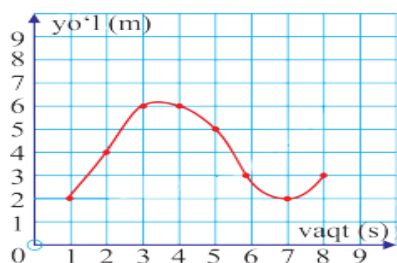


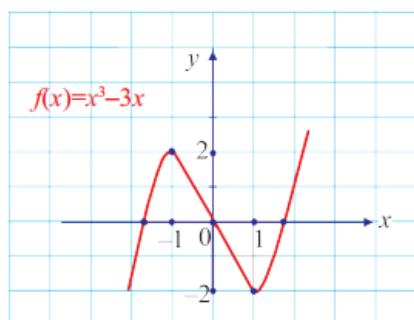
## 11- Sinf. Matematika

1.  $S(2), S(3), S(4), S(7)$  qiymatlarning o'rta arifmetigini toping?



A) 4,5 B) 5,5 C) 6 D) 4

2. Funksiyaning o'sish oraliqlarini toping.



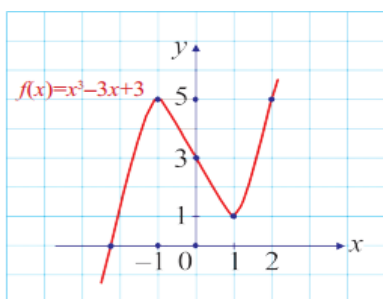
A)  $(-1; 1)$

B)  $(-\infty; -1) \cup (1; +\infty)$

C)  $(-\infty; -1] \cup [1; +\infty)$

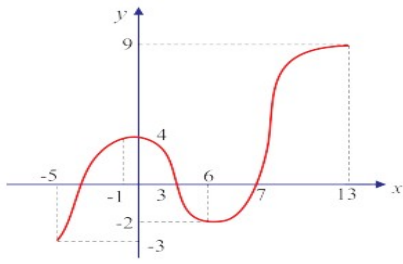
D)  $[-1; 1]$

3. Funksiyaning lokal maksimum nuqtasini toping.



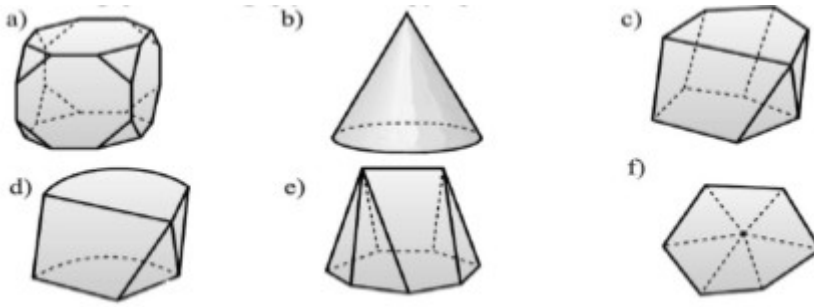
A) 1 B) 0 C) -1 D) 3

4. Funksiyaning kamayish oralig'ini toping.



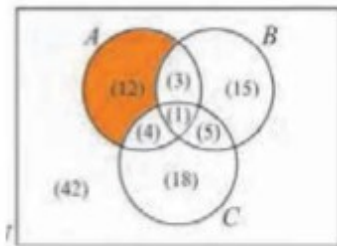
A) (0;6) B) (4;6) C) (6;13) D) (-5;0)

