

Ózbekistan Respublikası
Mektepke shekemgi hám mektep
bilimlendiriw ministrligi
2024-2025 oqıw jılı
I-sherek
Qánigelik pánlerden shereklik summativ
baxalaw test sorawlari.
9-klass
2-variant

1-12 algebra, 13-20 geometriya, 21-35 ingliz tili, 36-45 fizika.
(B-biliw; Q-qollaw; M-Pikirlewge baylanışlı test sorawlari)

Oqıwshı (F.A.Á).....

1. (B 1 ball) Parabola tóbesiniń koordinataların tabıń.

$$y = x^2 - 4x$$

- A) (-2; 4) B) (2; -4) C) (-2; -4) D) (2; 4)

2. (B 1 ball) Kvadrat teńsizlikti sheshiń:

$$x^2 - 16 < 0$$

- A) (-4; 4) B) (-2; 4) C) (-4; 2) D) (-2; 2)

3. (B 1 ball) Kvadrat teńsizlikti sheshiń: $\frac{x+2}{x-5} \geq 0$

- A) $(-\infty; -2) \cup [5; \infty)$ B) $(-\infty; -5) \cup (2; \infty)$
C) $(-\infty; -5] \cup [2; \infty)$ D) $(-\infty; -2] \cup (5; \infty)$

4. (Q 4 ball) Eger parabolaniń (1; 1) noqat arqalı ótiwi hám onıń tóbesi (2; 2) noqatta bolıwı belgili bolsa, parabolaniń teńlemesin tabıń.

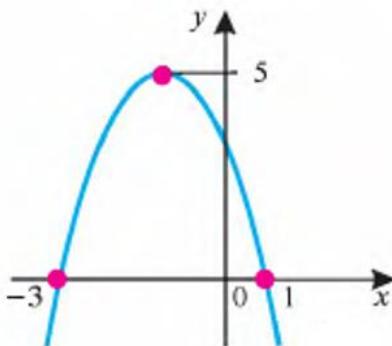
- A) $y = -x^2 + 2x - 2$ B) $y = x^2 - 4x - 2$
C) $y = -x^2 + 4x - 2$ D) $y = x^2 + 4x + 2$

5. (Q 4 ball) $y = ax^2 + bx + c$ kvadrat funkciyanıń grafigi parabolaniń shaqaları tómenge baǵıtlanǵan, onıń tóbesiniń abcissası oń, ordinatası bolsa teris bolsa, a , b hám c koefficientlerdiń belgisi ushın keltirilgen durıs sáykeslikti tabıń.

I. a niń belgisi	A. Oń
II. b niń belgisi	B. teris
III. c niń belgisi	

- A) I-A; II-A; III-B B) I-B; II-B; III-A
C) I-B; II-A; III-B D) I-B; II-B; III-B

6. (Q 4 ball) Kvadrat funkciyaniń grafiği súwrette berilgen.



Bul kvadrat funkciya ushın tómendegi tastıyıqlawlardıń durıs yaki nadurıs ekenligin aniqlań.

Nº	Tastıyıqlawlar	durıs	nadurıs
1	Bul kvadrat funkciyaniń eń úlken mánisi 5 ke teń		
2	Bul kvadrat funkciyaniń $x = 0$ degi mánisi 1 ge teń		
3	Bul parabola tóbesiniń ordinatası teris san boladı		

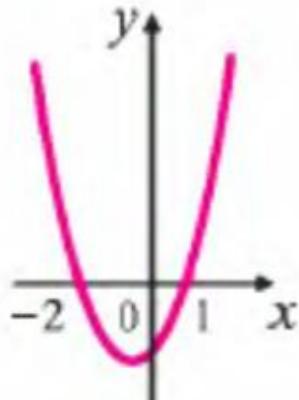
A) nadurıs, durıs, durıs;

C) durıs, nadurıs, durıs;

B) durıs, nadurıs, nadurıs;

D) durıs, durıs, nadurıs;

7. (Q 4 ball) $y = ax^2 + bx + c$ kvadrat funkciyaniń grafiği súwrette berilgen.



Súwretten paydalanıp, $ax^2 + bx + c > 0$ teńsizliktiń sheshimin tabıń.

