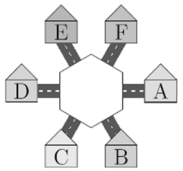
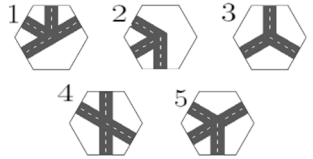
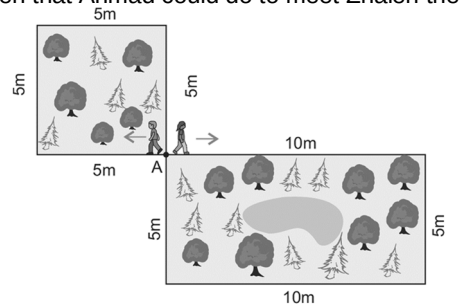
20. Alma wants to put one of the pieces 1, 2, 3, 4, 5 in the middle of the picture so that a child in A is able to travel to B and to E, but not to D. She can rotate the pieces. Which two pieces could she use?





(A) 1 and 2 (B) 2 and 3 (C) 1 and 4 (D) 4 and 5 (E) 1 and 5

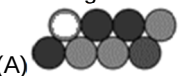
21. Ahmad and Zhaleh start moving from point A with the same speed, in the directions shown. Ahmad walks around the square-shaped garden and Zhaleh walks around the rectangular-shaped one. They meet again at A. What is the smallest number of laps around the square-shaped garden that Ahmad could do to meet Zhaleh there?



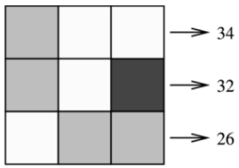
(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

22. Five children ate some plums. Lauren ate two plums more than Sophie. Betty ate three plums fewer than Lauren. Claire ate one plum more than Betty and three plums fewer than Alice. Which two girls ate the same number of plums?
(A) Claire and Lauren. (B) Claire and Sophie. (C) Lauren and Alice.
(D) Sophie and Alice. (E) Alice and Betty.

23. The small caterpillar shown in the picture curls up to sleep. What might that look like?

(A)  (B)  (C)  (D)  (E) 

24. In the grid, the same number is hidden under the same colour square.To the right of each row, the sum of the numbers hidden under the squares in that row is given. Which number is hidden under the black square?



(A) 6 (B) 8
(C) 10 (D) 12 (E) 14

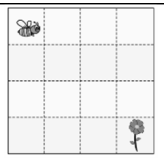
Laiks uzdevumu risināšanai – 75 minūtes!

Starptautiskā konkursa „Ķengurs" uzdevumi

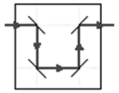
24.03.2022. **3.-4. klases**

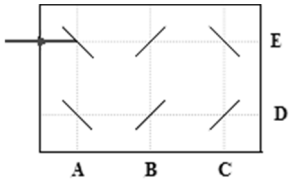
3 point problems

1. Buzz the bee wants to reach the flower. Buzz can move from cell to cell down ↓ or to the right →. Which set of directions will get him there?
(A) → ↓ → ↓ ↓ → (B) ↓ ↓ → ↓ ↓
(C) → ↓ → ↓ →(D) → → ↓ ↓ ↓ (E) ↓ → → ↓ ↓ ↓



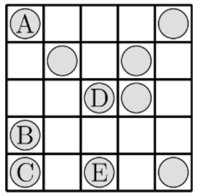
2. Laser beams reflect in mirrors in the way shown in the picture. At which letter will this laser beam end?





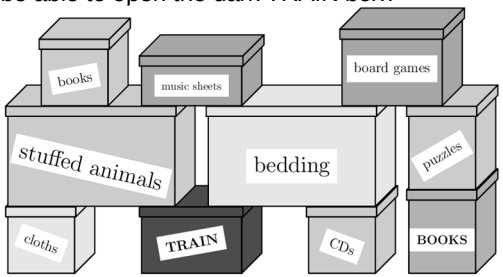
(A) A (B) B
(C) C (D) D (E) E

3. Rossitza wants to put 2 coins in each row and in each column of the grid. Which coin does she need to move to an empty cell?



(A) A (B) B (C) C (D) D (E) E

4. What is the smallest number of boxes that Bill has to move to be able to open the dark TRAIN box?

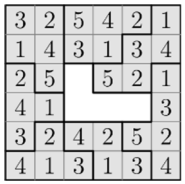


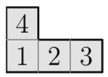
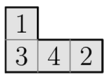
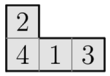
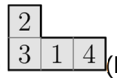
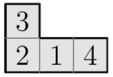
(A) 3 (B) 4 (C) 5 (D) 6 (E) 7

5. Kengu always makes one large jump followed by two small jumps on the number line, as shown in the picture. Kengu starts at 0 and ends on 16. What is the number of jumps that Kengu makes?

(A) 4 (B) 7 (C) 8 (D) 9 (E) 12

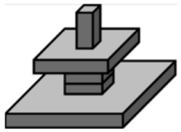
6. Anna makes a jigsaw where two squares with common sides do not contain the same number.Which piece should she use to complete her jigsaw?