5. Quyidagi shakllarning qaysilari ko'pyoq bo'ladi?



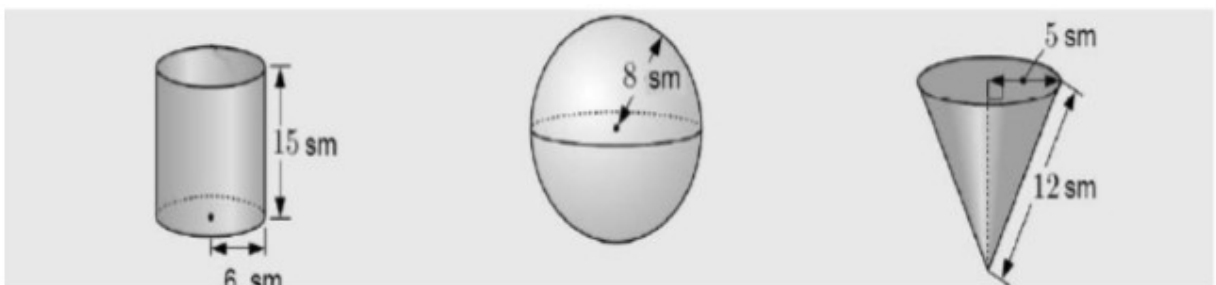
A) a,c,e,f B) c,e C) a,c,e D) a,c,d,e,f

6.  $A \cup B \cup C$  va  $A \cap B$  to'plamning elementlari sonini toping



A. 58 va 4 B. 45 va 13 C. 57 va 4 D. 46 va 12

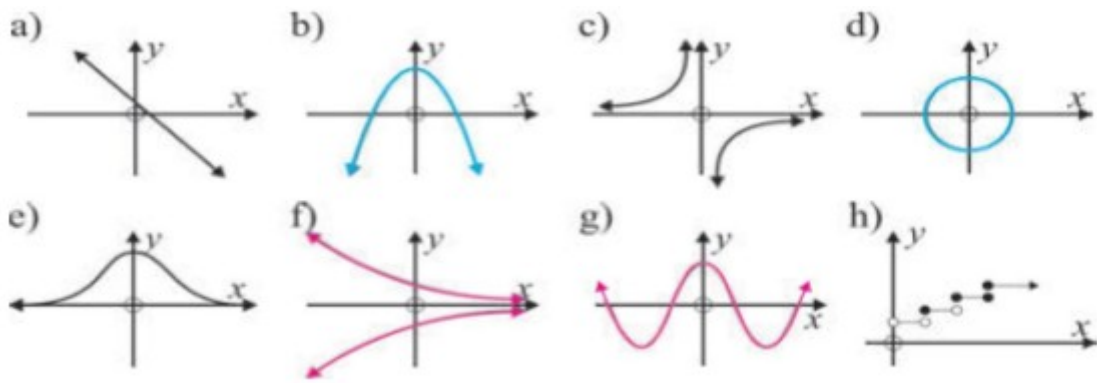
7.



Yuqoridagi shakllarning qaysi birining to'la sirtining yuzi  $267 \text{ sm}^2$  ga teng

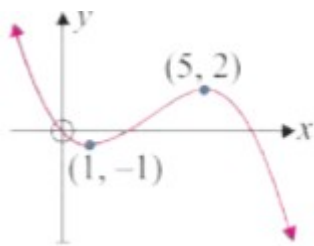
A) Silindr B) Shar C) Konus D) Teng emas

8. Quyidagilarning qaysilari funksiya bo'ladi?



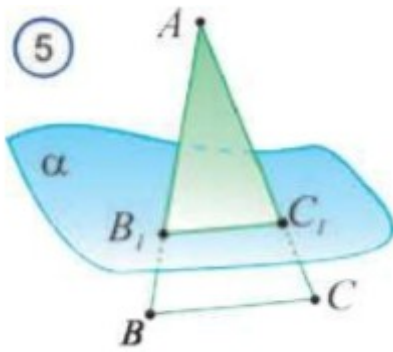
A) a,b,c,e ,g B) a,b,g C) b,c,e D) a,b,c,e,g,h

9. Funksiyaning o`shish oralig`ini toping



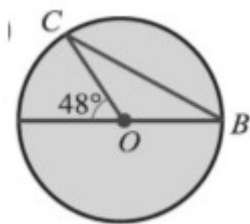
A) (1;5) B) (-1;5) C) (-1;2) D) (1;2)

10. ABC uchburchak  $\alpha$  tekislikni  $B_1$  va  $C_1$  nuqtalarda kesib o`tadi (4- rasm). Agar  $AB_1 : BB_1 = 3:2$ ,  $BC = 15$  sm,  $BC \parallel B_1 C_1$  bo`lsa,  $B_1 C_1$  kesmaning uzunligini toping.



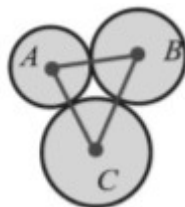
A) 6 B) 9 C) 12 D) 8

11. BOC uchburchak burchaklarini toping



A)  $48^\circ, 48^\circ, 84^\circ$  B)  $24^\circ, 132^\circ, 24^\circ$  C)  $42^\circ, 90^\circ, 48^\circ$  D)  $48^\circ, 32^\circ, 20^\circ$

12. Uchburchakning uchlari radiuslari 6 sm, 7 sm, 8 sm bo`lgan va juft-jufti bilan urinadigan uchta aylana markazlarida yotibdi. Bu uchburchak perimetrini toping

