

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

1-20 matematika, 21-35 ingliz tili, 36-50 fizika
(B-biliw; Q-qollaw; M-Pikirlewge baylanıshlı test sorawları)

Oqıwshı (F.A.Á).....

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

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

A) (-4; 16) B) (-4; -16) C) (4; -16) D) (4; 16)

2. (B 1 ball) Kvadrat teńsizlikti sheshiń:

$$x^2 - 25 < 0$$

A) (0; 5) B) (-5; 10) C) (-5; 0) D) (-5; 5)

3. (B 1 ball) Kvadrat teńsizlikti sheshiń:

$$\frac{x - 8}{x + 15} \geq 0$$

A) $(-\infty; -15) \cup [8; \infty)$ B) $(-\infty; -15) \cup (8; \infty)$

C) $(-\infty; -15] \cup [8; \infty)$ D) $(-\infty; -15] \cup (8; \infty)$

C) $y = 2x^2 + 4x + 3$ D) $y = 2x^2 + 4x + 4$

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

A) $y = x^2 - 4x - 5$ B) $y = x^2 - 4x + 5$

C) $y = x^2 - 4x + 3$ D) $y = x^2 + 4x + 2$

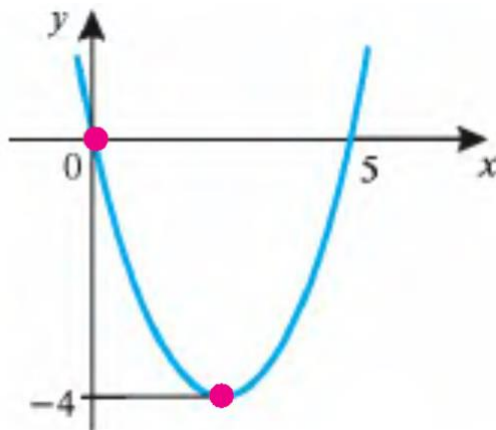
5. (Q 4 ball) $y = ax^2 + bx + c$ kvadrat funkciyanıń grafigi parabolaniń shaqaları tómenge baǵıtlangan, onıń tóbesiniń abscissası da, ordinatası da teris bolsa, a , b hám c koefficientlerdiń belgisi ushın keltirilgen durıs sáykeslikni tabıń.

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

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

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

6. (Q 4 ball) Súwrette kvadrat funkciyanıń grafigi berilgen.



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

Nö	Tastıyıqlawlar	durıs	nadurıs
1	Bul kvadrat funkciyanıń eń kishi mánisi 0 ge teń		
2	Bul kvadrat funkciyanıń $x = 0$ degi mánisi 5 ke teń		
3	Bul kvadrat funkciyanıń $x = 0$ degi mánisi 0 ge teń		

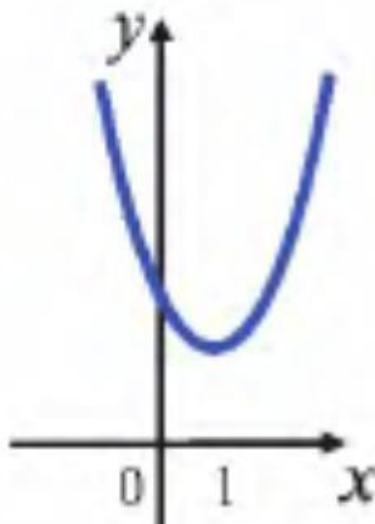
A) nadurıs, nadurıs, durıs;

B) durıs, nadurıs, nadurıs;

C) nadurıs, durıs, durıs;

D) durıs, durıs, nadurıs;

7. (Q 4 ball) Súwrette $y = ax^2 + bx + c$ kvadrat funkciyanıń grafigi berilgen.



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

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

8. (Q 4 ball) Teńsizlikti sheshiń:

$$\frac{x^2 + 7x + 12}{x - 2} < 0$$

A) $(-\infty; -3) \cup (-2; 4)$

B) $(-\infty; -4) \cup (2; 3)$

C) $(-\infty; -4) \cup (-3; 2)$

D) $(-\infty; -4) \cup (-3; -2)$

9. (Q 4 ball) Funkciyanıń anıqlanıw oblastın tabıń:

$$y = \sqrt{5x^2 + 15x}$$

- A) $[0; 3]$ B) $(-\infty; -3] \cup [0; \infty)$ C) $[-3; 0]$ D) $(-\infty; 0] \cup [3; \infty)$

10. (Q 4 ball) Funkciyanıń kemeyiw aralıǵın tabıń:

$$y = -x^2 + 8x - 12$$

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

11. (Q 4 ball) Teńlemeńi sheshiń:

$$\sqrt{x^2 - 9x + 12} = \sqrt{4 - 3x}$$

- A) 2 B) 2 hám 4 C) \emptyset D) 4

12. (M 5 ball) a nıń qanday mánislerinde $ax^2 - 6x + 9a < 0$ teńsizlik x tiń barlıq mánislerinde durıs boladı?

