

# MATHEMATICS KANGAROO 2015

## Austria - 23. 3. 2015

Level: Felix, Grades 1 – 2

Name:	
School:	
Class:	

Time: 60 min.

15 Starting points 2015

Each correct answer to questions 1. – 5.: 3 Points

Each correct answer to questions 6. – 10.: 4 Points

Each correct answer to questions 11. – 15.: 5 Points

Each question left unanswered: 0 Points

Each incorrect answer:  $\frac{1}{4}$  of the points for that question are deducted.



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

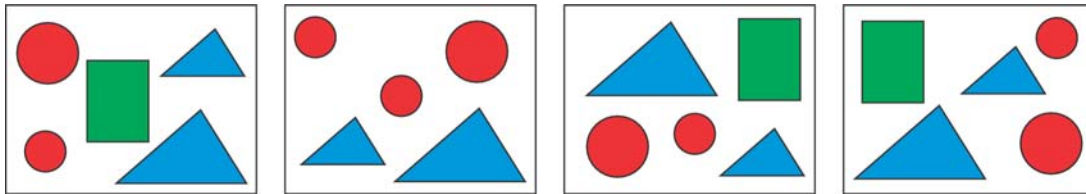
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15

Mathematical Kangaroo 2015  
 Group Felix (Grades 1 and 2)  
 Austria – 23. 3. 2015



- 3 point questions -

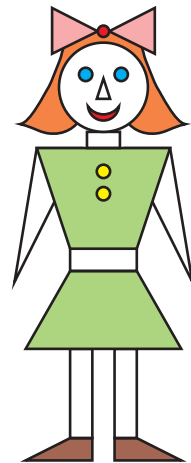
1. Which shape cannot be seen in every picture?



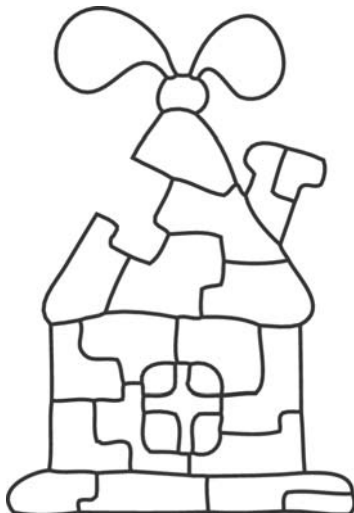
- (A) (B) (C) (D) (E)

2. How many triangles can you find in the picture?

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



3. Which part of the house is missing?



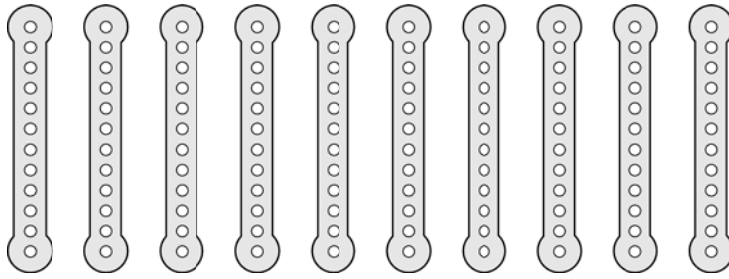
- (A) (B) (C) (D) (E)

4. How many dots do all ladybirds have together?

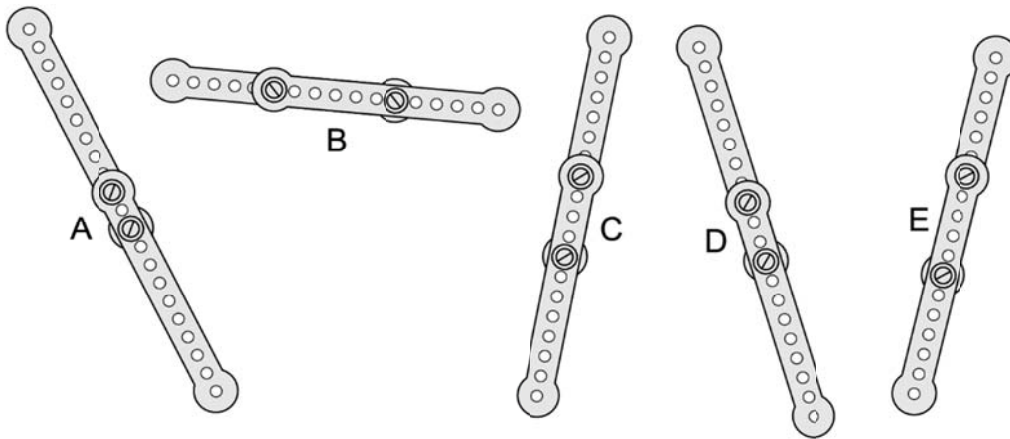
- (A) 17 (B) 18 (C) 19 (D) 20 (E) 21



5. Florian has 10 equally long metal strips with equally many holes.



He bolts the metal strips together in pairs. Now he has five long strips (see the diagram).



Which of the long strips is the shortest?

