



Kangaroo 2017 Ecolier
(4th and 5th grade)

NAME _____

CLASS _____

Points: _____ Kangaroo leap: _____

Separate this answer sheet from the test. Write your answer under each problem number.

A right answer gives 3, 4 or 5 points. Every problem has exactly one right answer.

For 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.

There are two goals: to score as many points as possible or to have as many consecutive right answers as possible.

3 points

PROBLEM	1	2	3	4	5	6	7
ANSWER							

4 points

PROBLEM	8	9	10	11	12	13	14
ANSWER							

5 points

PROBLEM	15	16	17	18	19	20	21
ANSWER							

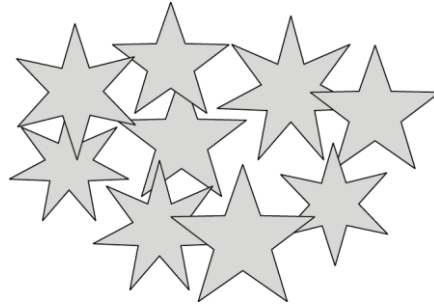
Contest not to be held before 16th of March.

Logo design by Petra Siilanen.

3 points

1.

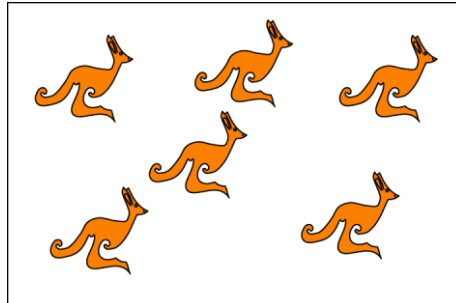
In the picture there are 5-pointed, 6-pointed and 7-pointed stars. How many 5-pointed stars are there in the picture?



- (A) 2 (B) 3 (C) 4 (D) 5 (E) 9

2.

Inkeri sees half of the kangaroos in the park from her window.

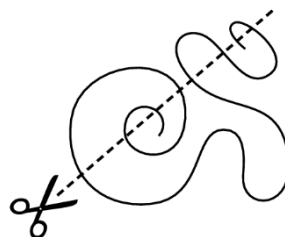


How many kangaroos in total are there in the park?

- (A) 3 (B) 6 (C) 12 (D) 14 (E) 16

3.

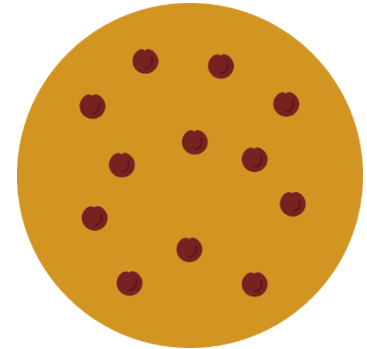
In how many parts will the string be after cutting?



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

4.

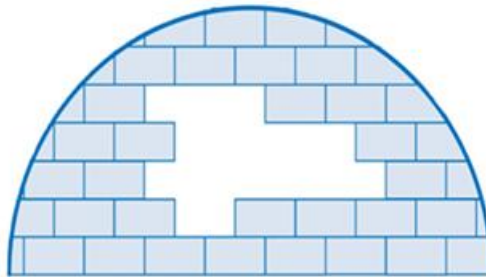
Kids eat the cherry pie in the picture - without permission! Each kid eats a piece with three cherries and then the pie is finished. How many kids are there?



- (A) 3 (B) 4 (C) 5 (D) 6 (E) 8

5.

How many bricks are missing from the igloo?



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

6.

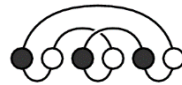
Two transparent sheets are darkened in some places, as shown. They are both placed on top of the board shown in the middle. The pictures behind the darkened squares cannot be seen. Only one of the pictures can still be seen, which one is it?



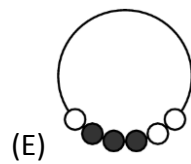
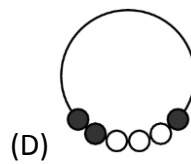
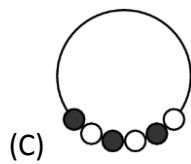
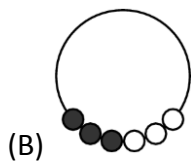
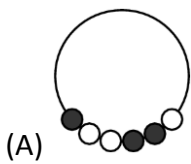
- (A) (B) (C) (D) (E)

7.