A) $(-\infty; -2) \cup (1; \infty)$ B) $(-2; 1)$ C) $(-\infty; -2)$ D) $(1; \infty)$

8. (Q 4 ball) Teńsizlikti sheshiń:

$$\frac{x^2 + x - 12}{x + 1} < 0$$

A) $(-\infty; -4) \cup (-1; 3)$ B) $(-\infty; -3) \cup (-1; 4)$

C) $(-\infty; -4) \cup (1; 3)$ D) $(-\infty; -4) \cup (-3; 1)$

9. (Q 4 ball) Funkciyaniń aniqlanıw oblastın tabıń:

$$y = \sqrt{x^2 - 36}$$

A) $[6; \infty)$ B) $[-6; 6]$ C) $(-\infty; -6]$ D) $(-\infty; -6] \cup [6; \infty)$

10. (Q 4 ball) Funkciyaniń kemeyiw aralığın tabıń:

$$y = x^2 - 6x + 8$$

A) $(2; 4)$ B) $(-3; \infty)$ C) $(3; \infty)$ D) $(-\infty; 3]$

11. (Q 4 ball) Teńlemeni sheshiň: $\sqrt{x^2 - 11x - 4} = \sqrt{6 - 2x}$

- A) 10 B) -1 hám 10 C) -1 D) 2

12. (M 5 ball) a niň qanday mánislerinde $ax^2 + 4x + 9a > 0$ teńsizlik x tiň barlıq mánislerinde durıs boladı?

- A) $a < \frac{2}{3}$ B) $a > \frac{2}{3}$ C) $a > -\frac{2}{3}$ D) $a < -\frac{2}{3}$

13. (B 4 ball) Katetleri 12 cm hám 16 cm bolǵan tuwrı mýyeshli úshmúyeshliktiň gipotenuzasınıň uzınlıǵıñ tabıń.

- A) 24 cm B) 20 cm C) 18 cm D) 28 cm

14. (B 4 ball) Uqsas úshmúyeshlikler ushın tómendegi tastıyıqlawlardıň durıs yaki nadurıs ekenligin aniqlań.

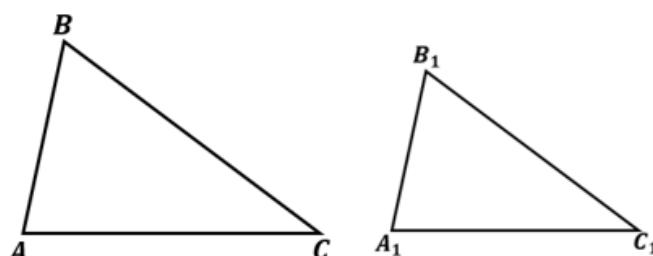
Nº	Tastıyıqlawlar	durıs	nadurıs
1	Uqsas úshmúyeshliklerdiň sáykes mýyeshleri óz ara teń boladı		
2	Eki uqsas úshmúyeshlik perimetrleriniň qatnası uqsaslıq koefficientine teń.		
3	Eki uqsas úshmúyeshlik maydanlarınıň qatnası uqsaslıq koefficientiniň kvadratına teń.		

- A) durıs, nadurıs, durıs; B) nadurıs, durıs, durıs;
C) durıs, durıs, durıs; D) durıs, durıs, nadurıs;

15. (Q 5,2 ball) Eki uqsas úshmúyeshliktiň maydanları 55 m^2 hám 220 m^2 . Kishi úshmúyeshliktiň bir tárepi 4 m bolsa, úlken úshmúyeshliktiň oğan sáykes tárepiniň uzınlıǵıñ tabıń.

- A) 8 m B) 2 m C) 16 m D) 1 m

16. (Q 5,2 ball) Súwrette ABC hám $A_1B_1C_1$ úshmúyeshlikler berilgen. Úshmúyeshliklerdiň uqsaslıq belgilerinen paydalaniپ, tómendegi tastıyıqlawlardıň durıs yaki nadurıs ekenligin aniqlań.