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

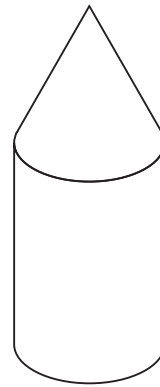
- 4 point questions -

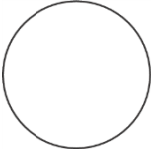
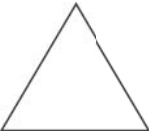
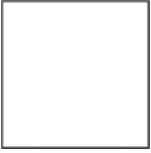
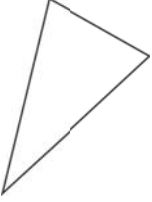

6. Which of the kangaroo cards shown below can be turned around so that it then looks the same as the card shown on the right?



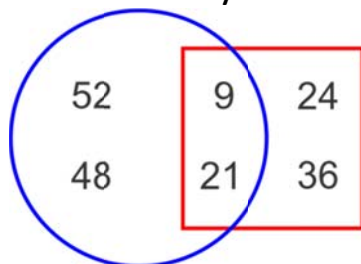
- (A) (B) (C) (D) (E)

7. What do you see if you look at the tower, which is made up of two building blocks, exactly from above?



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

8. How many numbers are outside the square?

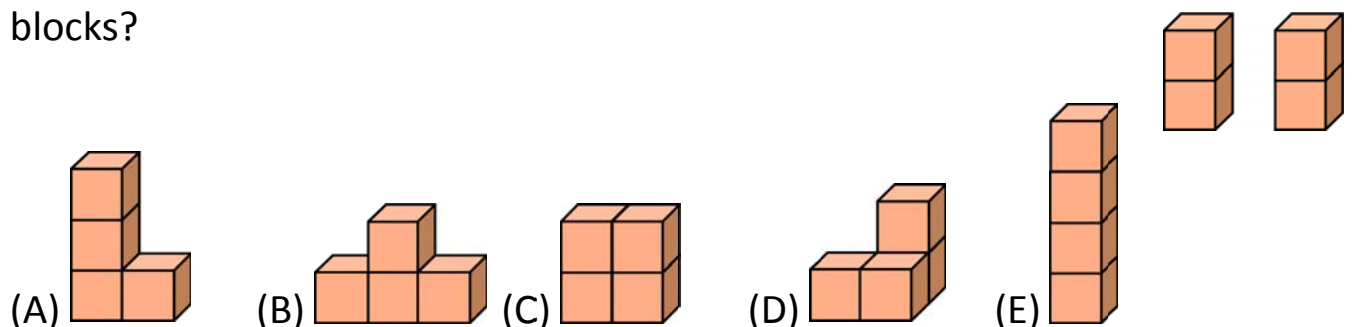


- (A) 6 (B) 5 (C) 4 (D) 3 (E) 2

9. It takes Jennifer half an hour to cover half of her journey home from school. How long does it take her to cover the whole journey home?

- (A) 15 minutes (B) 30 minutes (C) 40 minutes  
(D) 1 hour (E) 2 hours

10. Michael has two building blocks. Each building block is made up of two cubes glued together. Which figure can he not make using the blocks?

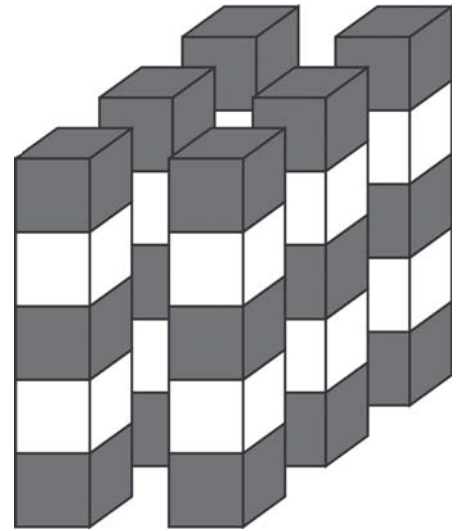


- 5 point questions -

11. Julia has 9 sweets and Katharina has 17 sweets. How many sweets does Katharina have to give to Julia so that they both have the same amount of sweets?

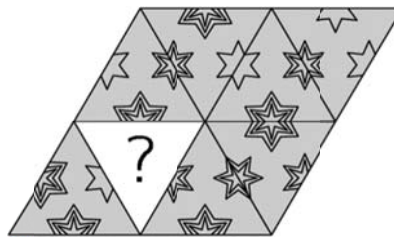
- (A) 2            (B) 3            (C) 4            (D) 5            (E) 6

12. Every one of these six building blocks consists of 5 little cubes. The little cubes are either white or grey. Cubes of equal colour don't touch each other. How many little white cubes are there in total?



- (A) 10    (B) 11    (C) 12    (D) 18    (E) 30

13. Which piece is missing?



- (A)    (B)    (C)    (D)    (E)

14. 11 Flags are placed alongside a straight race course. The first flag is at the start, the last one at the finish. The distance between two flags is always 8 meters. How long is the race course?

- (A) 24 meters    (B) 48 meters    (C) 72 meters    (D) 80 meters    (E) 88 meters

15. Some pirates are climbing onto a ship one after the other using a rope. Their leader is exactly in the middle. He is the eighth pirate to climb onto the ship. How many pirates board the ship?

- (A) 16            (B) 15            (C) 12            (D) 8            (E) 7