Here is a necklace:



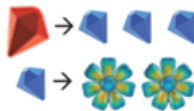
Which of the following is the same necklace?



4 points

8.

On the market fair of the Kangaroo Land you can trade a ruby for three sapphires and a sapphire for two flowers.



How many flowers can you get with two rubies?

(A) 6

(B) 8

(C) 10

(D) 12

(E) 14

9.

Balloons are sold in packages of 5, 10 and 25. Riku wants to buy exactly 70 balloons. What is the smallest number of packages he needs to buy?

(A) 3

(B) 4

(C) 5

(D) 6

(E) 7

10.

$$\bullet + \bullet + \bullet + \bullet + \blacksquare = \blacksquare + \blacksquare + \blacksquare$$

Which of the following is true?

(A) $\bullet = \blacksquare$

(B) $\bullet + \bullet + \bullet = \blacksquare$

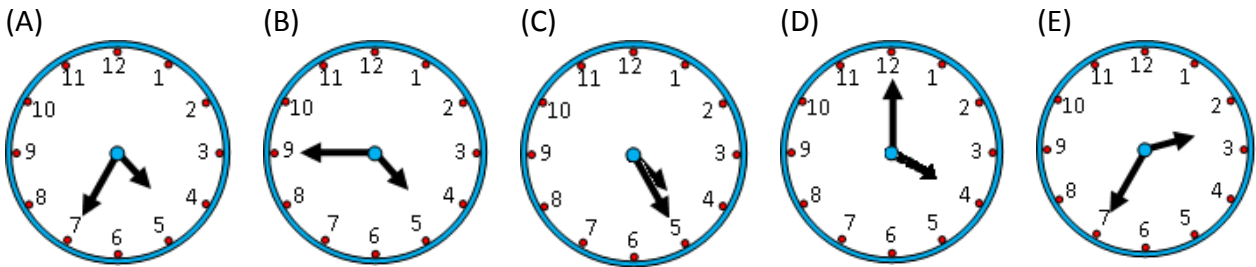
(C) $\blacksquare + \blacksquare + \blacksquare = \bullet$

(D) $\blacksquare + \blacksquare = \bullet$

(E) $\bullet + \bullet = \blacksquare$

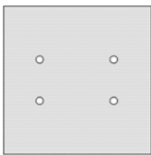
11.

Salli needs to be in a training session at five. It takes 5 minutes to get to the bus stop and the bus ride is 15 minutes. After that it's still 5 minutes to the training field. The bus goes every 10 minutes. What is the latest time Salli can leave and still make it?

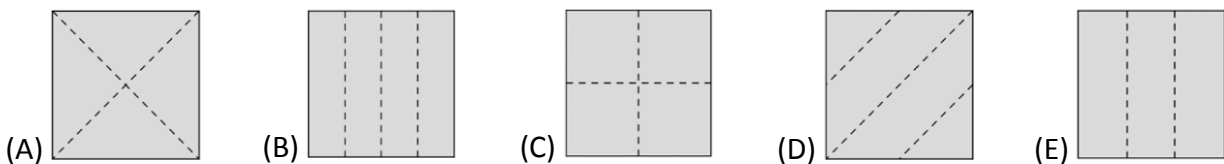


12.

Nella folded a piece of paper and cut one hole through it. After unfolding, the paper looked like this:

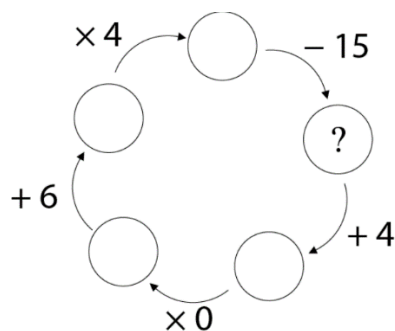


How was the paper folded?



13.

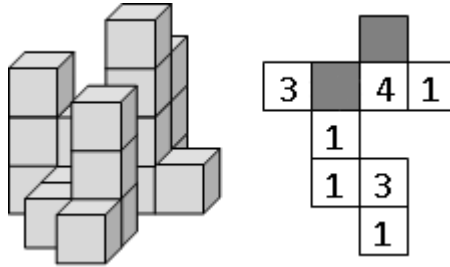
Which number belongs to the place of the question mark?



- (A) 9 (B) 10 (C) 11 (D) 12 (E) 13

14.

In the figure you see a construction made of cubes and a figure showing how many cubes there are at each spot. How many cubes in total are at the two spots marked grey?



