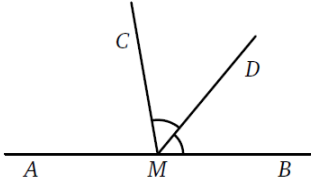


1. Berilgan chizmada MD-chiziq $\angle CMB$ ni bissektrisasi va $\angle DMC = 55^\circ$ bo'lsa $\angle CMA$ ni toping.



- A) 50° B) 60° C) 70° D) 80°

2. $\int_1^{\frac{3}{2}} [2x-1] dx = ?$

- A) 0,5 B) 1 C) 2 D) 3

3. Agar $x = \frac{\sqrt{11}+1}{2}$ bo'lsa $\frac{2x^3-3x^2+10x-1}{3x^2-3x+3}$ ni qiymatini toping?

- A) $\frac{1}{2}(2\sqrt{11}+1)$ B) $\frac{2}{3}(\sqrt{11}+1)$ C) $\frac{2}{3}(\sqrt{11}+3)$ D) $\frac{2}{3}(2-\sqrt{11})$

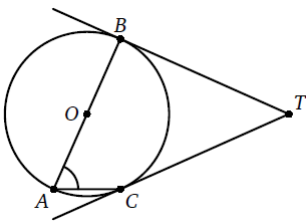
4. Soddashtiring? $\frac{\sin 34^\circ - \sin 22^\circ + \cos 16^\circ + \sin 8^\circ}{4 \cos 4^\circ \cos 20^\circ \cos 32^\circ}$

- A) 1 B) -1 C) 2 D) 0.5

5. Basketbol o'yini uchun 15 nafar sportchidan necha xil usulda 5 nafar sportchidan iborat ikkita jamoa tuzish mumkin?

- A) 3013 B) 1716 C) 2184 D) 2340

6. AB aylana diametri, TC va TB unga o'tkazilgan urunmalar. $\angle CAB = 66^\circ$ bo'lsa $\angle CTB$ ni toping.



- A) 38 B) 48 C) 58 D) 68

7. Ta'lim muassasasida barcha o'quvchi kamida bitta ingliz yoki nemis tilida so'zlasha oladilar ayrimlari esa ikkala tilni biladilar. O'quvchilarning 85% I ingliz tilini 75% I nemis tilini biladilar. Ikkala tilni ham biladigan o'quvchilar barcha o'quvchilarning necha foizini tashkil etadi.

- A) 50 B) 60 C) 30 D) 40

8. $f(x)$ funksiya barcha x larda aniqlangan bo'lsa, $f(x)$ ning eng kichik musbat davrini toping?

$f(x+2) + f(x-2) = f(x)$

- A) 16 B) 12 C) 18 D) 6

9. $\cos \frac{\pi}{12} + \sin \frac{\pi}{12} = \frac{a}{4 \cos \frac{\pi}{12}}$ bo'lsa, $a = ?$

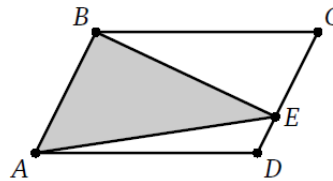
- A) $\sqrt{3}$ B) $\sqrt{3} + 1$ C) $\sqrt{3} + 2$ D) $\sqrt{3} + 3$

10. $\begin{cases} y \leq x + 1 \\ x \leq 11 - y \\ x \geq y - 2 \\ y \geq 4 \end{cases}$ tenglamalar sistemasining yechimlari

koordinata o'qida hosil qilgan shaklni Ox o'qiga parallel bo'lgan (jism) tomoni atrofida aylantirildi. Hosil bo'lgan jism hajmini toping.

- A) $\frac{135\pi}{12}$ B) $\frac{120\pi}{5}$ C) $\frac{145\sqrt{13}\pi}{13}$ D) $\frac{145\pi}{4}$

11. $S_{AEB} = 2$ bo'lsa S_{ABCD} parallelogram yuzini toping.



- A) 3 B) 4 C) 5 D) 6

12. $a+b+c=9$ $\frac{1}{a+b} + \frac{1}{a+c} + \frac{1}{a+c} = 1$ bo'lsa $(a+b+c) \cdot (\frac{c}{a+b} + \frac{b}{a+c} + \frac{a}{b+c})$ ni toping.

- A) 5 B) 3 C) 2 D) 6

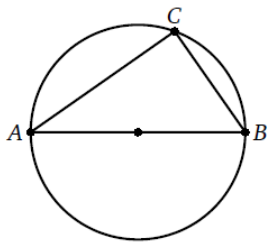
13. $\frac{(1-2i)^2}{1+3i} = ?$

- A) $0,5i + 1,5$ B) $0,5i - 5$
C) $0,5i - 1,5$ D) $1,5i + 1,5$

14. Vertolyot bir viloyatdan ikkinchi viloyatga shamol yo'nalishi bo'yicha 2,4 soatda, ikkinchi viloyatdan birinchi viloyatga shamolga qarshi yo'nalishda 4 soatda yetib boradi, agar shamolning tezligi 10 km/soat ni tashkil etsa, ikki viloyat orasidagi masofani toping?

