

KÄNGURU DER MATHEMATIK 2025

20th March 2025

Level: Écolier, Grade: Schulstufe 3 - 4

Full name:	
School:	
Class:	

Time: 60 min.

each correct answer to questions 1 – 8: 3 points
each correct answer to questions 9 – 16: 4 points
each correct answer to questions 17 – 24: 5 points
each question left unanswered: 0 points
each incorrect answer: minus $\frac{1}{4}$ of the points for the question
24 base points



Please write the letter (A, B, C, D, E) of your
answer in the square under the question number
(1 bis 24). Write clearly and carefully!

1	2	3	4	5	6	7	8

9	10	11	12	13	14	15	16

17	18	19	20	21	22	23	24



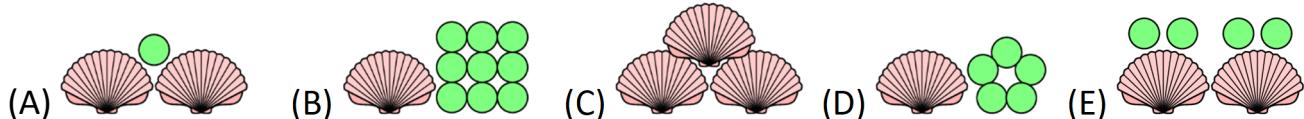
Information über den Känguruwettbewerb: www.kaenguru.at

Känguru der Mathematik 2025
Level Écolier (Schulstufe 3 and 4)
Austria – 20th March 2025

3 Points

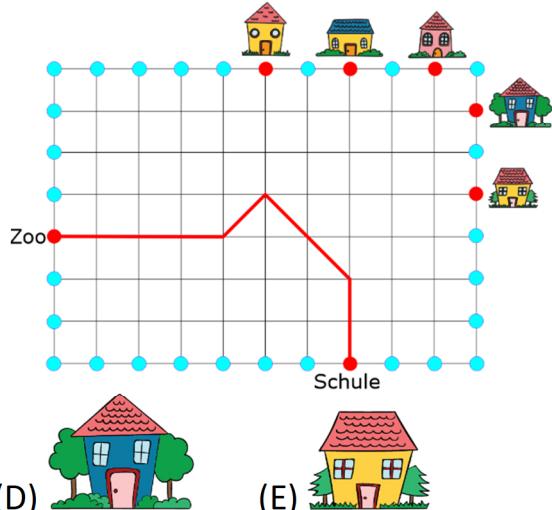
- 1.** Nico and his little sister are playing with their shells and marbles.

Each shell has a value of 6 and each marble has a value of 1. ( = 6 ;  = 1)
 Which picture shows the value 16?



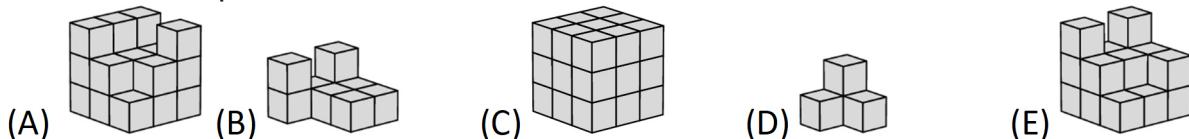
- 2.** Kenny the Kangaroo hops from his school to the zoo.
 He hops like this: $\uparrow 2$, $\nwarrow 2$, $\swarrow 1$, $\leftarrow 4$ (see picture).

From the zoo, Kenny hops like this: $\rightarrow 3$, $\nearrow 2$, $\uparrow 2$.
 Which house does Kenny land at?



- 3.** Mia builds a large cube out of small cubes. While she is building it, she takes a photo at five different times.

Which of the five photos shown is the fourth?

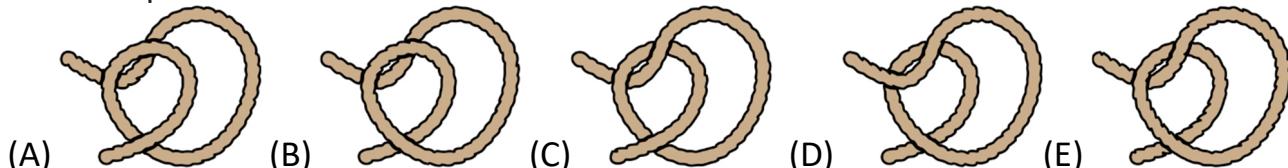


- 4.** Simona writes the numbers 2, 0, 2 and 5 in the boxes. $\square + \square - \square + \square$
 In what order can she write the numbers so that the calculation produces the biggest result?

