

## WereldWijde WiskundeWedstrijd **W4Kangoeroe**

[WWW.W4KANGOEROE.NL](http://WWW.W4KANGOEROE.NL)

**THURSDAY  
MARCH 17<sup>TH</sup> 2022**

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*Good luck and most of  
all have fun!*



calculators are not allowed



only a pencil, an eraser and scribbling paper are allowed



answers will be posted on the website about March 29<sup>th</sup>



you may use 50 minutes



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



solutions will be posted on the website about April 20<sup>th</sup>

wizKID  
group 5 & 6 primary school

zwijse n

Breng leren tot leven  
[www.zwijsen.nl](http://www.zwijsen.nl)



[www.e-nemo.nl](http://www.e-nemo.nl)

TEXAS  
INSTRUMENTS

[www.education.ti.com](http://www.education.ti.com)



[www.smart.be](http://www.smart.be)

Schoolsupport 

[www.schoolsupport.nl](http://www.schoolsupport.nl)

ID Premiums Relatiegeschenken b.v.  
Relatiegeschenken & Promotieartikelen  
[www.idpremiums.nl](http://www.idpremiums.nl)



[www.mathplay.eu](http://www.mathplay.eu)



[www.ru.nl](http://www.ru.nl)

 cuttle.org

[www.cuttle.org](http://www.cuttle.org)

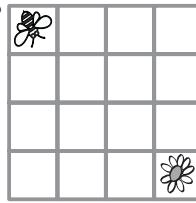
platform  
wiskunde nederland

[www.platformwiskunde.nl](http://www.platformwiskunde.nl)



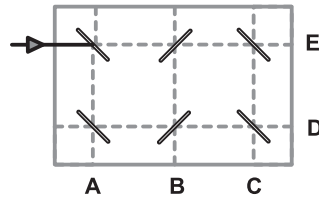
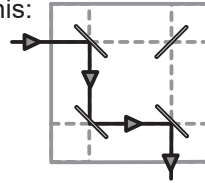
[www.museumboerhaave.nl](http://www.museumboerhaave.nl)

1. Which of these paths would get the bee to the flower?



- A. B. C. D. E.

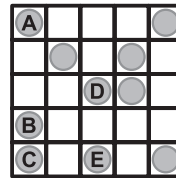
2. The mirrors reflect the laser beam like this:



Where does this laser beam end?

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

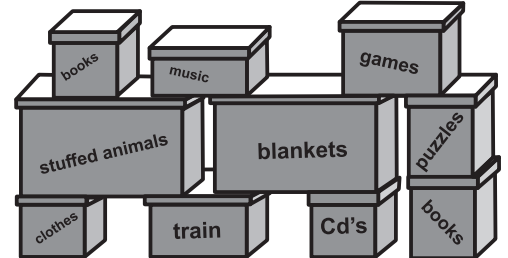
3. Each row and each column must contain 2 coins.



Which coin should be moved to make it right?

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

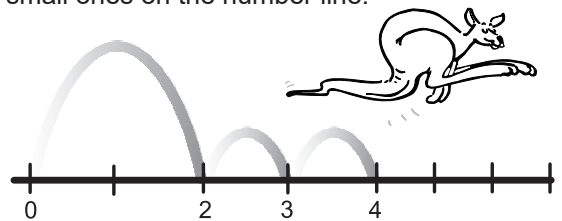
4. Tom needs to get to the box with the train. But he must first move a few boxes out of the way.



How many boxes does Tom have to move to get to the train?

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

5. Kangoo always makes 1 large jump followed by 2 small ones on the number line. Kangoo starts at 0 and ends at 16.



How many jumps does Kangoo make in total?

- A. 4      B. 7      C. 8      D. 9      E. 12

6. The same numbers may not be next to or above each other.

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 3 | 2 | 5 | 4 | 2 | 1 |
| 1 | 4 | 3 | 1 | 3 | 4 |
| 2 | 5 |   | 5 | 2 | 1 |
| 4 | 1 |   |   |   | 3 |
| 3 | 2 | 4 | 2 | 5 | 2 |
| 4 | 1 | 3 | 1 | 3 | 4 |

Which piece should be in the middle?

- A. 

|   |   |   |
|---|---|---|
| 4 |   |   |
| 1 | 2 | 3 |

      B. 

|   |   |   |
|---|---|---|
| 1 |   |   |
| 3 | 4 | 2 |

      C. 

|   |   |   |
|---|---|---|
| 2 |   |   |
| 4 | 1 | 3 |

      D. 

|   |   |   |
|---|---|---|
| 2 |   |   |
| 3 | 1 | 4 |

      E. 

