



Kangaroo 2016 Ecolier

(4th and 5th grade)

NAME _____

CLASS _____

Points: _____ Kangaroo leap: _____

Separate this answer sheet from the test. Write your answer under each problem number. From each wrong answer, $\frac{1}{4}$ of the points of the problem will be deducted, for example for a 4 points problem -1 point. If you leave the answer empty, no deduction will be made.

PROBLEM	1	2	3	4	5	6	7
ANSWER							

PROBLEM	8	9	10	11	12	13	14
ANSWER							

PROBLEM	15	16	17	18	19	20	21
ANSWER							

Contest not to be held before March 17th 2016.

Logo design by Jenna Tuupanen.



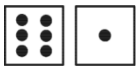
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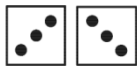
3 points

1.

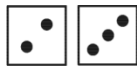
Amy, Bert, Carl, Doris and Ernst each rolled two dice and added the number of dots.



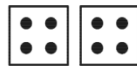
Amy



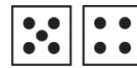
Bert



Carl



Doris



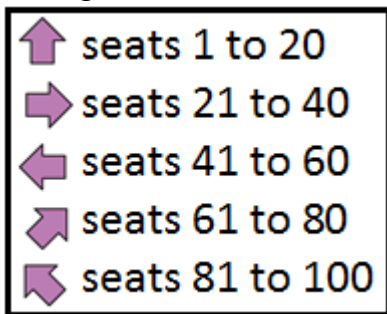
Ernst

Who rolled the largest total?






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

2.

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) 

3.

$$17 + 3$$



$$20 - 16$$



+



?

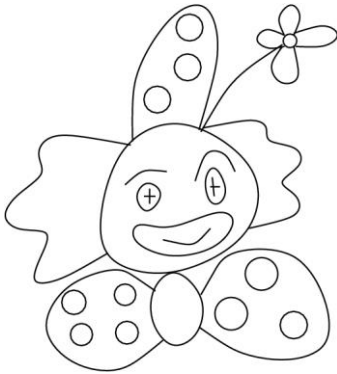
- (A) 24 (B) 28 (C) 36 (D) 56 (E) 80



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4.

What does the clown see when he looks in the mirror?



(A)



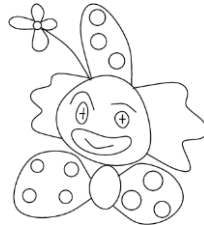
(B)



(C)



(D)



(E)



5.

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

(A) 2 and a half

(B) 3

(C) 4

(D) 5

(E) 6

6.

Small Kanga is 7 weeks and 2 days old. In how many days will Kanga be 8 weeks old?

(A) 1

(B) 2

(C) 3

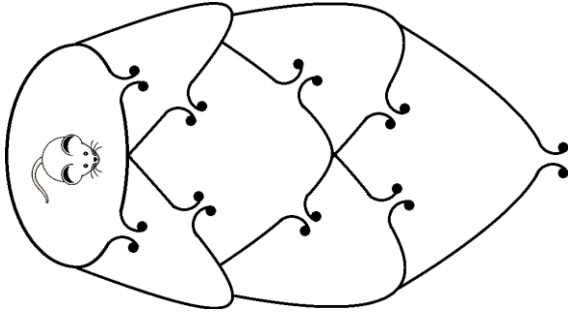
(D) 4

(E) 5



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7.
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?



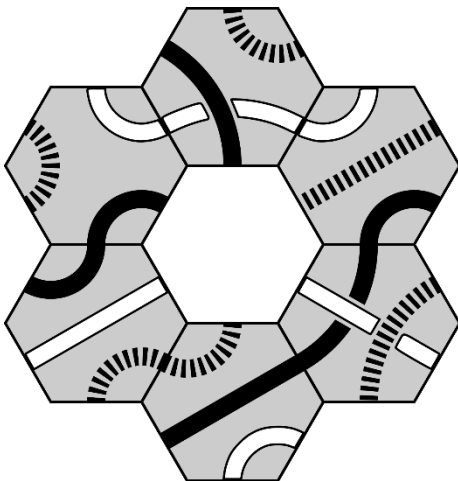
- (A) 2 (B) 4 (C) 5 (D) 6 (E) 7

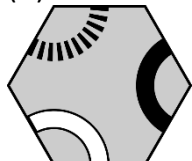

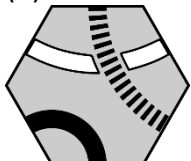


4 points

8.
The sum of the digits of the year 2016 is equal to 9. (Because $2 + 0 + 1 + 6 = 9$.)
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

9.
Which tile fits in the middle?



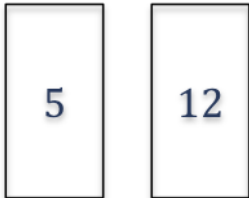
- (A)  (B)  (C)  (D)  (E) 



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10.