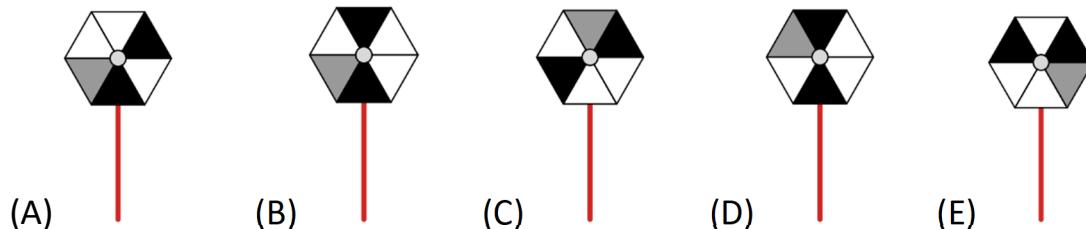
(A) 0, 2, 2, 5 (B) 0, 5, 2, 2 (C) 2, 5, 2, 0 (D) 5, 0, 2, 2 (E) 5, 2, 0, 2

- 5.** Markus pulls on both ends of each rope at the same time.

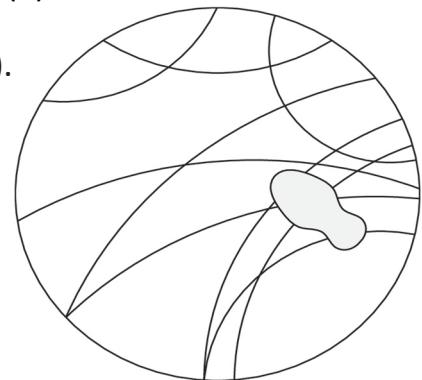
Which rope forms a knot?



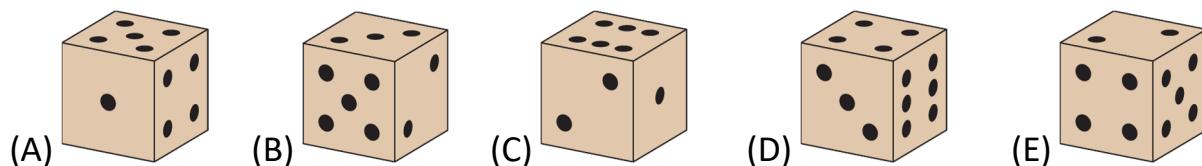
6. Larissa has a toy windmill that rotates in the wind (see picture on the right) and then stops. What does it look like now?



7. Alex steps on some lines on the ground (see picture on the right). What does the ground look like under his shoe?

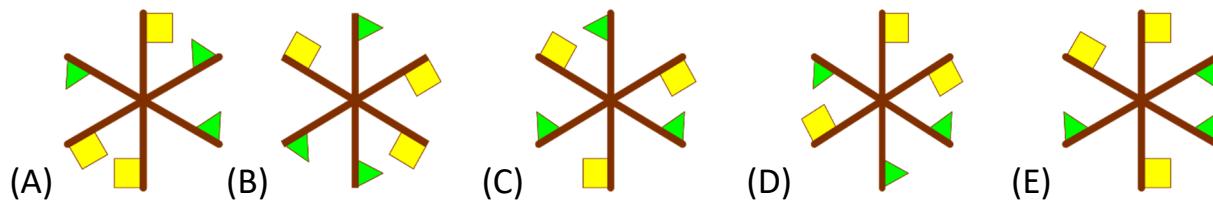


8. If you add up the numbers on two opposite sides of a die, you always get 7. Which of the pictures can show such a die?



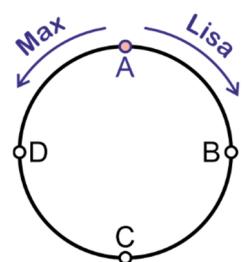
4 Points

9. George has these three poles:
- Which windmill can he make with them?



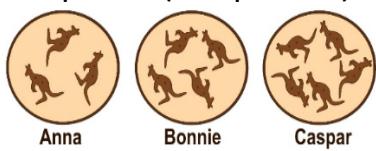
10. Max draws a large circle in the sand. Lisa adds the letters A, B, C and D. Lisa and Max start at the same time from point A. Lisa goes clockwise around the circle, Max runs anti-clockwise around the circle (see picture). They meet for the first time at point B, then at C, at D and then again at point A.