(A) 3

(B) 4

(C) 5

(D) 6

(E) 7

5 points

15.

In each of ten bags there is a different number of lollipops between 1 and 10. Five children share the bags: everyone gets two bags. Eero gets 5 lollipops, Aura 7, Oiva 9, and Rosa 15. How many lollipops does Miro get?

(A) 9

(B) 11

(C) 13

(D) 17

(E) 19

16.

A family of five is going to a party and everyone needs to take a shower and otherwise prepare themselves. The times needed are 5 minutes, 35 minutes, 15 minutes, 10 minutes and 20 minutes. Luckily, there are two showers. What is the shortest time possible for everyone to get ready?

(A) 40 min

(B) 45 min

(C) 50 min

(D) 55min

(E) 60 min

17.

In a small zoo there are only four animals: a giraffe, an elephant, a lion and a tortoise. Jerry wants to plan a tour of only two animals. He does not want to start with the lion. How many such tours exist?

(A) 3

(B) 7

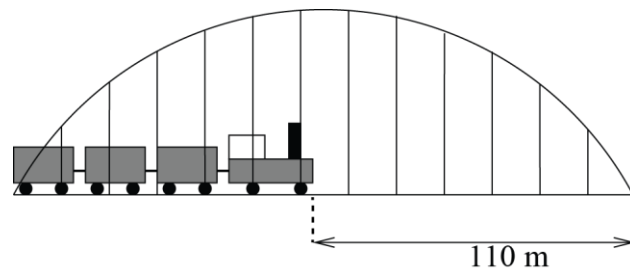
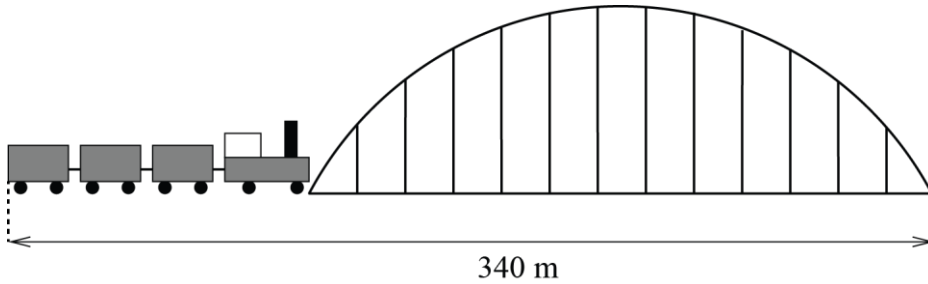
(C) 8

(D) 9

(E) 12

18.

How long is the train?



- (A) 55 m (B) 115 m (C) 170 m (D) 220 m (E) 230 m

19.

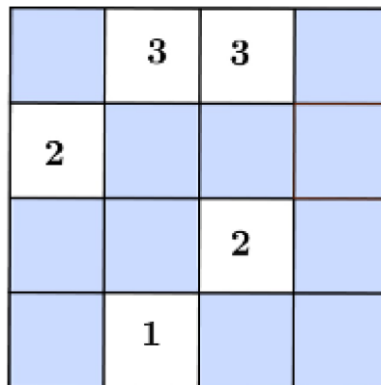
Four brothers ate 11 cookies. Everyone ate a different amount, each at least one. How many cookies were eaten by the boy who ate most?

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

20.



Kerttu has hidden smileys under some of the darkened squares. There is at most one smiley in each square. In the white squares, you can read how many smileys there are in the neighbouring squares. (Neighbouring squares have either a side or a corner in common.) How many smileys are there in total?

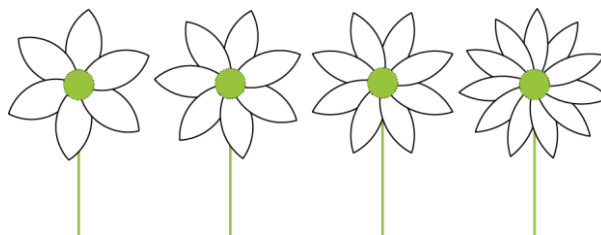


- (A) 4 (B) 5 (C) 7 (D) 8 (E) 11

21.

Kaisa has four flowers with 6, 7, 8 and 11 petals. She takes out three petals at a time, each from different flower.

Kaisa stops when at least two flowers have no petals left. What is the least possible amount of petals left in the flowers then?



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