Nº	Tastıyıqlawlar	durıs	Nadurıs
1	$\frac{AB}{A_1B_1} = \frac{AC}{A_1C_1}$ hám $\angle A = \angle A_1$ bolsa, $\Delta ABC \sim \Delta A_1B_1C_1$ boladı		
2	$\angle A = \angle A_1$ hám $\angle C = \angle C_1$ bolsa, $\Delta ABC \sim \Delta A_1B_1C_1$ boladı		
3	$\frac{AB}{A_1B_1} = \frac{AC}{A_1C_1} = \frac{BC}{B_1C_1}$ bolsa, $\Delta ABC \sim \Delta A_1B_1C_1$ boladı		

- A) durıs, durıs, durıs;
B) nadurıs, nadurıs, durıs;
C) durıs, nadurıs, nadurıs;
D) durıs, durıs, nadurıs;

17. (Q 5,2 ball) $ABCD$ parallelogrammniń CD tárepinde E noqat alıǵan. AE hám BC nurlar F noqatta kesilisedi. Eger $DE = 3$ cm, $EC = 9$ cm, $BC = 10$ cm, $AE = 8$ cm bolsa, ABF úshmúyeshliktiń perimetrin tabıń.

- A) 64 cm B) 96 cm C) 144 cm D) 84 cm

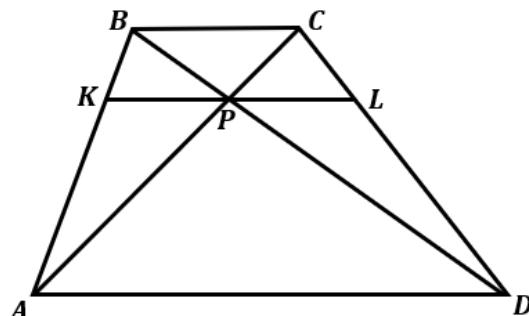
18. (Q 5,2 ball) $O(2; 8)$ noqatqa qarata simmetriyada $A(3; 5)$ noqat qaysı noqatqa ótedi?

- A) $(-1; 11)$ B) $(1; 11)$ C) $(5; 13)$ D) $(-1; 3)$

19. (Q 5,2 ball) Perimetri 64 cm bolǵan úshmúyeshliktiń bir tárepine parallel etip júrgizilgen tuwrı onnan perimetri 16 cm hám maydanı 40 cm^2 qa teń bolǵan úshmúyeshlikti ajıratadı. Berilgen úshmúyeshliktiń maydanın tabıń.

- A) 360 cm^2 B) 320 cm^2 C) 640 cm^2 D) 480 cm^2

20. (M 6 ball) Súwrette berilgen trapeciyada $AD \parallel BC \parallel KL$. Eger $BC = 4$ cm, $AD = 16$ cm bolsa, KL kesindiniń uzınlıǵıń tabıń.



- A) 6,4 cm B) 16 cm C) 8,2 cm D) 12,8 cm

21. (B. 2 ball) Complete the definition with personality adjective.

Someone who is always busy or likes doing sports is ...

- A) popular B) active C) helpful D) polite

22. (B. 2 ball) Choose the correct answer.

The water in the ... near our house is really clean.

- A) valley B) mountain C) river D) volcano

23. (B. 2 ball) Choose the correct answer.

I usually go to the town centre because there are no car parks in the centre.

- A) by boat B) by helicopter C) by plane D) on foot

24. (B. 2 ball) Choose the correct answer.

Charles loves and he wants to act in the school play.

- A) Drama B) ICT C) Design and technology D) PE

25. (Q. 2.8 ball) Choose the correct form of the verb:

Sarah _____ in a big company, but she _____ a vacation this week.

- A) work, takes C) is working, takes
B) works, is taking D) works, take

26. (Q. 2.8 ball) Choose the correct form of the verb:

Tom and Jerry _____ soccer every afternoon, but they _____ basketball now.

- A) plays, play C) are playing, plays
B) play, are playing D) play, playing

27. (Q. 2.8 ball) Choose the correct form of the verb:

She _____ an interesting article in the newspaper yesterday.

- A) reads B) read C) reading D) readed

28. (Q. 2.8 ball) Choose the correct form of the verb:

They _____ very happy when they heard the news.

- A) are B) is C) was D) were

29. (Q. 2.8 ball) Choose the correct preposition to complete the sentence:

I bought this gift _____ my friend.

- A) to B) by C) at D) for

30. (Q. 2.8 ball) Choose the correct preposition to complete the sentence:

The book is _____ the table.