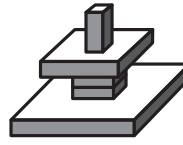
|   |   |   |
|---|---|---|
| 3 |   |   |
| 2 | 1 | 4 |

7.  $22 + \square = 20 + \square$

Which 2 numbers can *Angelina* put in the boxes to make the sum add up?

- A. 3 and 4      B. 3 and 5      C. 4 and 1      D. 7 and 2      E. 9 and 8

8. *Elisha* builds a structure that looks like this:



What will *Elisha* see when she looks from above?

- A.      B.      C.      D.      E.

9. Cars 1 to 5 are all driving in the same direction.

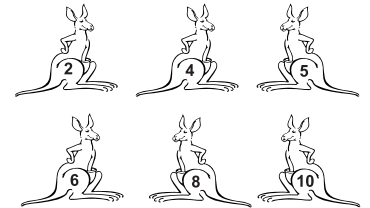


At first, the last car passes 2 cars.  
Then the second to last car passes 2 cars.  
Then the middle car passes 2 cars.

What is the order of 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 the kangaroos in a family are 2, 4, 5, 6, 8 and 10 years old.  
When you add the ages of 4 of the kangaroos together, you get 22.



What are the ages of the other 2 kangaroos?

- A. 2 and 8      B. 4 and 5      C. 5 and 8      D. 6 and 8      E. 6 and 10

11. I sent postcards to 5 friends while on holiday.  
There are no ducks on *Mieke's* postcard.  
There are 2 animals on *Paula's* postcard.  
There are kangaroos on *Maxima's* postcard.

There is a sun on *Cara's* postcard.  
There is a dog on *Liliane's* postcard.

Which postcard did I send to *Mieke*?

- A.      B.      C.      D.      E.

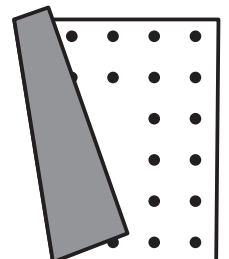
12. *Mosif* always adds the 3 numbers in each row.  
He also always adds the 3 numbers in each column.  
All these sums must have the same result.  
1 box contains a wrong number.

|   |   |   |     |
|---|---|---|-----|
| 9 | 1 | 5 | → ? |
| 3 | 7 | 6 | → ? |
| 4 | 7 | 4 | → ? |
| ↓ | ↓ | ↓ |     |
| ? | ? | ? |     |

Which number must be correct?

- A. 1      B. 3      C. one of the fours  
D. 5      E. one of the sevens

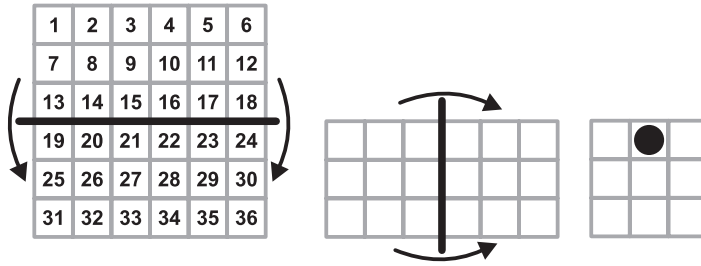
13. *Aladdins* carpet has the shape of a square.  
Each side of the carpet has the same number of dots arranged in 2 rows.  
Unfortunately the carpet has been folded.



How many dots are there on the carpet?

- A. 32      B. 36      C. 40      D. 44      E. 48

14. Joanna folds the grid paper twice as shown by the arrows in the figure. Afterwards she punches a hole at the black spot.



Which numbers is she going to punch?

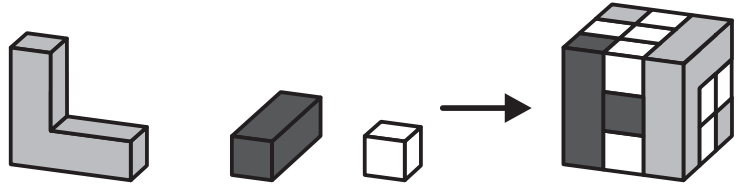
- A. 2, 5, 20, 23    B. 8, 11, 26, 29    C. 14, 16, 21, 23    D. 14, 17, 20, 23    E. 15, 16, 21, 22

15. Pupils in a class are sitting in rows. There is the same number of pupils in each row. There are 2 rows of pupils in front of Robert, 1 row behind him, 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

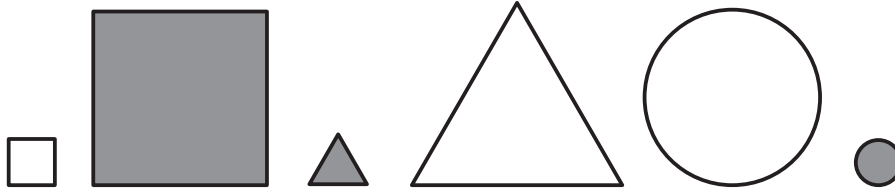
16. The cube in the figure was built from the 3 kinds of colored wooden blocks.