- A) $a < -1$ B) $a < 1$ C) $a > -1$ D) $a > 1$

13. (B 4 ball) Katetleri 10 cm hám 24 cm bolǵan tuwrı múyeshli úshmúyeshliktiń gipotenuzasınıń uzınlıǵın tabıń.

- A) 28 cm B) 25 cm C) 30 cm D) 26 cm

14. (B 4 ball) Uqsas úshmúyeshlikler ushın tómendegi tastıyıqlawlardıń durıs yaqı nadurıs ekenligin anıqlań.

Nö	Tastıyıqlawlar	durıs	nadurıs
1	Uqsas úshmúyeshliklerdiń sáykes múyeshleri óz ara teń boladı		
2	Uqsas úshmúyeshliklerdiń sáykes tárepleri proporcional boladı		
3	Uqsas úshmúyeshliklerdiń tárepleriniń qatnası k ǵa teń bolsa, perimetrleriniń qatnası k ǵa teń boladı		

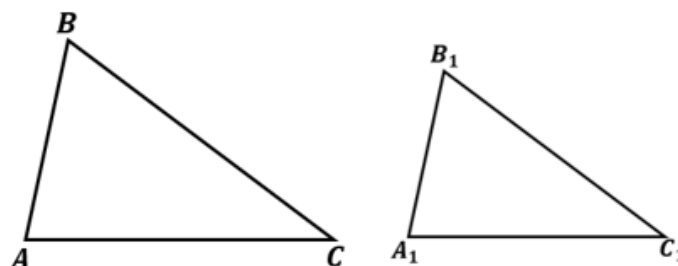
A) durıs, durıs, durıs; B) nadurıs, durıs, durıs;

C) nadurıs, durıs, nadurıs; D) durıs, durıs, nadurıs;

15. (Q 5,2 ball) Eki uqsas úshmúyeshliklerdiń maydanları 24 m^2 hám 216 m^2 . Kishi úshmúyeshliktiń bir tárepi 4 m bolsa, úlken úshmúyeshliktiń oǵan sáykes tárepiniń uzınlıǵın tabıń.

- A) 12 m B) 16 m C) 36 m D) 18 m

16. (Q 5,2 ball) Súwrette ABC hám $A_1B_1C_1$ úshmúyeshlikler berilgen. Úshmúyeshliklerdiń uqsaslıq belgilerinen paydalanıp, tómendegi tastıyıqlawlardıń durıs yaqı nadurıs ekenligin anıqlań.



Nö	Tastıyıqlawlar	durıs	nadurıs
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1	$\frac{BC}{B_1C_1} = \frac{AC}{A_1C_1}$ hám $\angle B = \angle B_1$ bolsa, $\Delta ABC \sim \Delta A_1B_1C_1$ boladı		
2	$\angle A = \angle A_1$ hám $\angle B = \angle B_1$ bolsa, $\Delta ABC \sim \Delta A_1B_1C_1$ boladı		
3	$\frac{AB}{A_1B_1} = \frac{AC}{A_1C_1} \neq \frac{BC}{B_1C_1}$ bolsa, $\Delta ABC \sim \Delta A_1B_1C_1$ boladı		

A) naduris, duris, naduris;
C) duris, naduris, naduris;

B) naduris, naduris, duris;
D) duris, duris, naduris;

17. (Q 5,2 ball) $ABCD$ parallelogramnıń CD tárepinde E noqat alıngan. AE hám BC nurlar F noqatta kesilisedi. Eger $DE = 6$ cm, $EC = 2$ cm, $BC = 15$ cm, $AE = 12$ cm bolsa, ABF úshmúyeshliktiń perimetrin tabıń.