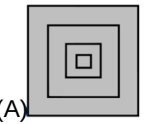
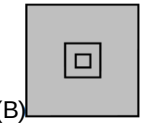
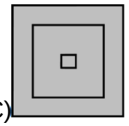
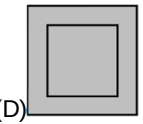
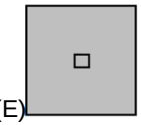


(A)  (B)  (C)  (D)  (E) 

7. 2022 + □ = 2020 + □
Which two numbers can be written in the two boxes to make the statement correct?
(A) 3 and 5 (B) 4 and 1 (C) 3 and 4 (D) 7 and 2 (E) 9 and 8

8. John builds the tower shown. What will he see if he looks at his tower from above?



(A)  (B)  (C)  (D)  (E) 

4 point problems

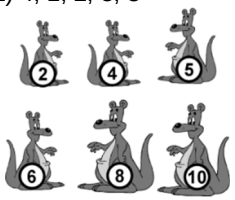
9. Five cars numbered 1, 2, 3, 4 and 5 are moving in the same direction.

1 2 3 4 5

First, the last car (5) overtakes the two cars ahead of it. Next, the second last car overtakes the two cars ahead of it. Finally, the middle car overtakes the two cars ahead of it. In what order are the cars now?

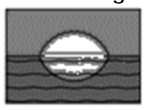
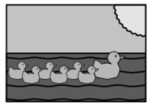
(A) 1, 2, 3, 5, 4 (B) 2, 1, 3, 5, 4 (C) 2, 1, 5, 3, 4 (D) 3, 1, 4, 2, 5 (E) 4, 1, 2, 5, 3

10. The ages of a family of kangaroos are 2, 4, 5, 6, 8 and 10 years. The sum of the ages of four of them is 22 years. What are the ages of the other two kangaroos?



(A) 2 and 8 (B) 4 and 5
(C) 5 and 8 (D) 6 and 8 (E) 6 and 10

11. During my holiday I sent the five postcards shown below to my friends. There are no ducks on Mike's card. Cara's card has the sun on it. There are exactly two living creatures on Paula's card. Lexi's card has a dog on it. There are kangaroos on Heather's card. Which card did Mike get?

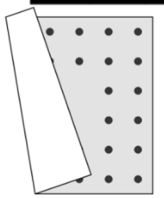
(A)  (B)  (C)  (D)  (E) 

12. Mosif wanted the sum of the three numbers in each row and in each column of the grid to be the same. He made one mistake. Which number must he correct?

9	1	5
3	7	6
4	7	4

(A) 1 (B) 3 (C) one of the 4s (D) 5 (E) one of the 7s

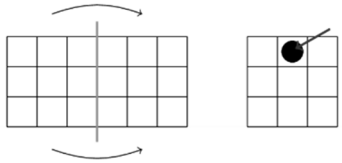
13. Aladdin has a square carpet. There are the same number of dots, arranged in two lines, along each side of his carpet. Unfortunately, the carpet has folded. How many dots are there on Aladdin's carpet?



(A) 48 (B) 44 (C) 40 (D) 36 (E) 32

14. Joanna folds the number square twice as shown. Then she punches a hole through the black spot shown by the arrow. Which numbers does she also punch through?

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

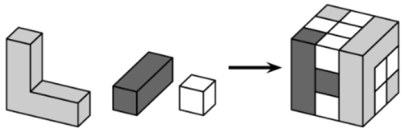


(A) 8, 11, 26, 29
(B) 14, 17, 20, 23
(C) 15, 16, 21, 22
(D) 14, 16, 21, 23
(E) 15, 17, 20, 22

15. The pupils in a class sit in rows. There are the same number of pupils in each row. There are 2 rows of pupils in front of Robert and 1 row of pupils behind him. In his row, there are 3 pupils on his left and 5 pupils on his right. How many pupils are there in this class?

(A) 10 (B) 17 (C) 18 (D) 27 (E) 36

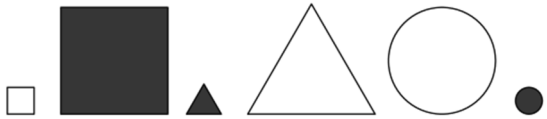
16. The cube in the picture is built from the three kinds of wooden blocks shown. How many white wooden blocks are used?



(A) 8 (B) 11
(C) 13 (D) 16 (E) 19

5 point problems

17. Wanda chose a few of the following shapes and said "Amongst the shapes I have chosen, there are 2 coloured ones, 2 large ones and 2 round ones". What is the smallest number of the following shapes that Wanda could have chosen?

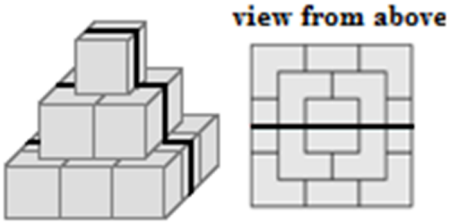


(A) 2 (B) 3
(C) 4 (D) 5 (E) 6

18. Three football teams participate in a sports tournament. Each team plays the other two teams exactly once. In each game, the winner gets 3 points and the loser doesn't get any points. If the game finishes in a draw, each team gets 1 point. At the end of the tournament, which number of points is it impossible for any team to have?

(A) 1 (B) 2 (C) 4 (D) 5 (E) 6

19. A pyramid is built from cubes with a side-length view from above of 10 cm. An ant climbed up and over the pyramid, as shown by the black line. What is the length of the path walked by the ant across the pyramid?



(A) 30 cm (B) 60 cm
(C) 70 cm (D) 80 cm (E) 90 cm

3.-4. klases