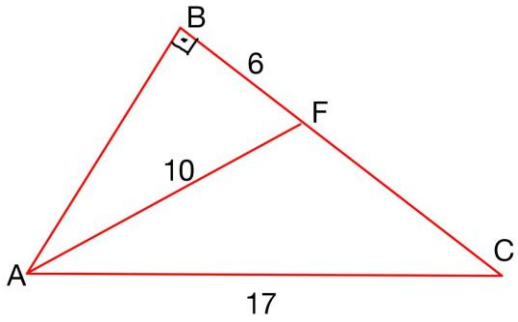
Attestatsiya 2024

1.	$f(x)=mx+2$, $g(x)=4x+m$ va $f(2)=g(3)$ bo'lsa m ni toping.
2.	O'tkir burchagi 30° bo'lgan parallelogram tomonlari 2:3 nisbatda. Paralellogramm perimetri 60 ga teng bo'lsa, parallelogranm yuzini toping.
3.	$\int_0^4 \left(x^3+kx\right)dx=84$ bo'lsa, k ni toping.
4.	3 ta lift bor. Birinchi liftga 3 ta odam, ikkinchi va uchinchi liftga 2 tadan odam chiqsa bo'ladi. 7 ta odamni necha xil usukl bilan bu liftlarga chiqarish mumkin.
5.	$f(x)=\sqrt{-x^2+6x+16}+\log_3(x-1)$ funksiyaning aniqlanish sohasini toping.
6.	$xy'+y=y^2$ differensial tenglamani yeching.
7.	$\sqrt{3}\sin x+\cos x=2$ tenglamani yeching.
8.	-11 ni 5 ga bo'lgandagi qoldiqni toping?
9.	-11 ni 5 ga bo'lgandagi to'liqsiz bo'linmani toping.
10.	Agar $\left(0<\alpha<\beta<90^\circ\right)$ $\sin(\alpha+\beta)=\frac{4}{5}$ va $\sin(\alpha-\beta)=\frac{5}{13}$ bo'lsa, $\cos\alpha+\cos\beta$ ni toping.
11.	Uch o'lchovli fazoda uchlari $A(3;0;0)$, $B(0;4;0)$ va $C(0;0;5)$ nuqtalarda bo'lgan parallelepipedning to'la sirtini toping.
12.	$1\cdot2\cdot3\cdot\ldots\cdot54\cdot55$ ko'paytma nechta nol bilan tugaydi?
13.	Ikki natural sonni 5 ga bo'lganda mos ravishda 1 va 3 qoldiq qolsa, bu sonlarni yig'indisini 5 ga bo'lgandagi qoldiqni toping.
14.	Uchburchakning tomonlari $6\sqrt{2}$ va 4 ga teng. Agar ular orasidagi burchak 45° ga teng bo'lsa uchburchak uchinchi tomonini toping.
15.	$15^{20}+20^{60}$ ifodani 13 ga bo'lgandagi qoldiqni toping.
16.	$\frac{\sqrt{-x^2+14x+32}}{\sqrt{x^2-1}-2}=0$ tenglamani yeching.
17.	Radiusi $6\sqrt{3}$ ga teng bo'lgan sharga ichki chizilgan eng katta hajmli slindr asosining radiusini toping?
18.	Radiusi $6\sqrt{3}$ ga teng bo'lgan sharga ichki chizilgan eng katta hajmli konus asosining radiusini toping?
19.	 S(AFC) ni toping?
20.	$f(x)=3^x\cdot tgx$ bo'lsa, $f'(0)$ ni toping.
21.	$EKUB(a;b)=120$ va $\frac{25}{b}+19=a$ bo'lsa, $a+b$ ni toping.
22.	$\int ctg^2x dx$
23.	$EKUB(a,b)=6$ va $\frac{a+b}{a-b}=\frac{14}{9}$ bo'lsa, ab ni toping.

24. $f(x+y)=f(x)+f(y)$ va $f(3)=2$ bo'lsa, $f(18)$ ni toping.

25. Agar $f(x)=x^2$ funksiya uchun $2\int_0^k f(x)dx+\int_0^{k^2} f^{-1}(x)dx=64$ o'rinli bo'lsa, k ni toping.

26. 30 kg qorishmaning 60% sement. Shu qorishmaga qancha qum qo'shilsa 40% sement bo'ladi.
@attestatsiya_ms_group
@gmat_gre_group

27. $0,4+0,1\left(\frac{7}{6}-\frac{7}{15}+\frac{45}{100}\right)$

28. $\frac{\sqrt{108}+\sqrt{75}+\sqrt{48}}{\sqrt{147}+\sqrt{27}+\sqrt{12}}$

29. $EKUK(a;b)=180$, $EKUB(a;b)=9$ bo'lsa, $a+b$ ning eng kichik qiymatini toping.

