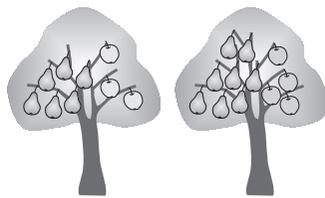


19. Magic trees grow in a magic garden. Each tree contains either 6 pears and 3 apples or 8 pears and 4 apples. There are 25 apples in the garden. How many pears are there in the garden?



- A) 35 B) 40 C) 45 D) 50 E) 56

20. My dogs have 18 more legs than noses. How many dogs do I have?

- A) 4 B) 5 C) 6 D) 8 E) 9

21. Karin has building blocks of three different types: \triangle , \circ , \square . Blocks of the same type have the same weight, and blocks of different types have different weight. Karin placed 3 boxes with building blocks on a table in order of their weight (the rightmost box is the heaviest; see pic.).



Which block has the smallest weight and which one has the biggest weight?

- A) \triangle , \square B) \triangle , \circ C) \square , \circ D) \circ , \square E) \circ , \triangle

22. Rachel adds seven numbers and gets 2016. One of the numbers in the addition is 201. She replaces the number 201 with 102. What answer does she get?

- A) 1815 B) 1914 C) 1917 D) 2115 E) 2118

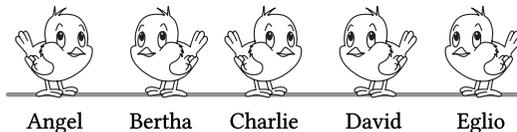
23. Malte has built a bar of 27 bricks.



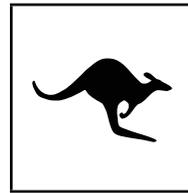
He breaks the bar into two bars such that one of them is twice the length of the other. Then he takes one of the new bars and breaks it the same way. He continues (if it is possible) in this way. Which of the following bars will he not be able to get at some moment?



24. Five sparrows sit on a branch, as shown in the figure. Each sparrow chirps the same number of times as the number of sparrows it sees. For example, David chirps three times. Then, one sparrow turns to look in the opposite direction. Again, each of the sparrows chirps the same number of times as the number of sparrows it sees. This time, the total number of chirps is more than the first time. Which of the sparrows has turned to look in the opposite direction?



- A) Angel B) Bertha C) Charlie D) David E) Eglío



KANGAROO 2016

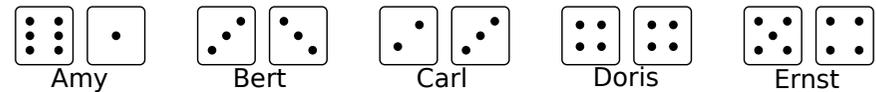


Time allowed: 75 minutes
Calculators are not permitted

Minor
3-4 grades

Questions for 3 points

1. Amy, Bert, Carl, Doris and Ernst each rolled two dice and added the number of dots.



Who rolled the largest total?

- A) Amy B) Bert C) Carl D) Doris E) Ernst

2. Kanga is 1 year and 3 months old. In how many months will Kanga be 3 years old?

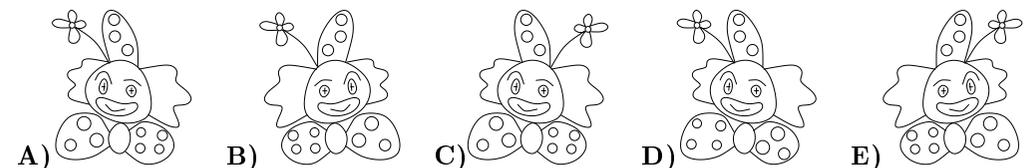
- A) 15 B) 17 C) 19 D) 20 E) 21

3. Find x .

$$\begin{array}{ccc} \boxed{17 + 3} & \rightarrow & \boxed{} \\ & & + \\ \boxed{20 - 16} & \rightarrow & \boxed{} \end{array} \rightarrow \boxed{x}$$