- A) 124km B) 240km C) 80km D) 120km

15. Aylananing radiusi 4 ga va $AC = \sqrt{39}$ bo'lsa BC ni toping.



- A)3 B)4 C)5 D)6

16. 2001 butun musbat sonning ko'paytmasi 105 ga yig'indisi 2021 ga teng . Bu sonning eng kattasi nimaga teng .

- A) 15 B) 105 C) 21 D) 35

17. $\begin{cases} a = 2b + 6 \\ 3b = 3 - c \end{cases}$ bo'lsa, $\frac{6c + 3ab + 2bc - 6b}{a + b + c}$ ifodani

qiymatini hisoblang .

- A) 0 B) 2 C) 1 D) 4

18. . Ko'bhadning ozod hadini toping ?

$$f(x) = (5x^3 - 1)^{2017} \cdot (2016x^7 + 1)^5 + x^{27} + 14$$

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

19. $\lim_{x \rightarrow \pi} \frac{\sin x}{\sqrt{x - \pi}} = ?$

- A) 0 B) 1 C) -1 D) π

20. Natural n sonning kvadrati 10 ga bo'linganda qanday qoldiqlarga ega bo'lish mumkin ?

- A) 0;2;3;7;6 B) 0;1;4;5;6;9
C) 0;2;3;5;8 D) 0;2;3;5;9

21. $\frac{3^x}{3^x - 2^x} < 3$ Tengsizlikning eng katta butun manfiy va

eng kichik butun musbat yechimlari ko'paytmasini toping ?

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

22. f(x) funksiya berilgan (a;b) intervalda noldan farqli va differensiallanuvchi bo'lsin . $(f(x))^{-4}$ funksiyaning (a;b) intervaldagi hosilasini toping ?

- A) $4(f(x))^5 \cdot f'(x)$ B) $-4(f(x))^3 \cdot f'(x)$
C) $-4(f(x))^{-5} \cdot f'(x)$ D) $2(f(x))^{-2} \cdot f'(x)$

23. $\{x | x \in N, x^2 < 28\}$ to'plamni necha usul bilan ikkita kesishmaydigan qism-to'plamlar birlashmasi ko'rinishida ifodalash mumkin ?

- A) 32 B) 5 C) 28 D) 16

24. 1234512345123451234512345 sonidan 10 ta raqam shunday o'chirilganki , hosil bo'lgan son eng katta bo'ldi . Shu sonning 3- raqamini toping ?

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

25. Agar $y = x^{x^2}$ bo'lsa, $y'(1) = ?$

- A) 0 B) bu qiymatda hosila mavjud emas C) 2 D) 1

26 Ali sakkizlik sanoq sistemasida (73;100) oraliqdagi barcha butun sonlarni yozib chiqdi. Vali esa shu sonlardan avval 5 raqami, so'ng 6 raqami qatnashgan barcha sonlarni o'chirib tashladi. Qolgan sonlar yig'indisini sakkizlik sanoq sistemasida aniqlang va o'nbeshlik sanoq sistemasiga o'tkazing.

- A) 7B B) 83 C) 67 D) 58

27.A = "Mening kompyuterim" maxsus qobiq dasturdir."

B = "Fayl nomida*,\, / belgilarini ishlatish mumkin."

C = "Kompyuter ishiga zarar keltiruvchi dasturlardan himoyalovchi dasturlar arxivatorlar deb ataladi." SHU mulohazalar asosida quyidagi mantiqiy ifodaning natijasini toping:

(not A or B) and (C or not B) or not C

- A) Ba'zi mulohazalarning qiymatini aniqlab bolmaydi
B) Yolg'on C) Rost D) Ifodada xatolik bor

28.MS Excel.

=?(-23;6) - ЗНАЧЕН(ЗАМЕНИТЕЛЬ(??(-23;6);2;2;6))

formulaning natijasi 67 bo'lishi uchun ? va ?? belgilarining o'rniga qo'yish mumkin bo'lgan funksiyalar to'g'ri berilgan javobni aniqlang.

- A) Мин, Мин B) Остат, Заменить
C) Мин, Макс D) Остат, Сценить

29.Quyidagi html-hujjat kodi yozilishi bo'yicha kataklar ketma-ket sanalganda nechanchi katakda tag chiziqli va og'ma shrift qo'llanilgan?

```
<table><tr><td colspan=2><b><em><ahref="#"test">
test</em></b></a></td><td rowspan=2><ul><strong>
<u><sup><li>test</sup></u>
</strong></ul></td><tr><td><cite><u>
<imgsrc=test.jpg>test</u></cite></td><td><dl>
<sub><dd>test</sub></dl></tr></table>
```

- A) Birinchikatakda B) Ikkinchikatakda
C) Uchinchikatakda D) To'rtinchikatakda

30.Paskal. Dastur natijasini aniqlang.

```
Var a,b,c: integer; k:boolean; s:string;
Begin Randomize; S:='INFORMATIKA';
a:=1+random(1); b:=1+trunc(random); k:=true;
while k Do begin c:=a+b; a:=c mod a+1;
b:=c div b; if a=b then k:=false; end;
Write(s[a]+s[b]+s[c]); readln; End.
```

- A) NON B) IFA
C) Natijani aniqlab bo'lmaydi D) IIF