- A) in B) at C) on D) by

31. (Q. 2.8 ball) Choose the correct answer.

Dad always gets home _____ than Mum.

- A) later B) lately C) latest D) the latest

32. (Q. 2.8 ball) Choose the correct answer

You need to study _____ to pass your exams.

- A) harder B) hardly C) hardest D) the hardest

33. (Q. 2.8 ball) Choose the correct form of the verb:

They _____ TV when the lights _____ out.

- A) watched, went C) were watching, went
B) were watching, were going D) watched, was going

34. (Q. 2.8 ball) Choose the correct form of the verb:

She _____ on the phone when I _____ her.

- A) talked, saw C) talked, was seeing
B) was talking, saw D) was talking, was seeing

35. (M. 4 ball) Read the text and choose the INCORRECT statement.

DAILY STORIES

by Margarita Marcos

Today I'm writing this blog about my oldest sister, Sofia. She's six years older than me. It's her birthday today and she's 21. She doesn't live in the same house as my parents and me, but her flat is in the same street. We live at number 22 Spring Street, and she lives in one of six flats at number 28.

Sofia is the first person I go to when I have a problem, and she always tries to help. She also helps me with my English homework. We all speak Spanish at home, but Sofia speaks English really well too as a second language. She knows some English from school, but she also listens to English music and watches English films. Another thing she is great at is dancing. She's teaching me the tango this week. Tango is really difficult, but I love the music and the dance.

My sister's interested in everything. She loves learning about science on the internet, and she often reads books about history in her free time. She also does three sports: football, swimming and running. She enjoys them all and is good at swimming. She likes camping, and she's learning to play the piano at the moment, too. She can't play very well yet, but she practises every day. She's also planning to learn the violin. She's a very active person! I really don't know how she has time to do so many things!

- A) Sofia's flat is on the same street as Margarita's house.
B) Sofia speaks English well as a second language.

- C) Sofia loves learning about science and often reads history books.
 - D) Sofia is learning to play the violin at the moment.

36. (B 2 ball) Molekulyar-kinetikalıq teoriyanıň tiykargı qağıydaları qaysı juwaptasalistirmalı tolıq bayanlanğan?

- A) zat mayda bólekshelerden quralǵan hám olar arasında óz-ara tásir kúshleri bar
 - B) har qanday dene molekulalardan dúzilgen, olar tártipsiz hárekette boladı, olar arasında óz-ara tásir kúshleri bar
 - C) zat mayda bólekshelerden dúziledi hám olar keńislikti úzliksiz toltıradı
 - D) zat elektron, tártipsiz hárekettegi proton hám neytronlardan dúzilgen, olar arasında óz-ara tásir kúshleri bar

37. (Q 2,8 ball) Bir altın atomınıń massası $3,29 \cdot 10^{-25}$ kg. Onıń salıstırımlı atom massasın tabıń (m.a.b). $1\text{ m.a.b} = 1,67 \cdot 10^{-27}$ kg.

- A) 108 B) 197 C) 320 D) 290

38. (Q 2,8 ball) 200 g geliy elementiniń muǵdarın aniqlań (mol). $\mu = 4$ g/mol.

- A) 100 B) 25 C) 20 D) 50

39. (B 2 ball) Molekulyar-kinetikalıq teoriyanıň tiykarǵı teńlemesin tabıń.

A) $pV = \text{const}$ C) $\frac{pV}{T} = \text{const}$
 B) $pV = \nu RT$ D) $p = \frac{2}{3}nE_k$

40. (B 2 ball) Tómende A baǵanada berilgen temperaturalarǵa B baǵanadan sáykes keliwshi temperaturalardı tuwrı sáykeslestirip shıǵıń.

A (kelvin)	B (celsiy)
1) 290 K	a) 47°C
2) 250 K	b) -23°C
3) 320 K	c) 17°C
	d) 27°C

- A) 1-c; 2-a; 3-b C) 1-c; 2-b; 3-a
B) 1-d; 2-c; 3-a D) 1-c; 2-d; 3-b

41. (Q 2,8 ball) Molekulaları ilgerilenbe qozǵalısınıń ortasha kinetikalıq energiyası $8,28 \cdot 10^{-21}$ J bolǵan gazdıń temperaturası qanday ($^{\circ}\text{C}$). $k = 1,38 \cdot 10^{-23}$ J/K.

