2006

wizKID

EUROPEAN KANGAROO
ARITHMETIC AND MATHEMATICS CONTEST

Welcome to the Kangaroo, great that you join in!

* You have 50 minutes. There are 24 questions. With every question one of the five options is the correct one.

* Do what you can, don't be disappointed if you cannot answer everything.

* You are not allowed to use a calculator; of course you may use scribbling paper.

* Use a pencil to fill in the answer sheet carefully.

* About scoring points:
  * You start with 30 free points.
  * Question   1 - 10: you will get 3 points for a correct answer;
       you will lose ¾ points for an incorrect one.
  * Question 11 - 20: you will get 4 points for a correct answer;
       you will lose 1 point for an incorrect one.
  * Question 21 - 24: you will get 5 points for a correct answer;
       you will lose 1¼ points for an incorrect one.
  * If you don't answer a question, you neither gain nor lose points.

* The answers will be on the website from March 22nd,
   www.math.ru.nl/kangoeroe

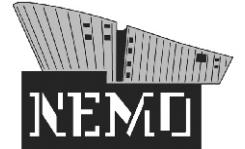* The scores and the prizes will arrive at schools in week 17.

Good luck and most of all: have fun!!

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the Netherlands: 5 & 6 primary school
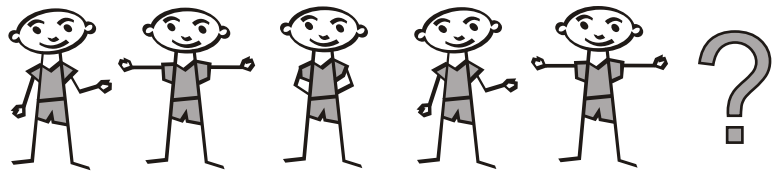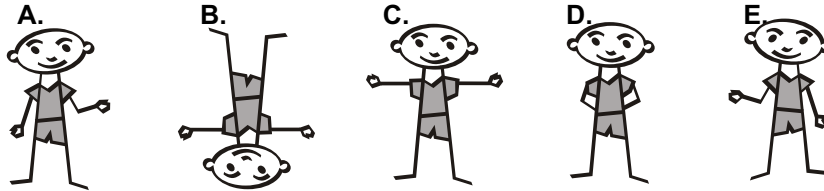Flanders: 3 & 4 primary school
© Stichting Wiskunde Kangoeroe

01. Hermione is drawing little puppets.
The same three in a row again and again.

Which little puppet will be on the position of the question mark?

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

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02. What is the result of the calculation 2 x 0 x 0 x 6 + 2006?

A. 0 **B.** 2006 **C.** 2014 **D.** 2018 **E.** 4012

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03. Some little blocks have been taken away from
the big block. On the right you see the result.
How many little blocks have been taken away?
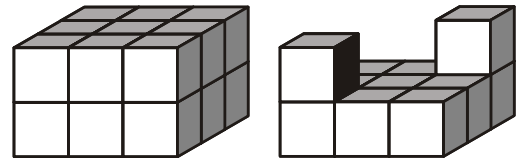
A. 4 **B.** 5 **C.** 6 **D.** 7 **E.** 8

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04. Harry had his birthday yesterday. Tomorrow it is Thursday.
Which day was Harry's birthday?

A. Monday **B.** Tuesday **C.** Wednesday **D.** Thursday **E.** Saturday

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05. Hermione has a 5 euro note, a 1 euro coin and a 2 euro coin in her purse.
Which of the following amounts can Hermione not pay exactly?

A. 3 euro **B.** 4 euro **C.** 6 euro **D.** 7 euro **E.** 8 euro

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06. A kangaroo hops into a building.
It only goes throughtriangular rooms.
Where does it hop out of the building again?

a
b
c
d
e
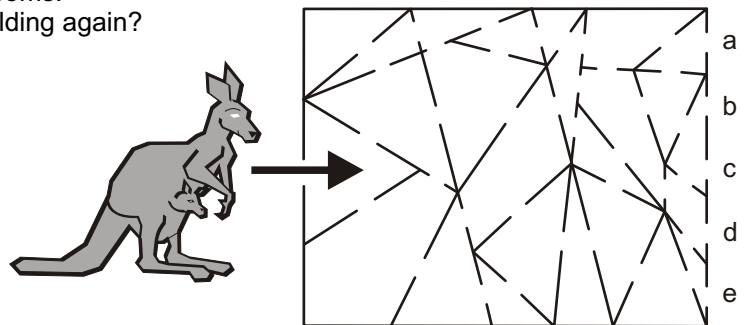
A. a **B.** b **C.** c **D.** d **E.** e

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07. There are three square tables. Four people can sit at each table.
The three tables form one long table.
How many persons can be seated around this long table?

