik**
18. **Logarifm**
19. **Trigonometriya**
20. **Hosila va integral**

1. 45 va 60 sonlarining eng kichik umumiy karralasini toping.
A) 100     B) 120     C) 180     D) 15

2. Hisoblang: $\dfrac{2-0,(3):\frac{5}{6}}{1-(\frac{2}{3}-0,6)}$

A) $\frac{3}{2}$   B) $\frac{12}{7}$   C) $\frac{15}{2}$   D) 8

3. Ko'paytuvchilarga ajrating: $a^2-16x^2$
A) $(a+4x)(a-4x)$    B) $(a+16x)(a-16x)$
C) $a^2(1-16x^2)$     D) $(a-16x)^2$

4. Soddalashtiring: $\dfrac{a^2x-ax^2}{a-x}$
A) ax   B) a    C) x    D) a+x

5. $\dfrac{9}{5-\sqrt{7}}+\dfrac{22}{7+\sqrt{5}}-\dfrac{1}{\sqrt{7}+\sqrt{5}}$

A)1    B)6    C)$\frac{1}{5}$    D)5

6. Chiziqli tenglamani yeching:
$2x-5\cdot(3x-6)=5x-6$
A)3    B)4    C)5    D)2

7. Tenglamaning katta ildizidan kichik ildizini ayiring: $x^2-18x+45=0$
A) 12     B)3      C)-15      D)15

8. Tenglamalar sistemasini yeching.
$\begin{cases}9(x-y)-4=15\\2x+9y=3\end{cases}$

A) $(-4;3)$   B)$\left(-\frac{2}{5};3\right)$   C)$(3;-4)$   D)$\left(2;-\frac{1}{9}\right)$

9. Tengsizlikni yeching: $2+17+3x>2(x-1)+x$
A) $(-2,5;0)$      B) $(-\infty;-2,5)$
C) $\left(-\infty;\frac{1}{4}\right)$      D) $x\in R$

10. Tengsizlikni yeching: $\dfrac{x+1}{x-2}\le0$
A)$(-\infty;-1]$   B)$[-1;2)$   C)$(-1;2]$   D)$(2;\infty)$

11. Tengsizlikning nechta ildizi bor?
$|x+1|=|2x-1|$
A)4    B)3    C)2    D)1

12. Tengsizlik nechta butun yechimga ega?
$|x-2|\le5$
A)11   B)10   C)8    D)7

13. Arifmetik progressiyada $a_2=12$ va $a_5=3$. Shu progressiyaning o'ninchi hadini toping.
A)-6      B)0       C)-12      D)-30

14. Ushbu $b_3\cdot b_4\cdot b_5=27$ tenglik o'rinli bo'lgan geometrik progressiyaning to'rtinchi hadini toping.
A)10      B)12       C)4    D)3

15. 60000 $ pul Feruza bilan Nozliyaga bo'lib berildi. Feruza Nozliyaga 5000 $ bersa, Feruzaning puli Nozliyanikining 20 % iga teng bo'lib qoladi. Dastlab Nozliyaga qancha pul tekkan edi?
A)45000   B)15000   C)5000   D)55000

16. $y=-3x+5$ funksiya grafigi koordinatalar tekisligining qaysi choraklaridan o'tadi?
A) 1,2,3   B) 2,3,4   C) 1,2,4    D) 3,4,1

17. Ushbu $0,5^{x+4}>0,5^{3x}$ Tengsizlikning eng kichik natural yechimini toping.
A)1,5    B)2     C)1      D)3

18. Hisoblang: $\log_2\lg100$
A)1     B)4     C)3      D)2

19. Ifodani qiymatini hisoblang.
$\sin180^0-ctg\,90^0+\cos90^0$
A)-1    B)0    C)180     D)-2

20. Ushbu $3x^2+5x-7$ ifodaning hosilasini toping.
A) $6x+5$           B) $3x-5$
C) $5x^2+3x-7$       D) 1