30. Arifmetik progressiyada $n+m=k-p$ bo'lsa, $a_n+a_m=a_k+a_p$ bo'ladimi?
@attestatsiya_ms_group
@gmat_gre_group

31. Muntazam uchburchakli kesik pramidaning asoslari 3 va 7. Unga shar ishki chizilgan. Piramida yon sirtini yuzini toping.

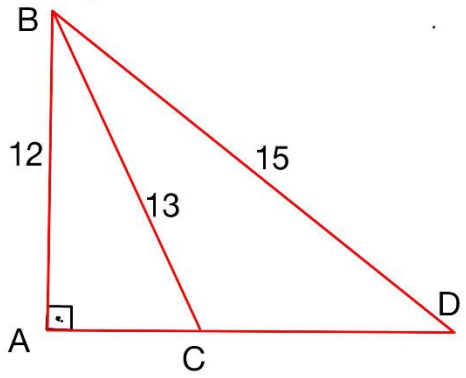
32. $9(k-1)x^2+(k+4)x+k+7=0$ tenglamani ildizlari bir xil son bo'ladigan k ning barcha qiymatlari yig'indisini toping.
@attestatsiya_ms_group
@gmat_gre_group

33. $\log_3\left(9+9^x\right)=x+\log_3\left(28-2\cdot3^x\right)$ tenglamani ildizlari yig'indisini toping.

34. 8 ta oq'quvchidan 3 tasi Samarqand, 2 tasi Buxoro va qolgani Xivaga boradi. Ali bilan Amirni bir shaharga bormaydigan qilib necha xil usulda guruhlash mumkin?

35. $(x+1)\cdot y'=(y-2)^2$

36. @attestatsiya_ms_group



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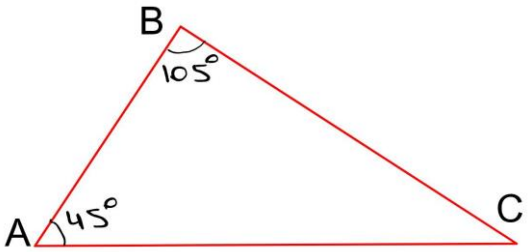
37.



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@gmat_gre_group

38. $\frac{x^2-4x}{x^2-18x+18}$ funksiyaning barcha boshlang'ich funksiyalarini toping.

39. $y=x^3$, $y=0$ va $y=1$ chiziqlar bilan chegaralangan soxani Ox o'qi atrofida aylantirishdan hozil bo'lgan jism hajmini toping?
@attestatsiya_ms_group
@gmat_gre_group

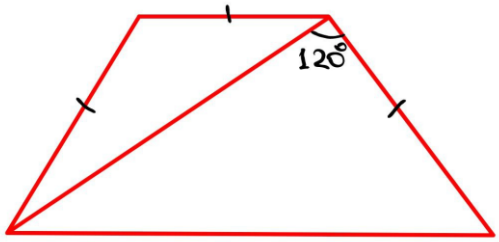
40. Parallelopipedni o'lchamlari 8,12,15 ga teng bo'lsa to'la sirtini toping.

41. $f^{-1}(3x-1)=6x+1$, $f(g(-2))=2m+1$ va $g(x)=4x+1$ bo'lsa, m ni toping?

42. Agar $f(x)=mx+2$ va $g(x)=4x+m$ uchun $g^{-1}(f(2))=3$ bo'lsa, m ni toping
@attestatsiya_ms_group
@gmat_gre_group

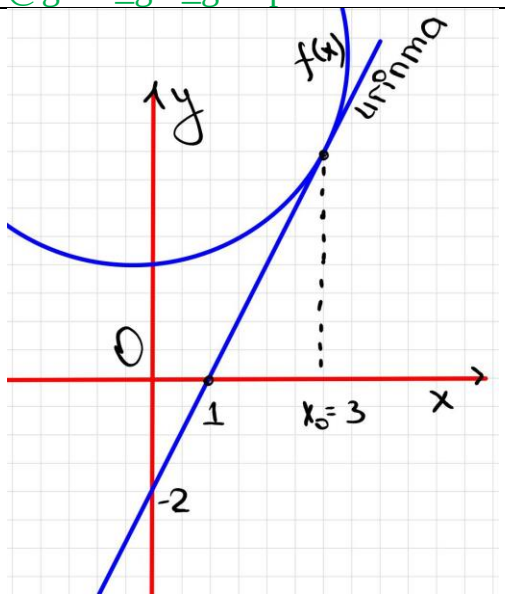
43. $\frac{\left(5\sqrt{3}+\sqrt{50}\right)\left(5-\sqrt{24}\right)}{\sqrt{75}-5\sqrt{2}}$ ni hisoblang.