A. 6 **B.** 8 **C.** 9 **D.** 10 **E.** 16

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08. Ron has thrown darts. When he hits the bull's eye, he gets two more darts.
He started with four darts, and he finishes after 8 throws.
How many times did he hit the bull's eye?

A. 2 **B.** 3 **C.** 4 **D.** 5 **E.** 6
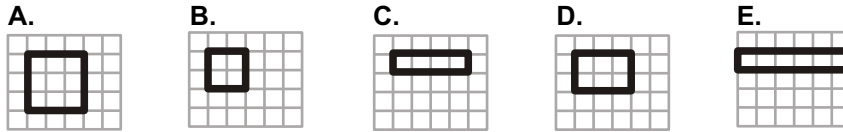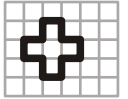
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09. We place the four number cards in a row.
What is the largest number we can make?
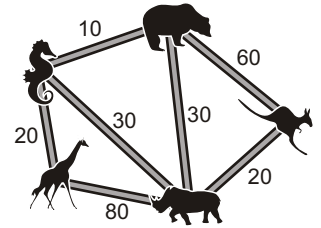
| 41 | 5 | 7 | 69 |

A. 415769   **B.** 694175   **C.** 756941   **D.** 769541   **E.** 796541

10. The chain shown alongside is laid down another way.
Which form can you get?

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

11. A train drives through the zoo.
The numbers are the fares of train tickets between the animals.
How much does the cheapest trip from the giraffes
to the kangaroos cost?

A. 60   **B.** 70   **C.** 80   **D.** 90   **E.** 100

12. The houses on one side of Main Street have the odd numbers from
1 to 15 inclusive. The houses on the other side of the road
have the even numbers from 2 to 10 inclusive.
How many houses are there along Main Street?
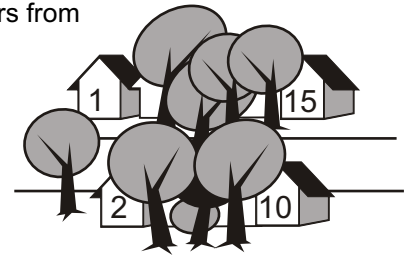
A. 10   **B.** 12   **C.** 13   **D.** 15   **E.** 25

13. Six weights (1 gram, 2 grams, 3 grams, 4 grams, 5 grams en 6 grams)
are divided between three boxes, two per box.
The weights in the first box together weigh 9 grams.
The weights in the second box together weigh 8 grams.
Which weights are in the third box?
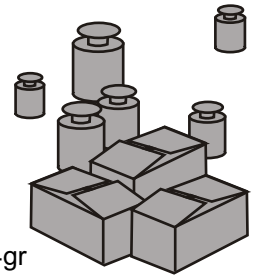
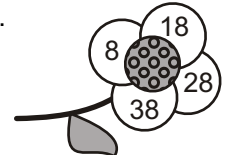**A.** 1gr and 3gr   **B.** 1gr and 6gr   **C.** 2gr and 4gr   **D.** 2gr and 5gr   **E.** 3gr and 4gr

14. Between two points four routes have been drawn.
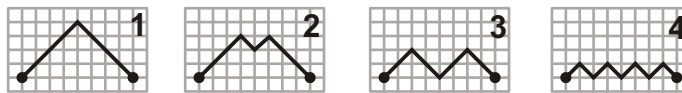
Which one is the shortest?

A. route 1   **B.** route 2   **C.** route 3   **D.** route 4   **E.** all routes are the same length

15. Hermione plucks the petals having a number from the table of four on them.
Then she adds the numbers from the petals she plucked.
What is the outcome?