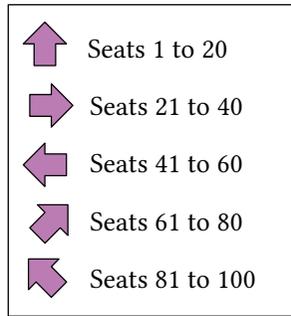
- A) 24 B) 28 C) 36 D) 56 E) 80

4. What does Pipo (see the picture) see when he looks at himself in the mirror?



5. Geoff goes with his father to a circus. Their seats are numbered 71 and 72. Which way should they go?

- A) B) C) D) E)

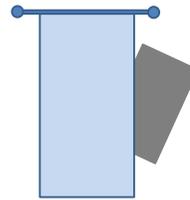


6. Anna shares some apples between herself and 5 friends. Everyone gets half of an apple. How many apples does she share?

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

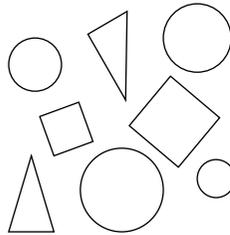
7. A rectangle is partly hidden behind a curtain. What shape is the hidden part?

- A) A triangle B) A square C) A pentagon D) A circle E) A rectangle



8. Which one of the following sentences correctly describes the picture?

- A) There are as many circles as squares
 B) There are fewer circles than triangles
 C) There are twice as many circles as triangles
 D) There are more squares than triangles
 E) There are two triangles more than circles



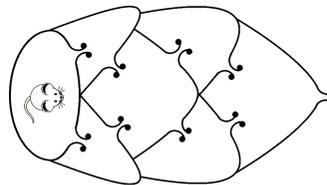
Questions for 4 points

9. The sum of the digits of the year 2016 is equal to 9. What is the next year, after 2016, where the sum of the digits of the year is equal to 9 again?

- A) 2007 B) 2025 C) 2034 D) 2108 E) 2134

10. The mouse wants to escape from the maze. How many different paths can the mouse take without passing through the same gate more than once?

- A) 2 B) 4 C) 5 D) 6 E) 7



11. Zoe has two cards. She wrote a number on both sides of each card. The sum of the two numbers on the first card is equal to the sum of the numbers on the second card. The sum of the four numbers is 32. What could be the two numbers on the sides that we cannot see?

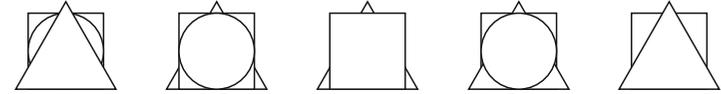
- A) 8 and 1 B) 10 and 5 C) 11 and 4 D) 9 and 6 E) 6 and 3



12. Grey kangaroo weighed 17 kg and red kangaroo weighed 20 kg. Then grey kangaroo gained 3 kg and red kangaroo lost 4 kg. What is now the total weight of the kangaroos?

- A) 36 kg B) 38 kg C) 44 kg D) 30 kg E) 37 kg

13. Five children had a paper square, a paper triangle and a paper circle. Every child placed their own papers in a pile, as shown in the pictures.

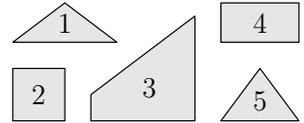


How many children placed the triangle above the square?

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

14. Which three of the five jigsaw pieces shown can be joined together to form a square?

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



15. Loes has started to write some numbers in the table. She decides that each row and column will contain the numbers 1, 2 and 3 exactly once. What is the sum of the numbers that she will write in the two shaded squares?

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

1		
	2	

16. There are 11 parking places on the side of the street, consecutively numbered 1 to 11. Eight successive places are occupied by 8 cars (it is not known which places are those). Which parking place is definitely occupied by a car?

- A) Number 1 B) Number 9 C) Number 3 D) Number 5 E) Number 11

Questions for 5 points

17. The numbers 1, 5, 8, 9, 10, 12 and 15 are distributed into groups with one or more numbers. The sum of the numbers in each group is the same. What can be the largest number of groups?

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

18. Tim, Tom and Jim are triplets (three brothers born on the same day). Their brother Paul is exactly 3 years older. Which of the following numbers can be the sum of the ages of the four brothers?

- A) 25 B) 27 C) 29 D) 30 E) 60