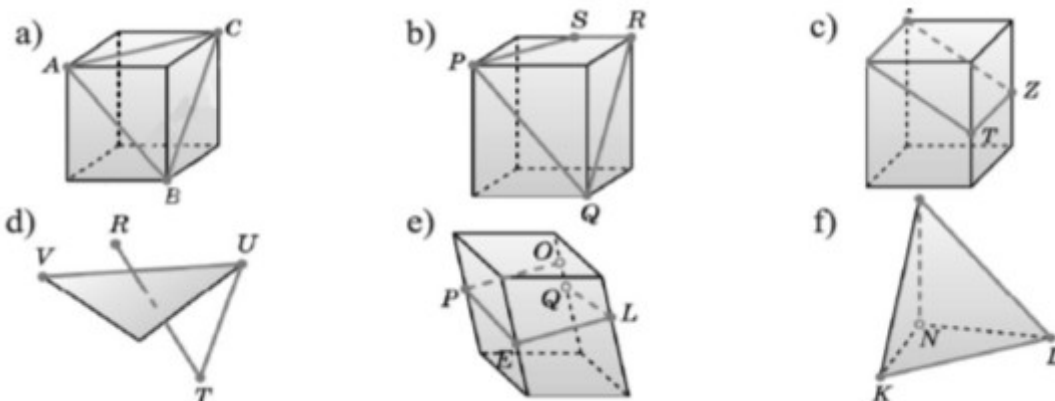


- A. 28 sm    B. 29 sm    C. 27 sm    D. 42 sm

13. Agar teng yonli uchburchak burchaklari 3:4:3 nisbatda bo`lsa, uning uchuning bissektrisasi va yon tomomni orasidagi burchakni toping

- A)  $18^\circ$     B)  $72^\circ$     C)  $36^\circ$     D)  $60^\circ$

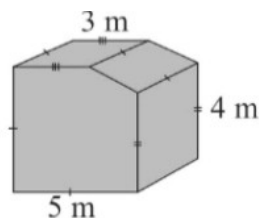
14. Kesimida fazoviy to`rtburchak hosil bo`lgan shakllar qaysilar



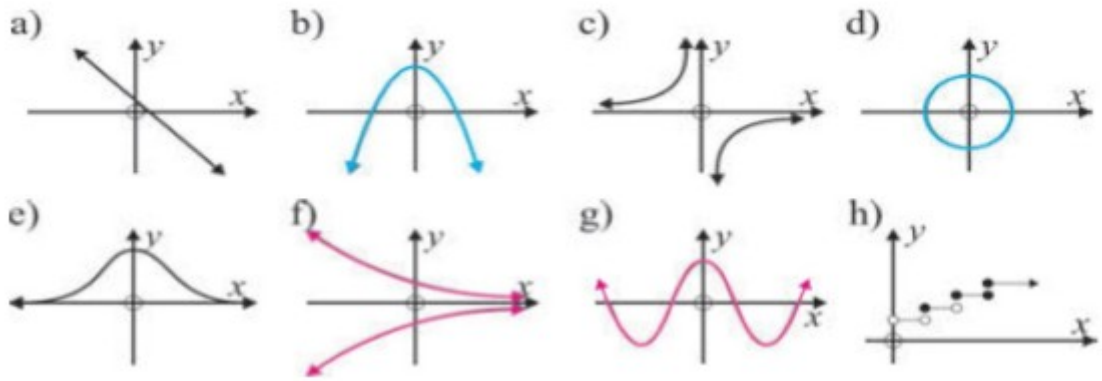
- A) b,c    B) b,c,e    C) a,b,c,e    D) a,b,e,f

15. Shaklning to`la sirtini toping

- A)  $(133+5\sqrt{5}) m^2$   
 B)  $(132+5\sqrt{5}) m^2$   
 C)  $(133+\sqrt{5}) m^2$   
 D)  $(134+5\sqrt{5}) m^2$

