

KÄNGURU DER MATHEMATIK 2017 16. 3. 2017



Level: Felix, Grade: 1 and 2

Name:

School:

Class:

Time: 60 min.

15 starting points

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 the question are subtracted

Please write the letter (A, B, C, D, E) of the correct answer in the square under the question number (1 to 15). Write clearly and carefully!



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

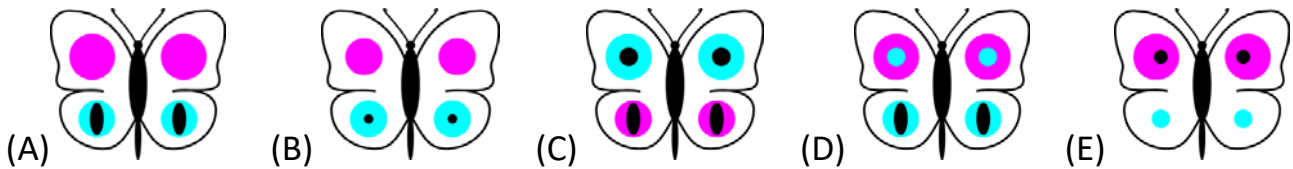
| | | | | |
|----------|----------|----------|----------|-----------|
| 6 | 7 | 8 | 9 | 10 |
| | | | | |

| | | | | |
|-----------|-----------|-----------|-----------|-----------|
| 11 | 12 | 13 | 14 | 15 |
| | | | | |

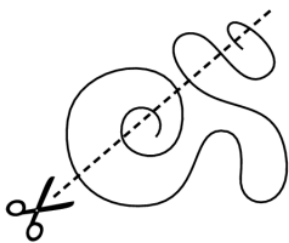
Känguru der Mathematik 2017
Level Felix (Grade 1 and 2)
Österreich – 16. 3. 2017

– 3 Points Questions –

1. Ellen wants to decorate the butterfly  using these 6 stickers . Which butterfly can she make?

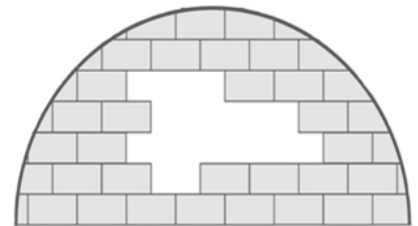


2. Into how many pieces will the string be cut?




- (A) 5 (B) 6 (C) 7 (D) 8 (E) 9

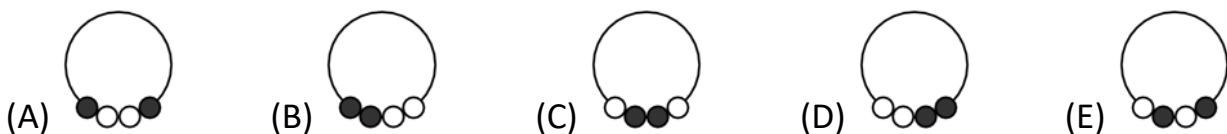
3. How many blocks are missing in this igloo?



- (A) 8 (B) 9 (C) 10 (D) 11 (E) 12

4. This picture  shows a bracelet with pearls.

Which of the bands below shows the same bracelet as above?



5. Four of the numbers 1, 3, 4, 5 and 7 are written into the boxes so that the calculation is correct.

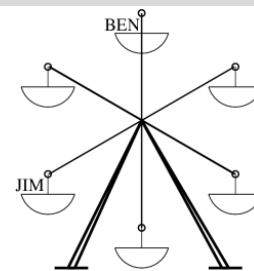
Which number was not used?

$$\square + \square = \square + \square$$

- (A) 1 (B) 3 (C) 4 (D) 5 (E) 7

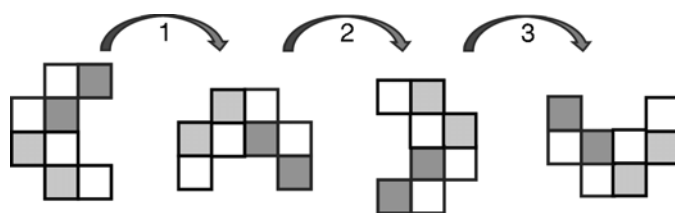
4 Points Questions

6. Jim and Ben are sitting in a ferris wheel (see picture on the right).
The ferris wheel is turning.
Now Ben is in the position where Jim was beforehand.
Where is Jim now?



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

7. Alfred turns his building block 10 times.
The first three times can be seen in the picture.
What is the final position of the building block?



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

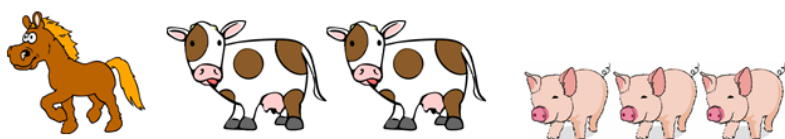
8. In which picture are there half as many circles as triangles and twice as many squares as triangles?

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

9. Leo and Max are standing in a queue that is made up of 11 people in total.
There are 7 people in front of Leo, Max stands directly behind him in the queue.
How many people are behind Max?

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

10. Old McDonald has a horse, two cows and three pigs.




How many more cows does he need, so that exactly half of all his animals are cows?

- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4

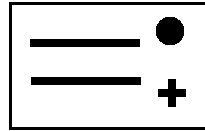
5 Points Questions

11. Every box shows the result of the addition of the numbers on the very left and on the very top (for example: $5 + 7 = 12$). Which number is written behind the star?

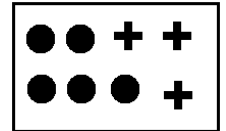
| | | |
|----------|-------------|---|
| | + 10 | 7 |
| 5 | 15 | 12 |
| ? | 14 |  |

- (A) 10 (B) 11 (C) 12 (D) 13 (E) 15

12. Lisa has several sheets of construction paper like this



and



She wants to make 7 identical crowns:

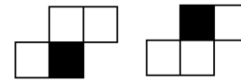


For that she cuts out the necessary parts.


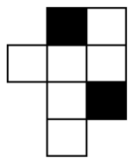
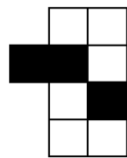
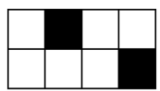
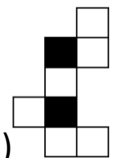
What is the minimum number of sheets of construction paper that she has to cut up?

- (A) 7 (B) 9 (C) 10 (D) 11 (E) 13

13. Simon has two identical tiles, whose front look like this:
The back is white.



Which pattern can he make with those two tiles?

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

14. A kangaroo always does ten jumps within a minute.

Then he has a three minute break.

How many minutes does it need in order to do 50 jumps?

- (A) 4 (B) 5 (C) 16 (D) 17 (E) 21

15. Each one of the four keys locks exactly one padlock. Every letter on a padlock stands for exactly one digit. Same letters mean same digits.

Which letters must be written on the fourth padlock?



- (A) GDA (B) ADG (C) GAD (D) GAG (E) DAD