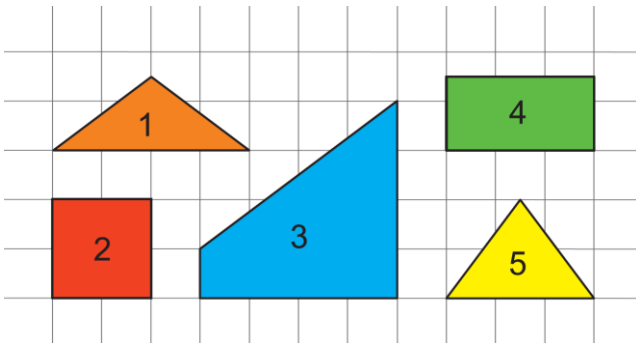
Zoe has two cards. She wrote numbers on both sides of each card. The sum of the two numbers on the first card is equal to the sum of the two numbers on the second card. The sum of the four numbers is 32. What are the two numbers on the sides that we cannot see?



- (A) 7 and 0 (B) 8 and 1 (C) 11 and 4 (D) 9 and 2 (E) 6 and 3

11.

Which three pieces 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

12.

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?

1		
	2	

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



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13.

John has a board with 11 squares. He puts coins in 8 consecutive squares. How many squares are such that they have a coin in them no matter where John puts the 8 consecutive coins?



(A) 1

(B) 3

(C) 4

(D) 5

(E) 6

14.

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

(A) 25

(B) 27

(C) 29

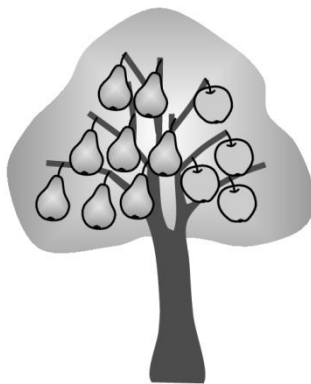
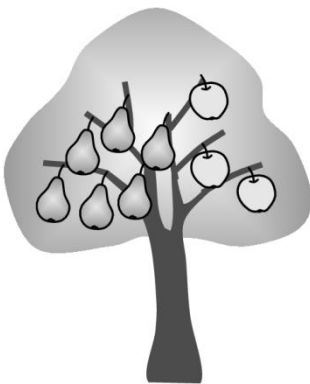
(D) 30

(E) 60

5 points

15.

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



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16.

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


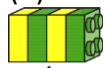



- (A) 1815 (B) 1914 (C) 1917 (D) 2115 (E) 2118

17.

Malte has built a bar of 27 bricks.

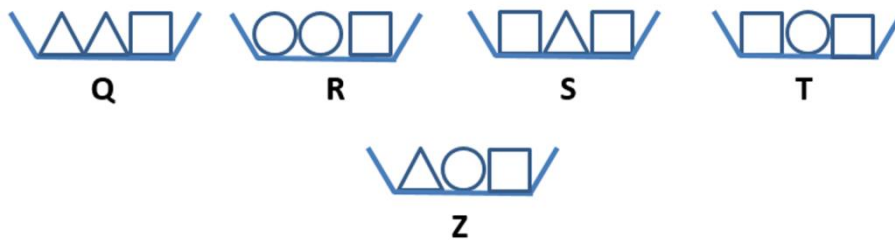


He breaks the bar into two bars such that one of them is twice the length of the other. Then he takes one of the new bars and breaks it the same way. He continues like this. Which of the following bars will he not be able to get?

- (A)  2 (B)  4 (C)  6 (D)  8 (E)  10

18.

Karin wants to place five bowls on a table in order of their weight. She has already placed Q, R, S and T in order. Bowl T weighs the most.



Where must she place bowl Z?

- (A) to the left of bowl Q
(B) between bowl Q and bowl R
(C) between bowl R and bowl S
(D) between bowl S and bowl T
(E) to the right of bowl T



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19.

Five sparrows sit on a branch, as shown in the figure. Each sparrow chirps once to every sparrow it sees. For example, David chirps 3 times. Then, one sparrow turns to look in the opposite direction. Again, each of the sparrows chirps once to every sparrow 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?



Angel

Bertha

Charlie

David

Eglío

(A) Angel

(B) Bertha

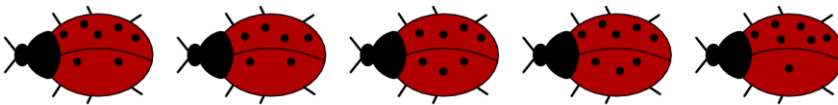
(C) Charlie

(D) David

(E) Eglío

20.

In the picture you see five ladybirds.



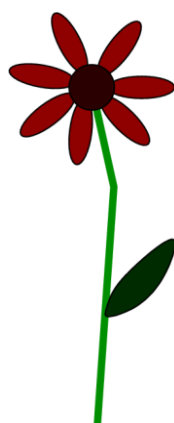
Each one sits on its flower.

Their places are defined as follows: the difference of the dots on their wings is the number of the leaves and the sum of the dots on their wings is the number of the petals.

Which of the following flowers has no ladybird?



(A)



(B)



(C)



(D)



(E)

21.

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 is the largest possible number of groups?

(A) 2

(B) 3

(C) 4

(D) 5

(E) 6