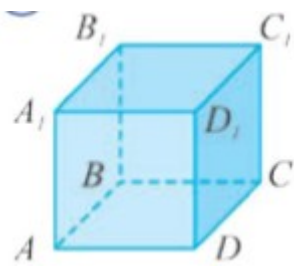


16. Quyidagilarning qaysilari akslantirish bo`lmaydi?



A) a,b,c,e ,g B) a,b,g C) d,f,h D) a,b,c,e,g,h

17. Berilgan parallelepipedning berilgan yoqlarigdan qaysi biri ABCD yog`iga parallel bo`ladi?



A)  $ABB_1 A_1$  B)  $CDD_1 C_1$  C)  $B_1 C_1 CB$  D)  $A_1 B_1 C_1 D_1$

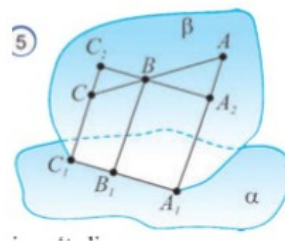
18. Qaysi kesmalar

A)  $AB:BC=AB:BC_2$

B)  $AB:BC=A_1 B_1 :B_1 C_1$

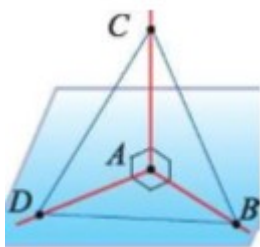
C)  $AB:BC=AA_2 :A_2 A_1$

D)  $AB:BC=C_2 C:CC_1$



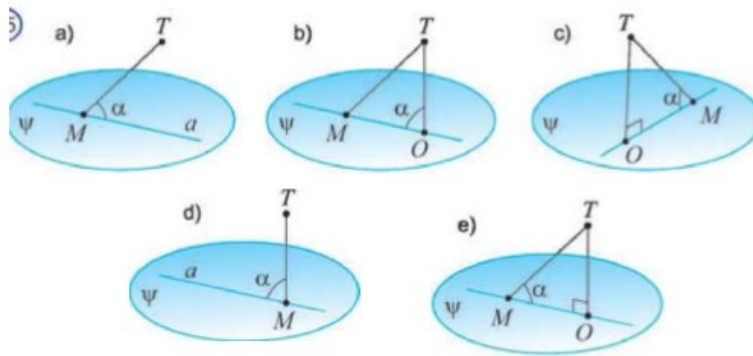
proporsional

19. AB, AC, AD juft-jufti bilan perpendikulyar,  $AB=3$  sm,  $BC=7$  sm,  $AD=1,5$  sm bo`lsa,  $CD=?$



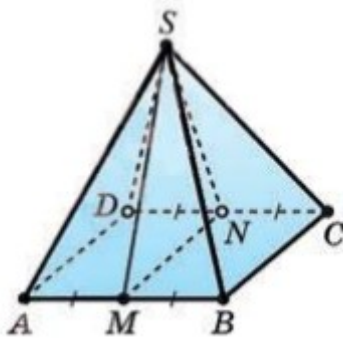
A) 6,5 B) 6 C) 5,5 D) 5

20. Quyidagi rasmlarning qaysilarida tekislik va og`ma orasidagi  $\alpha$  burchak to`g`ri belgilangan?



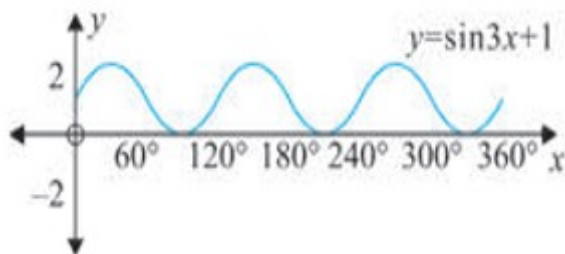
- A) Hammasi    B) a,c,d,e  
C) c,e        D) b,c,e

21. SABCD ko`pyoqning  $\alpha$  tekislikdagi orthogonal proyeksiyasini toping



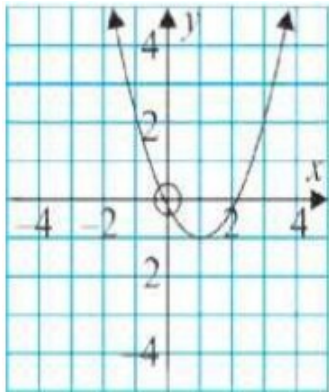
- A)     B)     C)     D) 

22. Funksiyaning davri nechaga teng



- A)  $60^\circ$     B)  $180^\circ$     C)  $360^\circ$     D)  $120^\circ$

23. O`shish va kamayish oraliqlarini toping

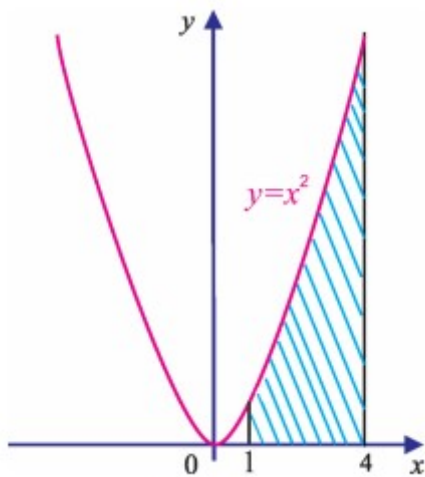


- A)  $x > 2$  o'suvchi,  $x < 2$  kamayuvchi  
 B)  $x > 1$  o'suvchi,  $x < 1$  kamayuvchi  
 C)  $x < 1$  o'suvchi,  $x > 1$  kamayuvchi  
 D)  $x < 2$  o'suvchi,  $x > 2$  kamayuvchi

24. Sonlar ketma-ketligidagi keyingi sonni toping: 0, 1, 5, 14, 30, ...

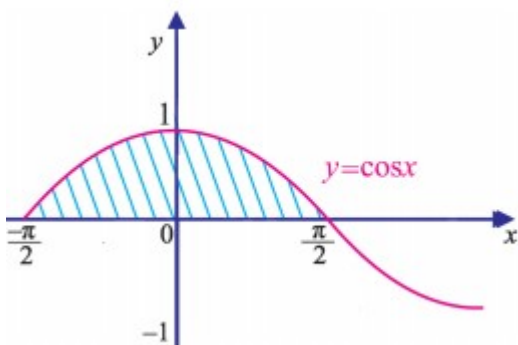
- A) 46      B) 50      C) 55      D) 60