44.



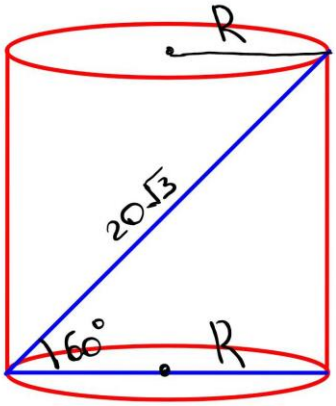
Trapetsiya ichki burchaklarini toping.

45.



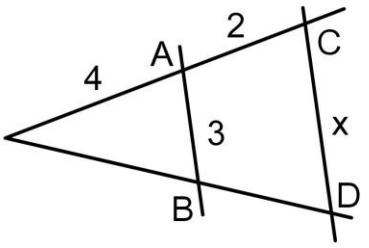
$g(x)=x\cdot f^2(x)$ bo'lsa, $g'(3)$ ni toping

46.



Slindr asosini radiusini toping?

47.



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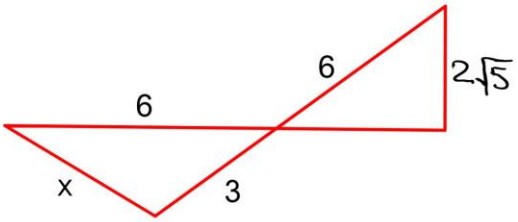

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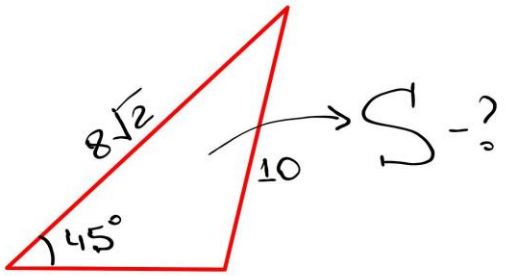
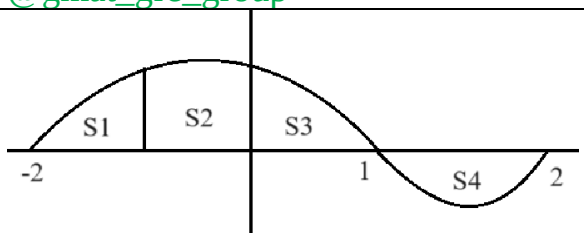


50.



S1=6, S3=5 va S4=1.

$\int_0^2 xf\left(x^2-2\right)dx=9$ bo'lsa, S2 ni toping.

51. Prizmaning qirralari soni 35 ta bo'lsa, yoqlari sonini toping.

52. $f(x)=\dfrac{\sqrt{x}+1}{\sqrt{x}-1}$ bo'lsa, $f'(x)$ ni toping.

53. $\left(\dfrac{1}{5}\right)^{\frac{x^2+8}{x^2-4}}>25$ tengsizlikni butun yechimlari nechta?

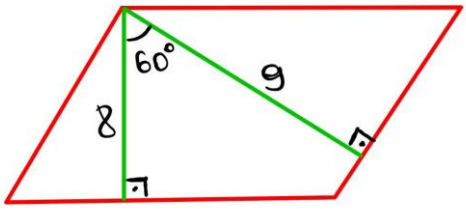
54. Nechta 4 xonali sonda 2 ham, 3 ham ishtirok etmaydi?

55. 6^{100} ni oxirgi 2 ta raqamini toping?

56. $M(4;-1)$, $N(-2;3)$, $P(x;y)$, $Q(5;7)$ nuqatalar uchun $\overrightarrow{MN}=4\overrightarrow{PQ}$ bo'lsa, $P(x;y)$ ni toping?