A. 26   **B.** 36   **C.** 46   **D.** 54   **E.** 56

16. Hagrid, Dragon, Dumbledore, and Harry are standing in a row at equal distances.
Dumbledore and Hagrid are 40 m apart.

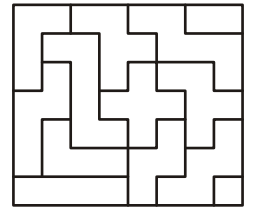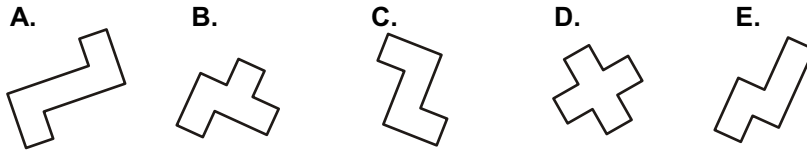What is the distance in meters between Harry and Hagrid?
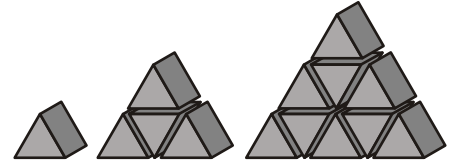
A. 50   **B.** 60   **C.** 70   **D.** 80   **E.** 90

17. Which of the following puzzle pieces doesn't belong to this puzzle?
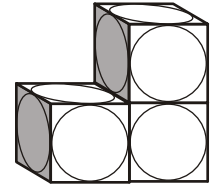
A. **B.** **C.** **D.** **E.**

18. Harry is building towers of triangular blocks.
He starts with a tower of one block.
Then he builds a tower of four blocks.
The towers get higher and higher.
How many blocks does Harry need for the fourth tower?

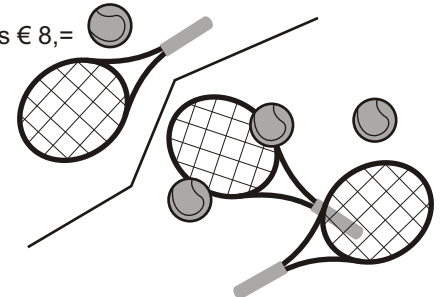**A.** 12   **B.** 13   **C.** 14   **D.** 15   **E.** 16

19. Each of the six faces of a cube has a circle on it.
Three cubes are glued together.
How many circles will be on the outside?

A. 7   **B.** 9   **C.** 11   **D.** 14   **E.** 18

20. How many euros does one tennis ball cost?

this costs € 8,=

this costs € 18,=

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

21. In the sum 5 ☐ 4 ☐ 3 ☐ 2 you have to put a + or a - in each of the blank spaces ☐ .
Which outcome is it that you cannot get?

A. 1   **B.** 2   **C.** 4   **D.** 6   **E.** 8

22. The 1st of January 2007 is a Monday.
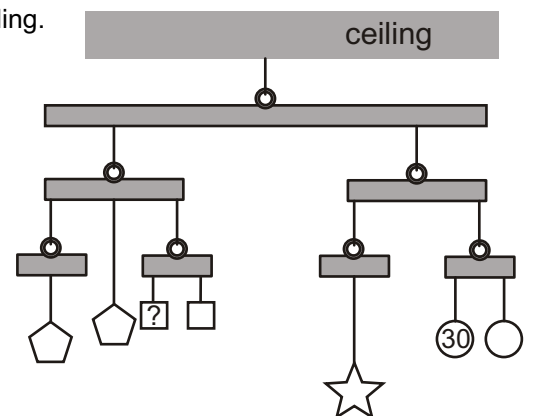Which day is the 31st of January 2007?

A. Monday   **B.** Tuesday   **C.** Wednesday **D.** Saturday   **E.** Sunday

23. Harry has three balls, numbered 3, 5 and 8.
With these numbers he could make the number 358 for instance.
How many different numbers can he make with the three balls?

A. 3   **B.** 4   **C.** 5   **D.** 6   **E.** 9

24. A mobile is hanging nice and straight from the ceiling.
At each point the mobile is balanced.
The same shapes have the same weight.
A circle weighs 30 grams.
How many grams does the shape with
the question mark weigh?

ceiling

A. 10   **B.** 20   **C.** 30   **D.** 40   **E.** 50