25. Bo'yalgan shaklning yuzini toping.



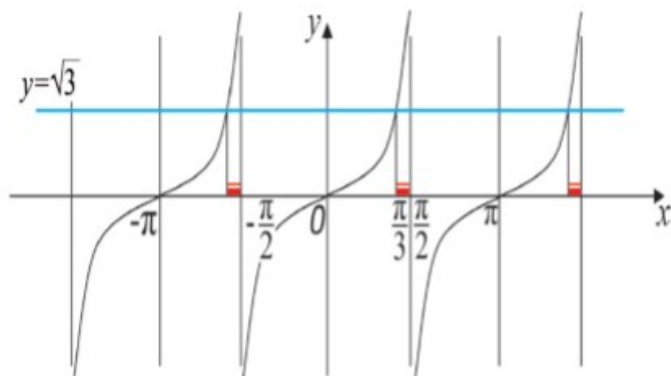
- A) 21      B) 20      C) 18      D) 22

26. Shtrixlangan shaklning yuzini toping.



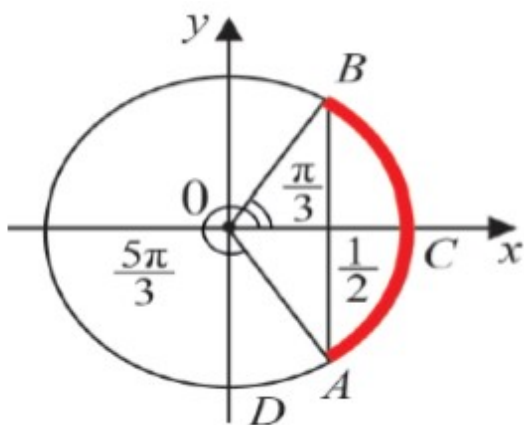
- A) 2      B) 3      C) 1      D) 4

27. Grafik qaysi trigonometrik funksiyaga tegishli?



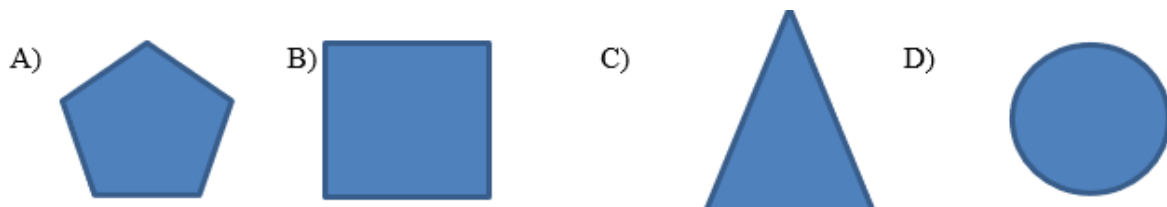
- A)  $y = \sin x$
- B)  $y = \cos x$
- C)  $y = \operatorname{tg} x$
- D)  $y = \operatorname{ctg} x$

28. Belgilangan sohani toping



- A)  $[-\pi/3; 3]$
- B)  $(-\pi/3; 3)$
- C)  $\emptyset$
- D) 0

29. Qaysi shaklning simmetriya o`qi bitta


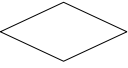



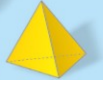
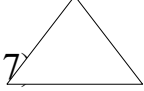