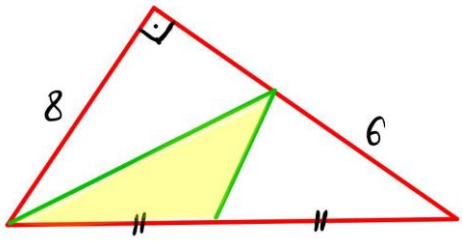
57. $a(1;1)$ va $b(-1;1)$ vektotlar berilgan. $2\vec{c}+\vec{d}=\vec{a}$ va $\vec{c}+2\vec{d}=\vec{b}$ tengliklar o'rinli bo'lsa, c va d vektorlar orasidagi burchakni toping.

58.



Parallelogrammning yuzini toping.

59.



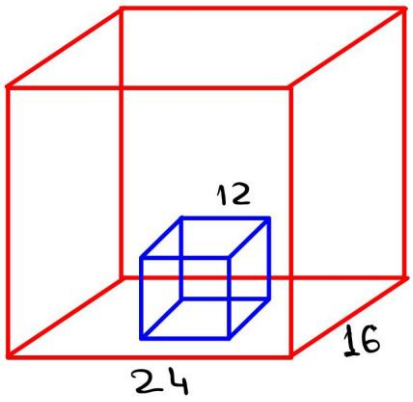
Bo'yalgan sohani yuzini toping.

60. 10 litr sut va 10 litr suv bor. Avval suvli idishdan 1 litr suv olinib sutli idishga solindi va aralashtirildi, so'ng sutli idishdan 1 litr olinib suvli idishga solindi va aralashtirilgan bo'lsa, suvli idishda sut ko'pmi yoki sutli idishda suv ko'pmi?

61. Kesik muntazam to'rtburchakli piramidaning asos yuzalari nisbati 25:9 va balandligi 3 ga teng. Hajmi 147 ga teng bo'lsa, yon sirtini yuzini toping.

62. $\cos x\cos 2x=\cos 3x$ tenglamani $[0;180^\circ]$ oraliqdagi yechimlari yig'indisini toping.

63.

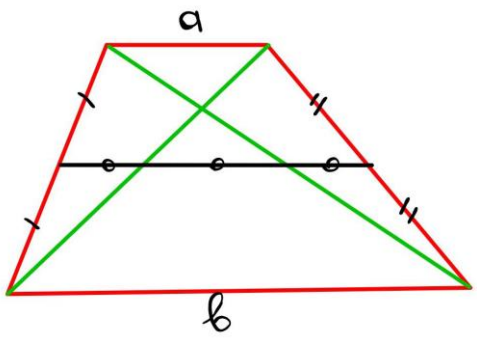


Tomoni 12 ga teng bo'lgan kub ozgina suvi bor parallelopipedga solindi. Shunda suv parallelopiped yarmigacha ko'tarildi. Dastlabki suv balandligini toping.

64. $x=y^2$, $y=-\frac{x}{2}$ bilan chegaralangan soxa yuzini Oy o'qi atrofida aylantirishdan hosil bo'lgan jism hajmini toping.

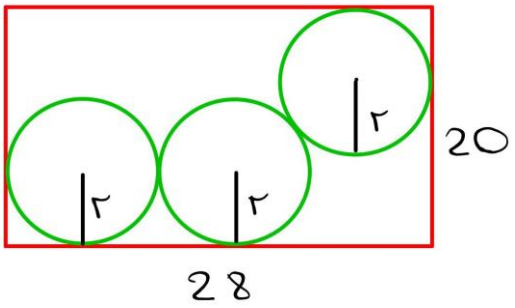
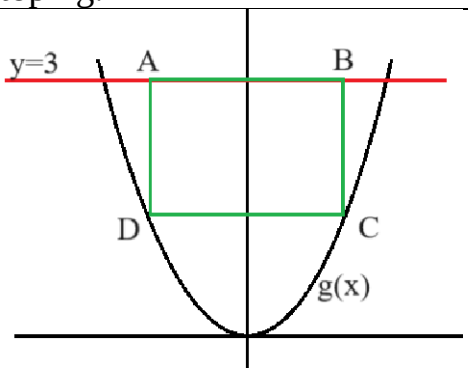
65. 3^{100} sonining oxirgi 2 ta raqamini toping.

