Test- 4

1 . y = 4sin6x + 3sin8x fungsiyaning hosilasini toping ?
A) 48sinx•sin7x B) 48cosx•cos7x
C) 48sinx•cos7x D) - 48cosx•sin7x

2 . Shunday n - natural sonni topingki, shu songacha b'lgan toq sonlar yig'indisi 50 marta kichik
A) 100 B) 200 C) 300 D) 250

3 . a,b,c,d,e -lar bir - biridan farqli butun sonlar (6 - a)(6 - b)(6 - c)(6 -d)(6 -e) = 45 bo'lsa a+b++d+e = ?
A) 5 B) 17 C) 25 D) 27 E) 30

4 . Uch burchakning ikki tomoni 7 va 11 , yuzi $12\sqrt{10}$ bulsa, uchinchi tomonini toping.
A) 10 yoki 12 B) 12 yoki 15
C) 12 yoki 14 D) 14 yoki 16

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5 . $y = (x + 6)e^{x-6}$ fungsiyani minimum nuqtasini toping .
A) -10 B) -8 C) -7 D) -9

6 . a va b natural sonlarning EKUBi 30 ga teng ko'paytmasi 36000 ga teng bo'lsa shu sonlarning EKUKini toping .
A) 1800 B) 1000 C) 1200 D) 9000

7 . Agar $f(x) = 3^{\cos x}$ bo'lsa $f'(\frac{\pi}{2}) = ?$
A) ln3 B) - ln3 C) 0 D) 3ln3

8 . $y = \frac{|x|}{x}$ fungsiyani aniqlanish sohasini toping .
A) $(-\infty; 0)\cup(0; +\infty)$ B)$(-\infty; +\infty)$ C) $(-\infty; 0)$ D)$(0; +\infty)$

9. Qùyidagi javoblardagi uchliklardan qaysi biri uchburchakning balandligi bula olmaydi .
A) 7;8;√113 B)5;12;13 C) 8;15;17 D) 1;√3;2

10 . To'p 2m 43sm balandlikdan tashlandi va yerga urilib , har gal balandligini 2/3 qismiga teng balandlikga ko'tarildi.
To'p necha urinishdan keyin 32 sm balandlikga ko'tariladi.
(32 sm dan yuqoriga o'tib ketadigan hollarni qaramang.)
A) 8 B) 7 C) 4 D) 5

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11 . y=lg [x (x-1)(x+2)] fungsiyaning aniqlqnish sohasini toping.
A)(- 2; ∞)∪(1 ;∞) B)(- ∞ ; ∞) C)(-∞ ; 0) D)(0 ; ∞)

12 . E (n) - n soning juft raqamlari yig'indisi, bo'lsa E (1) +E (2) +E (3) . . . E(100) ni toping ?
A) 200 B) 400 C) 360 D) 900

13 . a soni b ning c foiziga teng.
b soni a ning 4c foiziga teng . c ni toping.
A) 50 B) 25 C) 40 D) 36

14 . Doirani markazidan √2 birlik uzoqlikda otuvchi vatar uzunligi 4 birlikga teng. Doirani yuzini toping .
A)8π B) (2 + √2)π C) 6π D) 9π

15 . $2(x - 3) - (x - 1)(x + 3) \le 0$
Tengsizlikni yechimlari yig'indisini toping.
A) 77 B) 78 C) 84 D) 90

16 . $tg5x = tg(3x + 4)$ tenglamani butun ildizini toping.
A) 1 B)2 C) 3 D) 0

17 . Teng yonli trapetsiyaning qarama qarshi burchaklari ayirmasi 40° bo'lsa uning burchaklarini toping .
A) 70° va 110° B) 65° va 115°
C) 80° va 120° D) 75° va 105°

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18 . 50 - 45 - 13 - 1 ifodaga qavslar qo'yilganda nechta turli xil natijalar olish mumkin .
A) 6 B) 5 C) 4 D) 7

19 . R radiusli metal shardan yon sirti asosining yuzidan 3 martta katta bo'lgan konus quyildi. Konusni balandligini toping.

A$2R\sqrt[3]{4}$ B) $R\sqrt[3]{4}$ C) $2R\sqrt[3]{2}$ D) $R\sqrt[3]{2}$

20 . Soddalashtiring .
tgx•tgy + (tgx + tgy)•ctg (x + y) + 1 .
A)2 B) 1 C) -1 D) 0

21 . x = sin3x tenglamani nechta yechimga ega .
A) 0 B) 1 C) 3 D) 2

Test-4

22 . ab = 3a + 6b bo'lsa ab ikki xonali sonni toping.
A) 60 B) 56 C) 57 D) 83

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23 . $\ln(x+1) \geq 2$ tenglamaning eng kichik butun qiymatini toping.
A)3 B) 8 C) 4 D) 7

24 . To'g'ri parallelopipedning uchta o'lchovi bo'yicha sirtini toping. 10sm , 22sm ,16sm .
A)1244 B) 1464 C) 1440 D) 1462

25 . Quyidagi nuqtalardan qaysi biri OXY tekisligida yotadi .
A) (0; 0; 7) B) (3; 0; -2)
C) (-2; 3 0) D) (0; -2; -3)

26 . lg2 = n lg5 = m lg1400= p bo'lsa, lg7 = ?
A) p + 3m + 2n B) p - 3m - 2n
C) p- 2m - 3m D) p + 2m + 3m

27 . $x(x+1)(x+3)(x+2)$ kupaytmaning eng kichik qiymatini toping .
A) -1 B) 1 C) -2 D) 2

28 . $(x-2)x(x-3)(x+1) = 40$ tenglamani haqiqiy ildizlari yigindisini toping .
A) 6 B) 3 C) 4 D) 2

29 . $y = x^2 - 6x + 4$ fungsiyaning simmetriya tenglamasini toping.
A) y = -6 B) x = 3 C) y = 4 D) y = 3

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30 .
$$\begin{cases} 2x + 3y = 7 \\ 4x + 6y = 14 \end{cases}$$

tenglamalar sistemasini nechta yechimga ega.
A) 1 B) 2 C) ø D)cheksz ko'p