30. Qatordagi keying sonni toping: 30, 35, 60, 185, ...


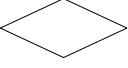




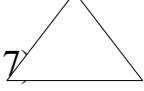
- A) 250
- B) 625
- C) 810
- D) 825

31. Berilgan shakllardan qaysilari fazoviy shakllar?

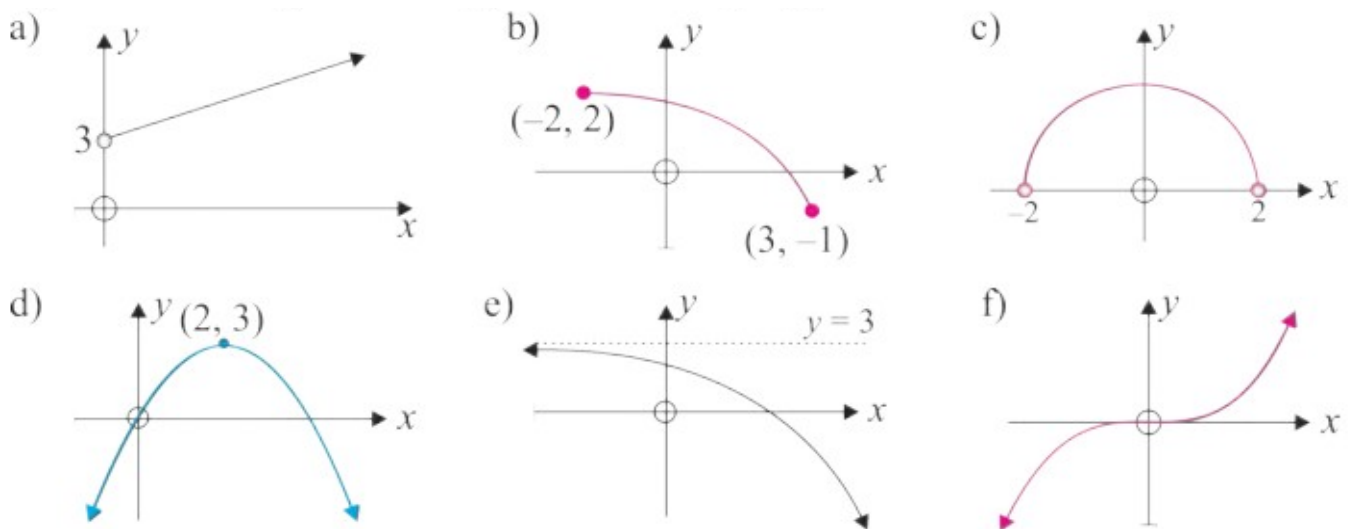


- 1)  2)  3)  4)  5)  6)  7) 
- A) 1,3,5,6.      B) 1,2,3,5.      C) 2,4,5,6.      D) 2,4,7.

32. Berilgan shakllardan qaysilari planimetriya bo'limida o'rganiladigan shakllar?

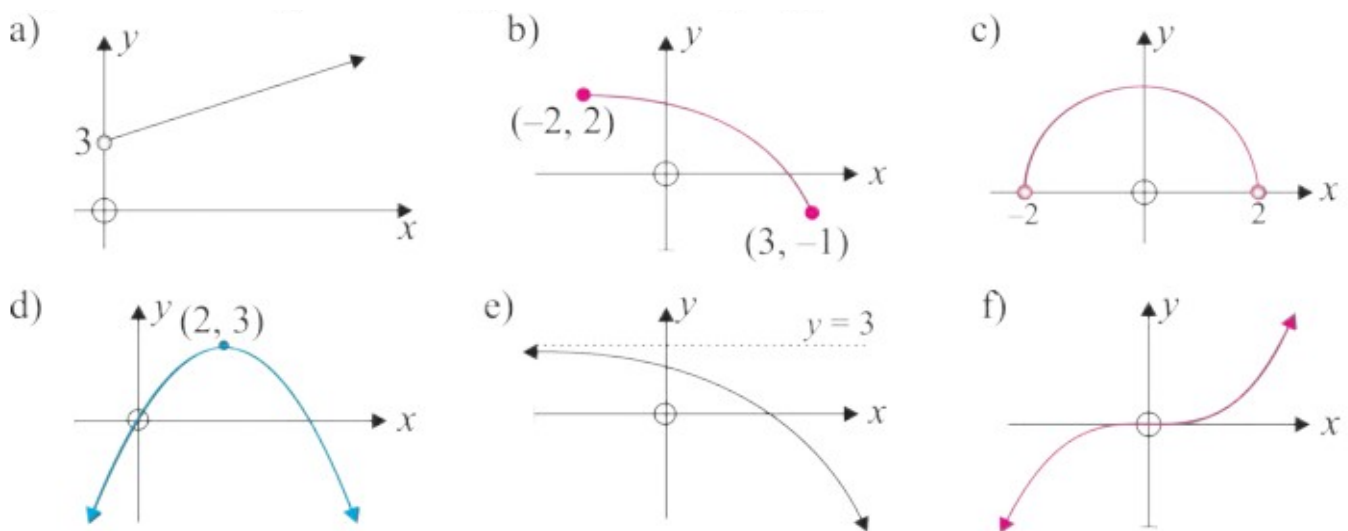
- 1)  2)  3)  4)  5)  6)  7) 
- A) 2,4,7.      B) 1,2,3,5.      C) 2,4,5,6.      D) 1,3,5,6.

33. Berilgan funksiya grafiklartidan qaysi biri faqat o'suvchi funksiya grafigi?



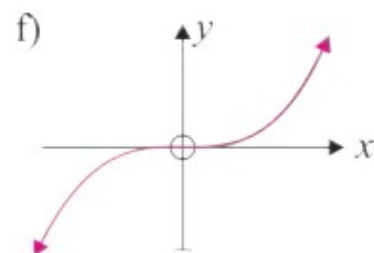
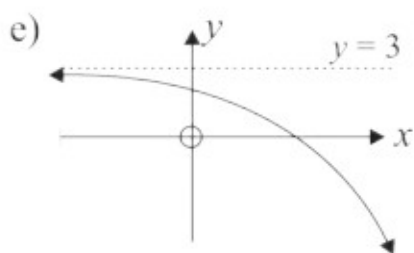
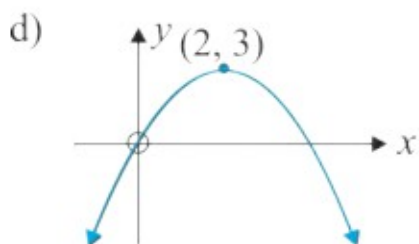
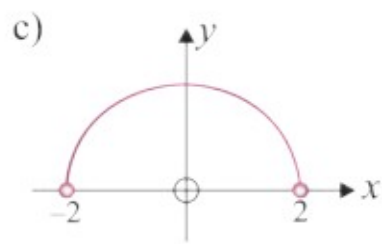
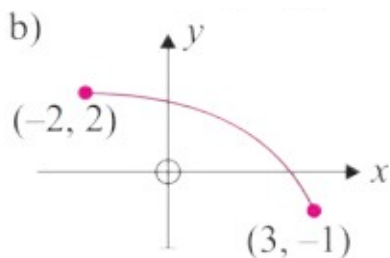
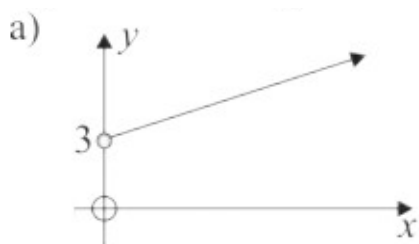
- A) a, f      B) a, b, d.      C) a, c, e, f.      D) b, e