- A) 127 B) 117 C) 137 D) 130

42. (Q 2,8 ball) Mendeleev-Klapeyron teńlemesinen ideal gazdıń tıǵızlıǵı qanday esaplanadı?

A) $\rho = \frac{pM}{RT}$

B) $\rho = \frac{RT}{p}$

C) $\rho = \frac{p}{RT}$

D) $\rho = \frac{p}{RTM}$

43. (Q 2,8 ball) Kólemi 100 litr bolǵan ıdısta 250 g metan 4,155 atm basım payda etedi. Onıń temperaturasın tabıń ($^{\circ}\text{C}$). $\mu = 16 \text{ g/mol}$.

- A) 35 B) 68 C) 47 D) 74

44. (Q 2,8 ball) Gazdıl kólemi 6 l den 4 l ge shekem izotermikaliq túrde kemeytirildi. Gazdıl baslangısh basımı 10 kPa bolsa, qısılıw nátiyjesinde basım neshe kPa artqan?

- A) 15 B) 5 C) 20 D) 10

45. (Q 2,8 ball) Izobaralıq processte gazdıl baslangısh kólemi 120 l hám temperaturası 450 K . Gaz jılıwı nátiyjesinde 150 l kólemdi iyelegen bolsa, onıń aqırğı temperaturasın tabıń (K).

- A) 325,5 B) 424,5 C) 622,5 D) 562,5

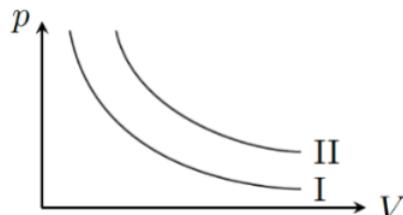
46. (Q 2,8 ball) Ballondaǵı gazdıl basımı 4 kPa hám temperurası 300 K . Eger onı ısitıp temperurasın 450 K ǵa jetkizsek, ballonda qanday basım payda boladı (kPa).

- A) 8 C) 6
B) 5 D) 10

47. (B 2 ball) 1 mol bir atomlı ideal gaz molekulalarınıń ortasha kinetikalıq energiyaları jiyındısı qaysı juwapta tuwrı kórsetilgen?

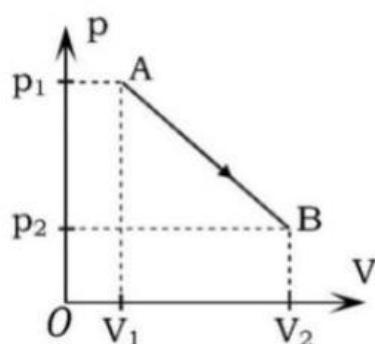
- A) $E_k = 3RT/2$ C) $E_k = 3kT/2$
B) $E_k = 3kT$ D) $E_k = 3RT$

48. (P 4 ball) Ideal gaz ústinde eki qıylı izotermikaliq process orinlandı. Birinshi halda gazdıl ishki energiyası 111 kJ ǵa teń, ekinshi halda bolsa birinshisinen 37 kJ ǵa parq etken. Eger eki processtegi temperaturalar 125 K ǵa parq etken bolsa, birinshi jaǵdaydaǵı temperaturanı (K) anıqlań.



- A) 227 B) 500 C) 375 D) 250

49. (Q 2,8 ball) Súwrette súwretlengen processte ideal gazdıl atqarǵan jumısın tabıń.



- A) $p_2V_2 - p_1V_1$
B) $(p_2 + p_1)(V_2 - V_1)/2$
C) $(p_2 - p_1)(V_2 + V_1)/2$
D) $p_2V_1 - p_1V_2$

50. (Q 2,8 ball) Cilindrdegi gazdıl ortasha basımı 1 MN/m^2 . Porshenniń beti 200 cm^2 , júriw uzınlığı $0,5 \text{ m}$. Porshenniń bir márte júriwinde gaz qanday jumıs atqaradı (kJ)?

- A) 20 B) 12 C) 4 D) 10



PEDAGOGIK MAHORAT VA XALQARO
BAHOLASH ILMIY-AMALIY
MARKAZI