How many white blocks were used?

- A. 8    B. 11    C. 13    D. 16    E. 19

17. Wanda has to make sure she has 2 colored, 2 large and 2 round figures.



What is the smallest number of figures Wanda can choose?

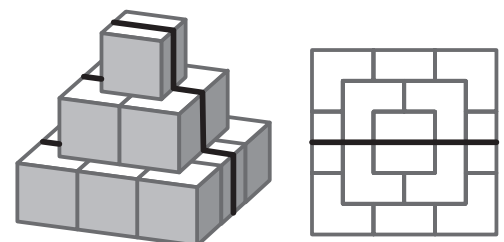
- A. 2    B. 3    C. 4    D. 5    E. 6

18. Three football teams play in a sports tournament. Each team plays against every other team once. If a team wins, it gets 3 points. The loser doesn't get any points. In a draw, each team gets 1 point. When all matches have been played, the points are counted.

Which number of points **cannot** be the points of any of the teams?

- A. 1    B. 2    C. 4    D. 5    E. 6

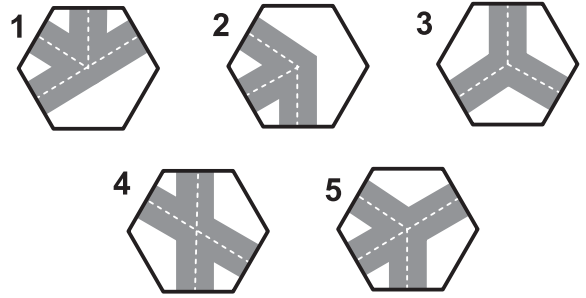
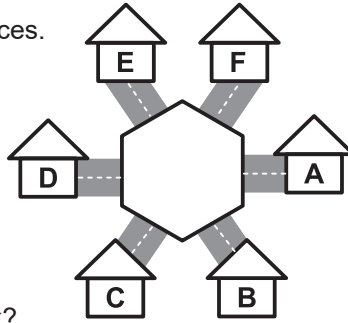
19. The pyramid is built from cubes. The length of one side of each block is 10 cm. An ant walks on the black line over the pyramid.



How many centimeters did the ant walk across the pyramid?

- A. 30    B. 60    C. 70    D. 80    E. 90

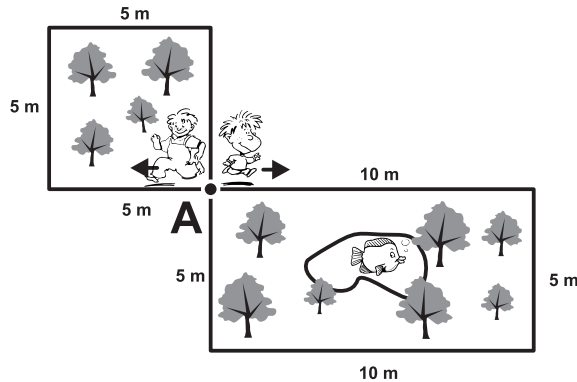
- 20.** *Alma* wants to put one of the pieces in the middle such that a child in **A** is able to travel to **B** and **E**, but not to **D**. She can rotate the pieces.



Which pieces will work?

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

- 21.** *Ahmad* and *Zhaleh* start walking at point **A** in the direction shown by an arrow. They both walk with the same speed. *Ahmad* walks around the square-shaped garden and *Zhaleh* walks around the rectangular-shaped garden.



How many rounds around the square-shaped garden would it take for *Ahmad* to meet *Zhaleh* again at point **A**?

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

- 22.** 5 children eat plums.  
*Lauren* eats 2 plums more than *Sophie*.  
*Betty* eats 3 fewer plums than *Lauren*.  
*Claire* eats 1 plum more than *Betty* and 3 fewer plums than *Alice*.

Which 2 children eat the same number of plums?

- A.** *Alice* and *Betty*      **B.** *Claire* and *Lauren*      **C.** *Claire* and *Sophie*  
**D.** *Lauren* and *Alice*      **E.** *Sophie* and *Alice*

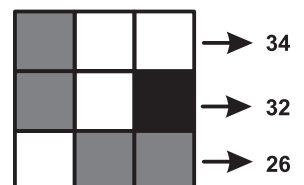
- 23.** The small caterpillar in the picture curls up to sleep.



What might that look like?

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

- 24.** The same number is placed in boxes with the same color. Next to each row is the result of the addition of the numbers in that row.



Which number will be in the black box?

- A.** 6      **B.** 8      **C.** 10      **D.** 12      **E.** 14