34. Berilgan funksiya grafiklartidan qaysi biri faqat kamayuvchi funksiya grafigi?



- A) b, e.      B) a, b, d.      C) a, c, e, f.      D) a, f

35. Berilgan funksiyalar grafiklari orasidan qaysilar kvadrat funksiyaning grafigi bo'radi?

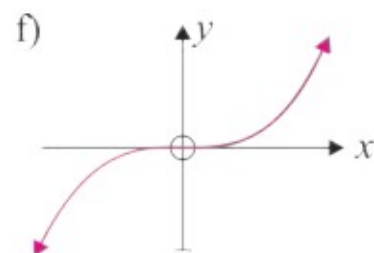
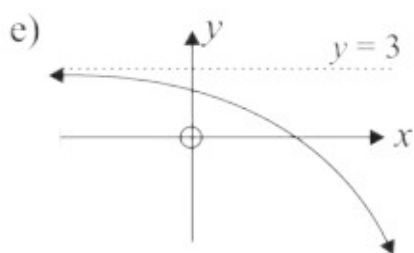
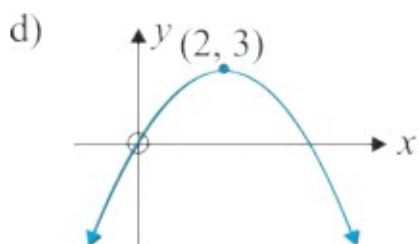
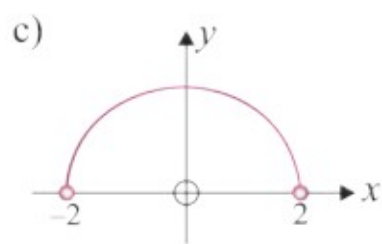
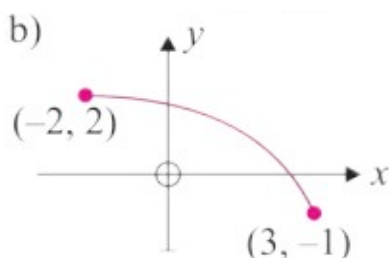
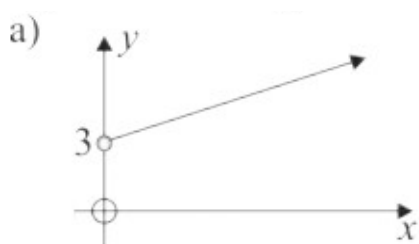


A) d. B) a.. C) c. D) b,e

36. Natural sonning o'nli yozuvida faqat toq raqamlar bo'lsa, bunday sonni "chiroyli" deymiz. Jami nechta to'rt xonali "chiroyli" son bor?