A) 48 cm B) 38 cm C) 44 cm D) 52 cm

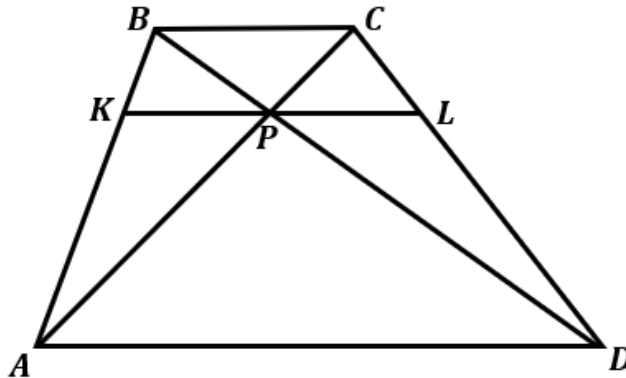
18. (Q 5,2 ball) $O(2; 4)$ noqatqa qarata simmetriyada $A(3; 6)$ noqat qaysı noqatqa ótedi?

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

19. (Q 5,2 ball) Perimetri 63 cm bolgan úshmúyeshliktiń bir tárepine parallel etip júrgizilgen tuwrı onnan perimetri 21 cm hám maydanı 30 cm^2 qa teń úshmúyeshlik ajratadı. Berilgen úshmúyeshliktiń maydanın tabıń.

A) 360 cm^2 B) 270 cm^2 C) 480 cm^2 D) 135 cm^2

20. (M 6 ball) Súwrette berilgen trapeciyada $AD \parallel BC \parallel KL$. Eger $BC = 6$ cm, $AD = 10$ cm bolsa, KL kesindiniń uzınlıgın tabıń.



A) 8 cm B) 7,2 cm C) 7,5 cm D) 12 cm

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

Someone who has a lot of friends is ...

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

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

My grandparents live down in the It gets dark early there when the sun goes down behind the hills.

A) hill B) valley C) mountain D) volcano

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

On this tour you travel and it has air conditioning and wifi.

A) by coach B) by underground C) by scooter D) by boat

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

Kate likes making things so she is good at

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

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

Every weekend, they _____ hiking in the mountains, but this weekend they _____ at home.

- A) go, are staying
B) are going, staying
C) goes, stays
D) go, stays

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

At the moment, my brother _____ in his room, but he normally _____ in the living room.

- A) studies, study
B) is studying, studies
C) study, studies
D) is studying, study

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

They _____ to the cinema last night.

- A) go
B) went
C) gone
D) going

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

He _____ his keys at home yesterday.

- A) forget
B) forgets
C) forgetting
D) forgot

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

The cat is hiding _____ the table.

- A) between
B) in
C) into
D) under

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

He is good _____ playing the guitar.

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

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

I study _____ when I'm not listening to music.

- A) more efficiently
B) most efficient
C) more efficient
D) as efficiently as

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

Who goes to the gym the _____ often?

- A) most
B) very
C) much
D) many

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

While we _____, we _____ a strange noise outside.

- A) talked, heard
B) talked, were hearing
C) were talking, heard
D) were talking, were hearing

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

I _____ my keys while I _____ for the bus.

- A) lost, waited
B) lost, was waiting
C) was losing, waited
D) was losing, was waiting

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 speaks English well as a second language.
- B) Sofia does three sports: football, swimming, and running.
- C) Sofia is a very active person and manages to do many things.
- D) Sofia learned English only from school.

36. (Biliw – 2 ball) Qaysı juwap molekulyar-kinetikalıq teoriyanıń tiykarǵı qaǵıydaların salıstırmalı tolıq bayanlaydı?

- A) zat elektron, proton hám neytronlardan quralǵan
- B) har qanday zat bóleksheleriniń temperaturası bólekshelerdiń kinetikalıq energiyasına baylanıslı
- C) har qanday dene molekulalardan dúzilgen olar tártipsiz hárekette boladı olar arasında óz-ara tásir kúshleri bar.
- D) barlıq molekulalar tıǵız halatta qozǵalısta boladı

37. (Qollaw – 2,8 ball) 1 gúmis atomınıń massası $180 \cdot 10^{-27}$ kg bolsa, onıń salıstırmalı atom massasın tabıń. (1 m.a.b = $1,67 \cdot 10^{-27}$ kg).

- A) 107
- B) 120
- C) 108
- D) 115

38. (Qollaw – 2,8 ball) 150 g kislород gazınıń muǵdarın (mol) anıqlań. $\mu = 32$ g/mol.

- A) 5
- B) 4,5
- C) 4,9
- D) 4,7

39. (Biliw – 2 ball) Molekulyar-kinetikalıq teoriyanıń tiykarǵı teńlemesin tabıń.

