

WERELDWIJDE WISKUNDEWEDSTRIJD

W4KANGOEROE 2025



WWW.W4KANGOEROE.NL

COMPETITION PERIOD
MARCH 20 TO 31

GOOD LUCK AND MOST OF ALL HAVE FUN!

© Stichting Wiskunde Kangoeroe



calculators are not allowed



you may use 50 minutes



Only a pencil, an eraser and scribbling paper are allowed



results and prizes will arrive at school at the end of May

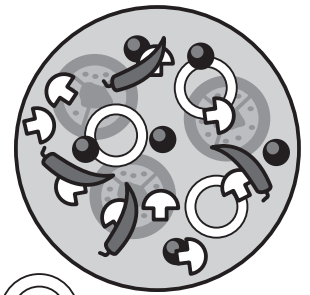


answers will be posted on the website about April 4th



solutions will be posted on the website about April 20th

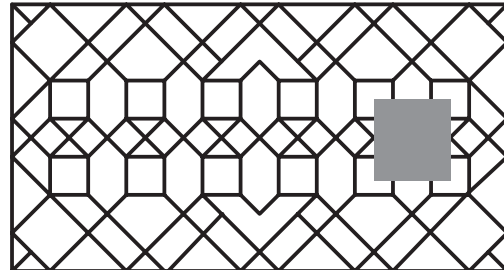
1. *Emil* makes a pizza.
He puts all the ingredients by type on the pizza one by one.



Which ingredient did he put on the pizza first?

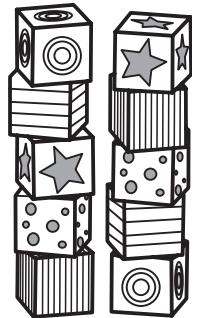
- A. B. C. D. E.

2. Which tile completes the pattern?



- A. B. C. D. E.

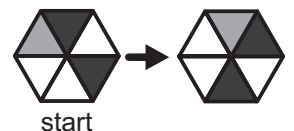
3. *Chris* has built 2 towers (see picture).
He is now going to make a new tower.
First he takes the top block of the left tower and puts it on the table.
Then he takes the top block of the right tower and puts it on top of it.
He keeps repeating this.
In his new tower, 2 blocks on top of each other have the same pattern.



Which blocks are these?

- A. B. C. D. E.

4. *Theo* turns a piece of paper that consists of 6 triangles.
Theo always turns the piece of paper clockwise.
In the picture alongside you can see what happens if *Theo* turns the paper once.



What does the piece of paper look like when *Theo* has turned the piece of paper 8 times?

- A. B. C. D. E.

5. On the chalkboard to the right, some of the prices of different hamburgers can no longer be read because of the rain.
The prices were ordered from small to large.



What is the price of a Cheesy burger?

- A. € 3,50 B. € 4,50 C. € 5,50 D. € 6,50 E. € 7,50

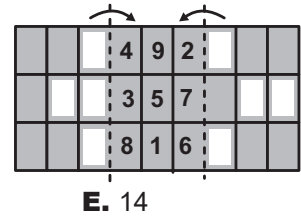
6. *Anna* has made a wall with cubes showing the year 2025.
Bella is standing on the other side of the wall.



What does *Bella* see?

- A. B. C. D. E.

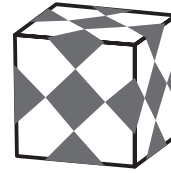
7. Mike has a piece of paper with the numbers 1 to 9 in the middle. On the sides are 2 flaps with holes in them (the white boxes). He folds the right side over the dotted line and sees the numbers 2, 3, 5, 6 through the holes. Then he also folds the left side over the dotted line. Finally, Mike adds up the numbers he can still see.



What result does he get?

- A. 8 B. 9 C. 10 D. 12 E. 14

8. A cube is decorated with identical grey squares. All faces of the cube look the same.



How many grey squares are pasted on the cube?

- A. 14 B. 15 C. 16 D. 18 E. 30

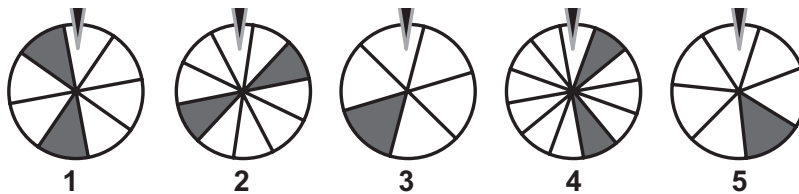
9. 6 children are participating in a running race. We know that:

- ▶ Ariadne finished third.
- ▶ Biel finished sixth, just behind Ernest.
- ▶ Fatima finished between Ariadne and Ernest.
- ▶ Diana overtook Charles just before the finish line.

Who won the race?

- A. Ariadne B. Charles C. Diana D. Ernest E. Fatima

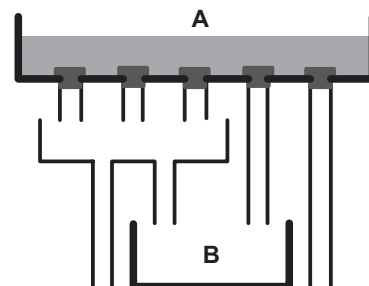
10. Sem plays the game "A Wheel of Fortune." He has to turn a wheel and gets a prize if the arrow points to a shaded part. Each wheel is divided into a number of identical parts.



At which wheel is he most likely to win?

- A. 1 B. 2 C. 3 D. 4 E. 5

11. Tank A is filled with 10 litres of water. All 5 plugs are taken out at the same time.



How many litres of water flows into container B?