How many times has Max run around the circle by then?



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

11. Anna, Bonnie and Caspar have some kangaroo cookies on their plates (see picture). There are 15 more cookies left. They distribute these in such a way that each child ends up with the same number of cookies on their plate.



How many cookies does Anna get added to her plate?

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

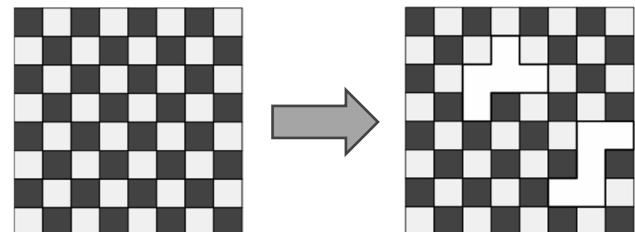
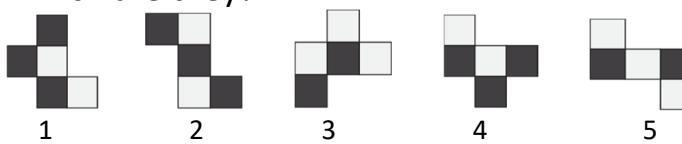
12. In the morning, the five friends Anna, Bob, Cristina, David and Eduard each have a fully charged cell-phone battery. By the evening, Bob has used up as much of his battery as Anna and Cristina combined. Bob's battery is empty. David hasn't used his cell-phone at all. The pictures show the battery levels of the five children.

Which of these is the battery level of Eduard's cell phone?



13. Two pieces were cut out of a chessboard.

Which are they?



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

14. Rudi feeds six sheep in the petting zoo.

The six sheep get a total of 210 g of food.



Each of the five large sheep gets the same amount, the small one gets twice as much as a large sheep.

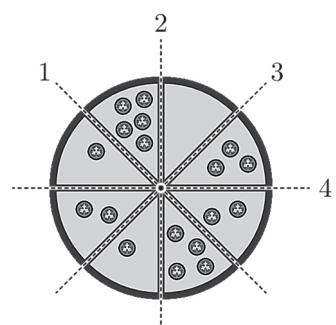
How much food does the small sheep get?

- (A) 50 g (B) 55 g (C) 60 g (D) 65 g (E) 70 g

15. Tom wants to cut the pizza in half in such a way that each half has the same number of tomatoes. There are two ways to do this.

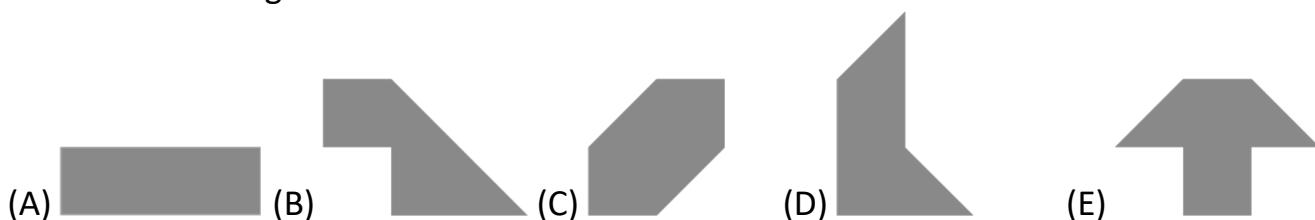
Along which lines can he cut?

- (A) 1 or 3 (B) 1 or 4 (C) 2 or 3 (D) 2 or 4 (E) 3 or 4



16. Eva assembles these two identical parts into a figure.

Which of these figures can she **not** build?

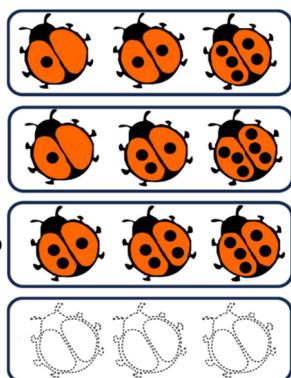


5 Points

17. Six ladybirds each have either 1, 2, 3, 4, 5 or 6 spots. Marta takes four photos each of three different ladybirds. Each ladybird appears equally often in the four photos. You can see the first three photos on the right.

How many spots do the three ladybirds in the fourth photo have in total?