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

40. (Biliw – 2 ball) Tómente A baǵanada berilgen temperaturalarǵa B baǵanadan sáykes keliwshi temperaturalarǵı tuwrı sáykeslestirip shıǵıń.

A (Kelvin)	B (Celsiy)
1) 275 K	a) 27°C
2) 300 K	b) 2 °C
3) 310 K	c) 37°C
	d) 57°C

A) 1-b; 2-a; 3-c

C) 1-c; 2-a; 3-b

B) 1-d; 2-c; 3-a

D) 1-c; 2-b; 3-a

41. (Qollaw – 2,8 ball) Molekulaları ilgerilewshi qozǵalıwınıń ortasha kinetikalıq energiyası $5,5 \cdot 10^{-21}$ J bolǵan gazdıń temperaturası qanday (°C)? ($k = 1,38 \cdot 10^{-23}$ J/K).

A) –7,3

C) 11

B) –8,3

D) 13

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

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

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

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

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

43. (Qollaw – 2,8 ball) Kólemi 150 litr bolǵan ıdısta 350 g vodorod 500 atm basım payda etedi. Onıń temperaturasınıń tabınıń (K). ($\mu = 2$ g/mol).

A) $4,5 \cdot 10^3$

C) $5,5 \cdot 10^3$

B) $5,16 \cdot 10^3$

D) $7,5 \cdot 10^3$

44. (Qollaw – 2,8 ball) Gazdıń kólemi 8 l den 5 l ge shekem izotermiyalıq túrde kemeytirildi. Gazdıń baslanǵısh basımı 20 kPa bolsa, qısılıw nátiyjesinde basım neshe kPa artqan?

A) 8

C) 15

B) 12

D) 32

45. (Qollaw – 2,8 ball) Izobaralıq processte gazdıń baslanǵısh kólemi 80 l hám temperaturası 300 K. Gaz ısıwı nátiyjesinde 100 l kólemde iyelegen bolsa, onıń aqırǵı temperaturasınıń tabınıń (K).

A) 400

C) 375

B) 350

D) 450

46. Ballondaǵı gazdıń basımı 4 kPa hám temperaturası 300 K. Eger onı ısıtıp temperaturasınıń 450 K ǵa jetkizsek, ballonda qanday basım payda boladı (kPa). (qollaw – 2,8 ball)

A) 6

C) 8

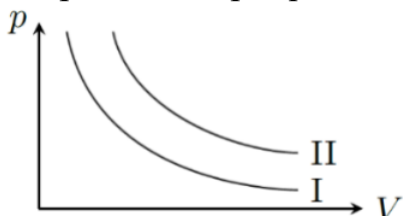
B) 5

D) 10

47. 1 mol bir atomli ideal gaz molekularinin ortasha kinetikalik energiyalari juyindisi qaysi juwapta tuwri korsetilgen? (bilw – 2 ball)

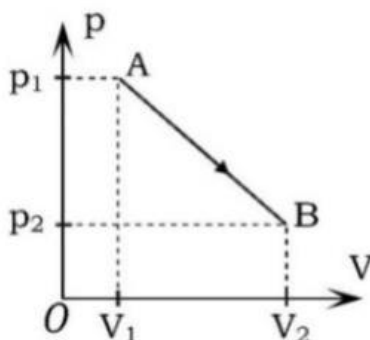
- A) $E_k = 3kT$
- B) $E_k = 3RT/2$
- C) $E_k = 3kT/2$
- D) $E_k = 3RT$

48. (Pikirlew – 4 ball) Eki qıylı izotermiyalıq process atqarıp atır. Birinshi processte ishki energiya 150 kJ, ekinshi processte bolsa birinshisinen 50 kJ parıq etedi. Eger temperaturalar parqı 100 K bolsa, ekinshi processtin temperaturası qansha (K)?



- A) 150
- B) 300
- C) 400
- D) 350

49. (Qollaw – 2,8 ball) Súwrette korsetilgen processte ideal gazdın atqarğan jumısın tabıń.



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

50. (Qollaw – 2,8 ball) Cilindrdegi gazdın ortasha basımı 0,8 MN/m². Porshenniń beti 250 cm² hám júriw uzınlığı 0,3 m bolsa, porshenniń bir márte júriwinde gaz qanday jumıs atqaradı (kJ)?

- A) 12
- B) 20
- C) 15
- D) 6