- A. 3 B. 4 C. 5 D. 6 E. 8

12. Boris has 3 shelves with books in his room. On the top shelf there are 17 books, on the middle shelf there are 15 books and on the bottom shelf there are 7 books. Boris wants to have the same number of books on all 3 shelves. Boris wants to move as few books as possible.





How many books should Boris move from the middle shelf to the bottom shelf?

- A. 1 B. 2 C. 3 D. 4 E. 5

- 13.** On each card below are 2 numbers consisting of 3 digits. Some of the digits are not visible because they are covered in ink. On one of the cards, the sum (addition) of the 3 digits of both numbers is the same.

On which card is this?

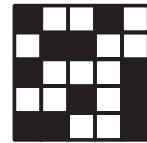
- A. 543 en 11  B. 58  en 11  C. 982 en 1 
- D. 211 en 6   E. 777 en 2  

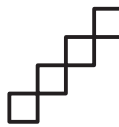


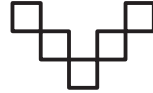
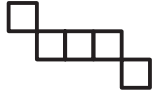
- 14.** *Facu* never tells the truth on Tuesdays, Thursdays and Saturdays. On other days, he always tells the truth. One day *Mateo* has the following conversation with *Facu*.
Mateo: 'What day is today?'
Facu: "Saturday."
Mateo: 'What day is tomorrow?'
Facu: "Wednesday."

On what day did *Mateo* and *Facu* have this conversation?

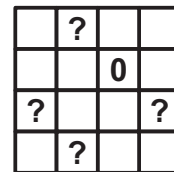
- A. Monday B. Tuesday C. Wednesday D. Thursday E. Friday

- 15.** Which shape does **not** fit over the white squares in the figure on the right? Turning is allowed.



- A.  B.  C.  D.  E. 

- 16.** *Jaida* has a diagram with 16 squares (see figure). In each square she writes the number 0 or 1. She then adds the 4 numbers of each row, column or diagonal. She always gets 3 as the result.



What does she get when she adds the numbers written in the boxes with the question marks?

- A. 0 B. 1 C. 2 D. 3 E. 4

- 17.** *Achmed*, *Ben*, *Carlos*, *Diana*, and *Esmee* of swimming team "The Kangaroos" are training for a swimming competition. They swim a relay where the next one does not start until the previous one finishes. Split times are kept by the coach with a stopwatch. *Achmed* needed 2 minutes and 8 seconds.



Achmed



Ben



Carlos



Diana

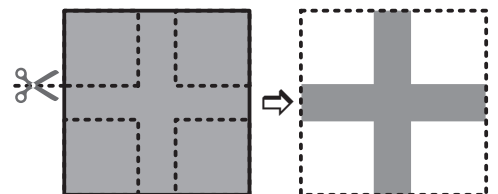


Esmee

Who swam the fastest?

- A. *Achmed* B. *Ben* C. *Carlos* D. *Diana* E. *Esmee*

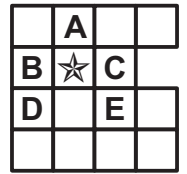
- 18.** *Jane* has a square piece of paper. From each corner she cuts off an equal-sized square. She is now left with a cross. The total area of the 4 pieces she cut off is 16 cm^2 . The area of the cross that remains is 9 cm^2 .



What is the perimeter of the cross?

- A. 9 cm B. 16 cm C. 20 cm D. 25 cm E. 32 cm

19. The figure on the right can be divided into 5 equally sized pieces with the same shape. Those pieces consist of 3 squares.



Which letter is in the same piece as the star?

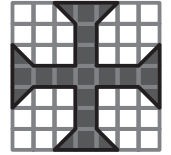
- A. A B. B C. C D. D E. E

20. Kees has a box of puzzle pieces. The puzzle pieces come in 5 different shapes (see picture 1). Each shape is in the box several times.



picture 1

Kees wants to make the figure in picture 2 with as few pieces as possible. The pieces may be rotated, but should not overlap.

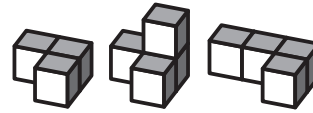


picture 2

What is the smallest number of pieces Kees can use to make the figure?

- A. 11 B. 12 C. 13 D. 15 E. 17

21. Timo glues the 3 pieces shown on the right together.



What might his construction look like?

- A. B. C. D. E.

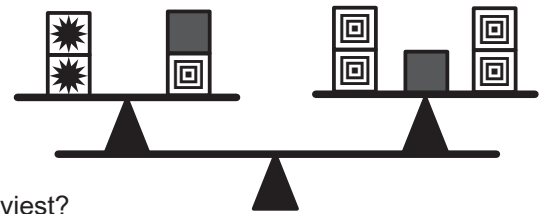
22. Zeta works in a flower store. She has 3 types of flowers with different prices.



How many different bouquets of 23 euros can she make?

- A. 4 B. 5 C. 6 D. 7 E. 8

23. The balance on the right is balanced. Blocks that look the same have the same weight.

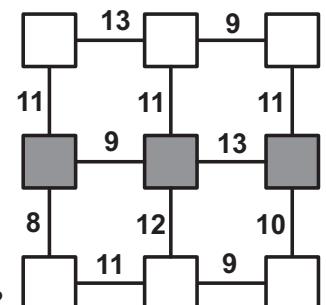


What is the correct order of the blocks from lightest to heaviest?

- A. B. C. D. E.

24. Zara writes the numbers from 1 to 9 in the boxes. She does this according to the following rules:

- ▶ She may use each number only once.
- ▶ The sum of the numbers in any 2 adjacent boxes must be equal to the number shown on the line connecting these boxes.



What result does she get when she adds the numbers in the grey boxes?

- A. 16 B. 17 C. 18 D. 20 E. 21