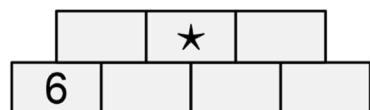
- (A) 10 (B) 11 (C) 12 (D) 13 (E) 14



18. Maria writes the numbers 1, 2, 3, 4, 5, 6 and 7 exactly once onto the number wall. If Maria adds two numbers from the bottom row together, she gets the number that is written exactly in the middle above these two numbers.

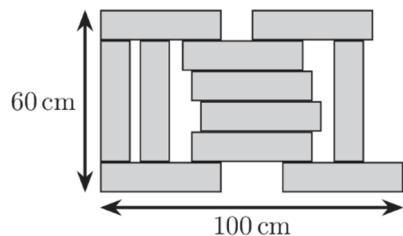
Which number must she write in the box with the star?

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



19. Tim has laid out a pattern on the floor made of 11 identical tiles (see picture).

How long and how wide is one of these tiles?



8 cm 40 cm

10 cm 40 cm

12 cm 40 cm

8 cm 44 cm

10 cm 50 cm

(A)

(B)

(C)

(D)

(E)

20. Jana writes down how much her toys weigh:

22 g	23 g	25 g	34 g	36 g

She wants to divide all her toys into two boxes so that the boxes have the same weight.

Which two toys do **not** go in the same box?

(A) and

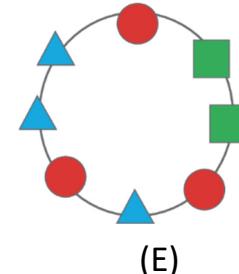
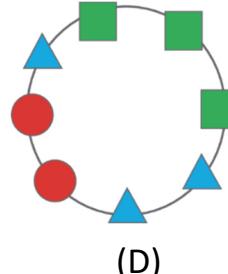
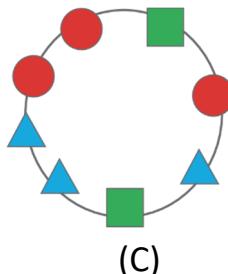
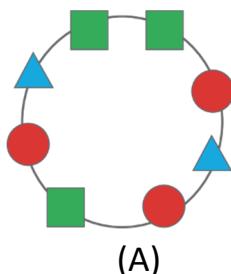
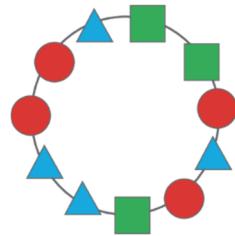
(B) and

(C) and

(D) and

(E) and

21. The picture on the right shows a bracelet with circular, square and triangular gemstones. Lisa removes three neighbouring stones, one of each shape. What bracelet can be created?



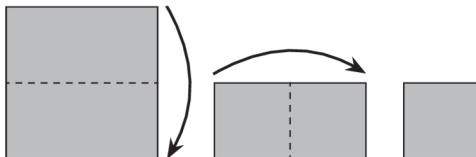
22. The calendar shown shows the days of the week in a month, but the numbers are missing. If you add the two numbers in the dark grey boxes together, you get 29.

Mo	Di	Mi	Do	Fr	Sa	So

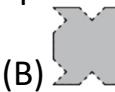
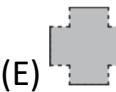
What day of the week is the 1st day of the month?

- (A) Monday (B) Tuesday (C) Wednesday (D) Thursday (E) Sunday

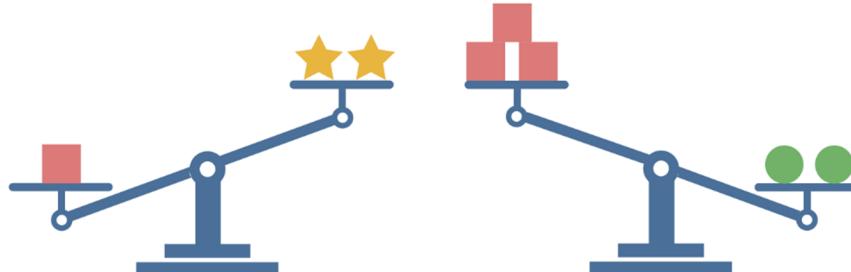
23. Nele folds a piece of paper in half and then in half again (see picture). She cuts four pieces out of the paper. When she unfolds the paper, she sees this pattern.



What did the paper look like before she unfolded it?

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

24. To compare the weights of the objects ,  and , Mona uses a beam balance.



All objects of one type have the same weight and objects of different types have different weights. The objects can weigh either 1, 2, 3, 4 or 5 kg.

How many kg does the  weigh?

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