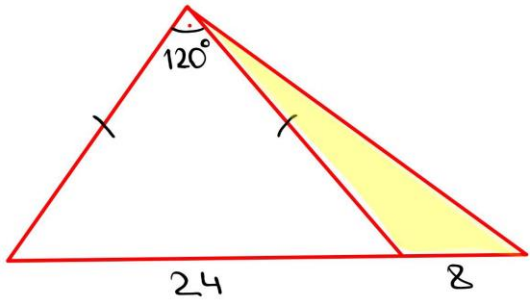
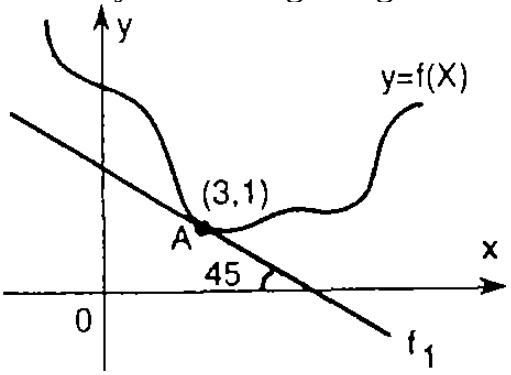
66.

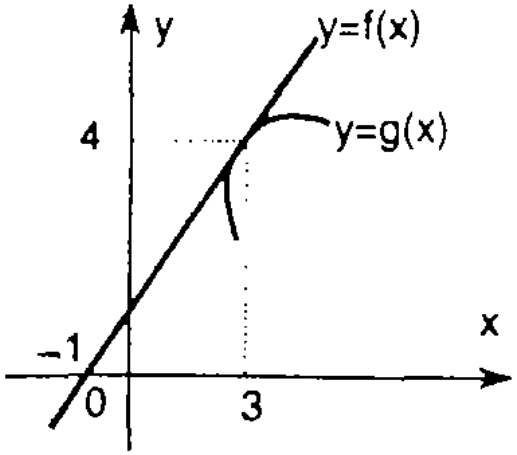


$\frac{a}{b}$ ni toping?

67. $y'=\sqrt{y}$ differensial tenglamani yeching. Bunda $y(1)=4$ bo'lsa, y ni toping.

68.	6^{46} ni 23 ga bo'lgandagi qoldiqni toping.
69.	Havoni bulutli bo'lish ehtimoli 0,75 ga teng. 6 kundan 4 kunni bulutli bo'lish ehtimolini toping. @attestatsiya_ms_group @gmat_gre_group
70.	$(2x-3)y'=2y$ differensial tenglamani yenging.
71.	$3^{2x}-26\cdot 3^{x}=3^{x}$ tenglamani yeching.
72.	$\left(\frac{\sin 3x}{\cos x}-\frac{\cos 3x}{\sin x}\right)\cos x=\sqrt{2}$ tenglamani $(0;360^{\circ})$ oraliqdagi eng katta va eng kichik ildizlari ayirmasini toping. @attestatsiya_ms_group @gmat_gre_group
73.	$f(a)-f(b)=4$ va $\int_a^b f(x)f'(x)dx=16$ bo'lsa, $f(a)f(b)$ ni toping. @attestatsiya_ms_group @gmat_gre_group
74.	Teng yonli trapetsiyaning asoslari 9 va 21 ga, balandligi 8 ga teng bo'lsa, trapetsiyaga tashqi chizilgan aylana radiusini toping.
75.	Ixtisoslashgan kasalxonga 50% bemor K kasallik bn, 30% bemor L kasallik bn, 20% bemor M kasallik bilan keladi. K kasallikdan tuzalish extimoli 0.7, L kasallikdan tuzalish 0.8 va M dan tuzlish 0.9 extimollikda. Kasalxonaga bemor kelib butunlay sog'ayib ketti shu bemorni K kasallik bilan kelganlik extimolligini toping? @attestatsiya_ms_group @gmat_gre_group
76.	Yuk va yengil mashinalar sonini nisbati 3:2 ga teng. Yuk mashinaning benzin quyish ehtimoli 0,1 ga, yengil mashinaning benzin quyish ehtimoli 0,2 ga teng. Shahobchaga mashina benzin quygani kirgan bo'lsa, uning yuk mashina bo'lish ehtimolini toping. @attestatsiya_ms_group @gmat_gre_group
77.	Barcha 5 xonali sonlar ichida hech bo'lmaganda bitta 7 qatnashadigan sonlar nechta?
78.	 Aylana radiusi r ni toping. @attestatsiya_ms_group @gmat_gre_group
79.	$y=\sin^2 e^{2x}$ funksiya hosilasini toping.
80.	 $g(x)=x^2$ bo'lsa, ABCD to'g'ri to'rtburchak yuzini eng katta qiymatini toping. @attestatsiya_ms_group @gmat_gre_group
81.	Kesik konus asoslari va yasovchisi 4:11:25 nisbatda. Hajmi 181π ga teng bo'lsa, yon sirtining yuzini toping.
82.	$\int \frac{1}{x^2-6x+7}dx$ @attestatsiya_ms_group @gmat_gre_group
83.	Uchburchakli piramida asosining tomonlari 6, 25 va 29 ga teng. Balandligi asosining katta