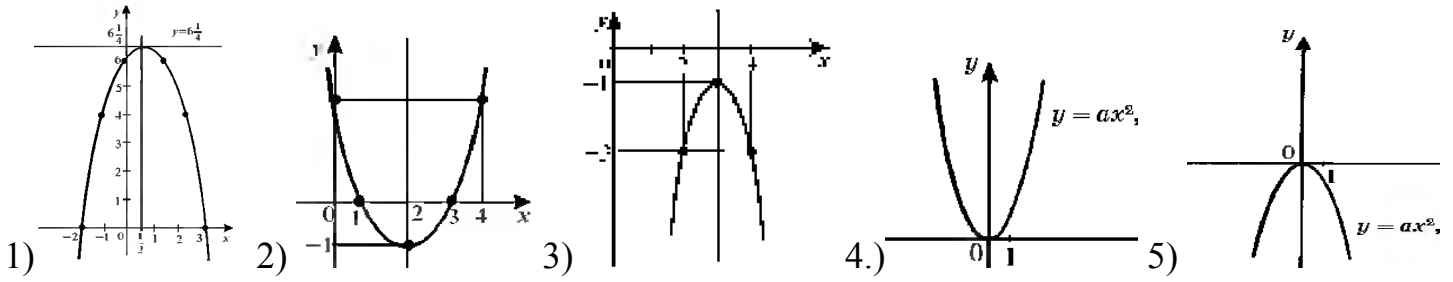
A) 625 B) 125 C) 425 D) 100

37. Berilgan funksiyalar grafiklari orasidan qaysilar chiziqli funksiyaning grafigi bo'radi?



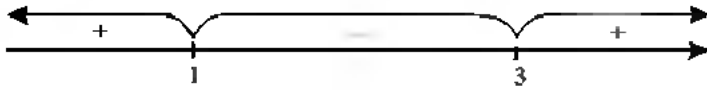
A) a. B) d. C) c. D) b,e

38. Berilgan kvadrat funksiya grafiklar orasidan  $a < 0$  dagi grafiklarni ko'rsating:



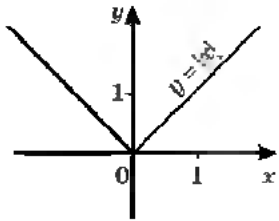
- A) 1,3,5.    B) 1,2.    C) 2,3,4 .    D) 2,4 .

39. Quyidagi shaklda qaysi kvadrat tengsizlik yechimi aks ettirilgan?



- A)  $x^2 - 4x + 3 > 0$     B)  $x^2 - 4x + 3 < 0$     C)  $x^2 + 3x - 4 > 0$     D)  $x^2 + 3x + 4 > 0$

40. Quyidagi shaklda qaysi funksiya grafigi aks ettirilgan?



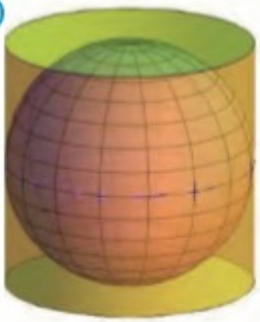
- A)  $y = |x|$     B)  $y = \frac{1}{x}$     C)  $y = x^2$     D)  $y = kx + b$

41. 3 ta tovuq, 4 ta o'rdak va 2 ta g'oz bor. Bir nechta qush tanlanmoqda, bunda tanlangan qushlar ichida ham tovuq, ham o'rdak, ham g'oz bo'lishi shart. Bunday variantlar soni nechta?

42. Gullola, Sanobar, Karim, Olim, Madina va Voris a'lo baholarga o'qiydi. Maktab ma'muriyati a'lochilar uchun sovg'a tarzida konsertga 4 ta chipta olib keldi. Shu chiptalalar a'lochilar o'rtasida necha usulda taqsimlanishi mumkin?

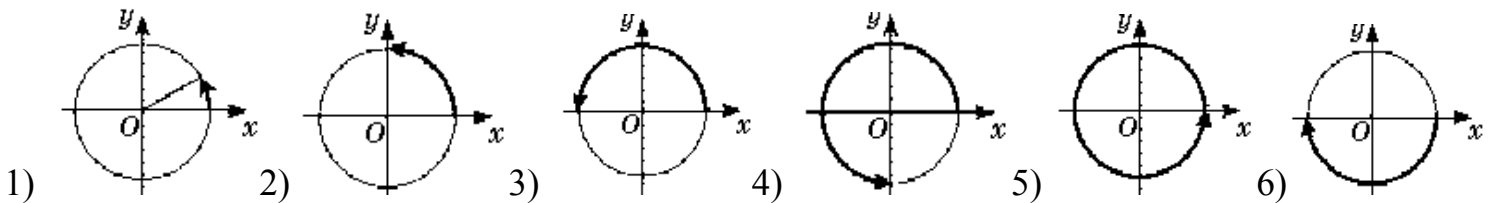
43. Asosining radiusi 1 ga teng bo'lgan silindrga ichki chizilgan sharning hajmini toping (40-rasm).

40



44. Xonada beshta chiroq bor. Ularning har biri yo yonishi, yo yonmasligi mumkin. Xonani nechta usulda yoritish mumkin?

45. Berilgan qaysi rasmda burchak  $-180^{\circ}$  ga burilgan?



46. Sferani bo'yash uchun 250 g bo'yoq kerak bo'ldi (79rasm). Qirradi sfera radiusiga teng bo'lgan kubni bo'yash uchun qancha bo'yoq kerak bo'ladi?

79



47 Silindr sferaga tashqi chizilgan (85rasm). Sfera sirtining yuzi 20 ga teng. Silindr to'la sirtining yuzimi toping.

85



48. Sinfda 30 nafar o'quvchi bor. Olimpiadada qatnashish uchun 2 nafar o'quvchini tanlab olishimiz kerak. Buni nechta usulda amalga oshirish mumkin?

49.  $P(A)=0,4$ ,  $P(A \cup B)=0,9$ ,  $P(A \cap B)=0,1$  bo'lsa,  $P(B)$  ni toping ?

50. Qavariq  $n$ - burchakda nechta diagonal bor?