	balandligiga teng bo'lsa, piramida to'la sirtini toping. @attestatsiya_ms_group @gmat_gre_group
84.	Slindr asosining yuzi yon sirtidan 2 marta kichik. O'q kesimimning yuzi Q ga teng bo'lsa, slindr hajmini toping. @attestatsiya_ms_group @gmat_gre_group
85.	$y=\frac{\sqrt{-x^2+14x+32}}{\sqrt[4]{x+1}+2}$ aniqlanish soxasini toping.
86.	5 va 1 sonlari orasiga arifmetik progressiya tashkil etuvchi sonlar joylashtirilgan bo'lib ularning yig'indisi 33 ga teng bo'lsa, bu sonlar orasida nechta had bor? @attestatsiya_ms_group @gmat_gre_group
87.	3 ta tovuq, 4 ta o'rdak, 2 ta g'ozdan tovuq, o'rdak, g'ozdan kamida bittadan qatnashadigan qilib necha xil usulda tanlab olish mumkin?
88.	O'quvchi formula kitobchasidan o'ziga kerakli formulani qidirmoqda. 3 ta kitobchadan birinchisida bo'lish ehtimoli 0,6 ga, ikkinchisida bo'lish ehtimoli 0,7 ga, uchinchisida bo'lish ehtimoli 0,8 ga teng bo'lsa, ikki kitobchada formulaning bo'lish ehtimolini toping. @attestatsiya_ms_group @gmat_gre_group
89.	O'quvchi formula kitobchasidan o'ziga kerakli formulani qidirmoqda. 3 ta kitobchadan birinchisida bo'lish ehtimoli 0,6 ga, ikkinchisida bo'lish ehtimoli 0,7 ga, uchinchisida bo'lish ehtimoli 0,8 ga teng bo'lsa, eng kamida ikki kitobchada formulaning bo'lish ehtimolini toping. @attestatsiya_ms_group @gmat_gre_group
90.	O'quvchi formula kitobchasidan o'ziga kerakli formulani qidirmoqda. 3 ta kitobchadan birinchisida bo'lish ehtimoli 0,6 ga, ikkinchisida bo'lish ehtimoli 0,7 ga, uchinchisida bo'lish ehtimoli 0,8 ga teng bo'lsa, faqat bitta kitobchada formulaning bo'lish ehtimolini toping.
91.	O'quvchi formula kitobchasidan o'ziga kerakli formulani qidirmoqda. 3 ta kitobchadan birinchisida bo'lish ehtimoli 0,6 ga, ikkinchisida bo'lish ehtimoli 0,7 ga, uchinchisida bo'lish ehtimoli 0,8 ga teng bo'lsa, eng ko'p ikki kitobchada formulaning bo'lish ehtimolini toping.
92.	 Bo'yalgan soxani yuzini toping.
93.	Teng yonli trapetsiya yon tomoni 7 ga, dioganali 8 ga, o'rta chizig'i 4 ga teng bo'lsa, kichik asosini toping.
94.	Slindr ikki asos yuzalari yig'indisi yon sirti yuziga teng. Uning hajmi 68π ga teng bo'lsa, uni balandligini toping. @attestatsiya_ms_group @gmat_gre_group
95.	Shaklda l_1 to`g`ri chiziq y=f(x) funksiyaga urinadi. g(x)=$\frac{f(x)}{x+1}$ bo`lsa, g(x) funksiyaga x=3 nuqtada o`tkazilgan urinmaning burchak koeffisiyenti nechaga teng? 

	A) $-\frac{5}{16}$ B) $-\frac{1}{4}$ C) $-\frac{3}{16}$ D) $-\frac{1}{8}$ E) $-\frac{1}{16}$ @attestatsiya_ms_group @gmat_gre_group
96.	y=f(x) va y=g(x) funksiyalarning grafiklari A(3,4) nuqtada bir–biriga urinadi. h(x)=f(x)·(gof)(x) bo`lsa, h′(2) nechaga teng?  A) 4 B) 5 C) 6 D) 7 E) 8 @attestatsiya_ms_group @gmat_gre_group
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